ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[FRL–7385–7]

RIN 2060–AG57

National Emission Standards for Hazardous Air Pollutants: Surface Coating of Plastic Parts and Products

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: This action proposes national emission standards for hazardous air pollutants (NESHAP) for plastic parts and products surface coating operations located at major sources of hazardous air pollutants (HAP). The proposed standards would implement section 112(d) of the Clean Air Act (CAA) by requiring these operations to meet HAP emission standards reflecting the application of the maximum achievable control technology (MACT). The proposed rule would protect air quality and promote the public health by reducing emissions of HAP emitted in the largest quantities by facilities in the surface coating of plastic parts and products source category to include methyl ethyl ketone (MEK), methyl isobutyl ketone (MIBK), toluene, and xylenes. Exposure to these substances has been demonstrated to cause adverse health effects such as irritation of the lung, skin, and mucous membranes, and effects on the central nervous system, liver, and heart. In general, these findings have only been shown with concentrations higher than those typically in the ambient air. The proposed standards would reduce nationwide HAP emissions from major sources in this source category by approximately 80 percent.

DATES: *Comments.* Submit comments on or before February 3, 2003.

Public Hearing. If anyone contacts the EPA requesting to speak at a public hearing, they should do so by December 24, 2002. If requested, a public hearing will be held within approximately 30 days following publication of this notice in the **Federal Register**.

ADDRESSES: *Comments.* By U.S. Postal Service, written comments should be submitted (in duplicate if possible) to: Air and Radiation Docket and Information Center (6102T), Attention Docket Number A–99–12, U.S. EPA, 1200 Pennsylvania Avenue, NW, Washington, DC 20460. In person or by courier, deliver comments (in duplicate if possible) to: Air and Radiation Docket and Information Center (6102T), Attention Docket Number A–99–12, U.S. EPA, Public Reading Room, Room B102, EPA West Building, 1301 Constitution Avenue, NW, Washington DC 20460. The EPA requests a separate copy also be sent to the contact person listed in **FOR FURTHER INFORMATION CONTACT**.

Public Hearing. If a public hearing is held, it will be held at the new EPA facility complex in Research Triangle Park, North Carolina. You should contact Ms. Janet Eck, Coatings and Consumer Products Group, Emission Standards Division (C539–03), U.S. EPA, 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–99–12 contains supporting information used in developing the proposed standards. The docket is located at the U.S. EPA, Public Reading Room, Room B102, EPA West Building, 1301 Constitution Avenue, NW, Washington DC 20460, and may be inspected from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays.

FOR FURTHER INFORMATION CONTACT: Ms. Kim Teal, Coatings and Consumer Products Group, Emission Standards Division (C539–03), U.S. EPA, Research Triangle Park, NC 27711; telephone number (919) 541–5580; facsimile number (919) 541–5689; electronic mail (e-mail) address: *teal.kim@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® file format. All comments and data submitted in electronic form must note the docket number: A–99–12. 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: Ms. Kim Teal, c/o OAQPS Document Control Officer (C404–02), U.S. EPA, 109 TW Alexander Drive, Research Triangle Park, NC 27709. 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, Coatings and Consumer Products Group, Emission Standards Division (C539–03), U.S. EPA, Research Triangle Park, North Carolina 27711; telephone number (919) 541–7946 at least 2 days in advance of the public hearing. Persons interested in attending the public hearing should also contact Ms. Eck 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 the proposed emission standards.

Docket. The docket is an organized and complete file of all the information considered by EPA in the development of this rulemaking. The docket is a dynamic file because material is added throughout the rulemaking process. The docketing system is intended to allow members of the public and industries involved to readily identify and locate documents so that they can effectively participate in the rulemaking process. Along with the proposed and promulgated standards and their preambles, the contents of the docket will serve as the record in the case of judicial review. (See section 307(d)(7)(A) of the CAA.) The regulatory text and other materials related to this rulemaking are available for review in the docket or copies may be mailed on request from the Air and Radiation Docket and Information Center by calling (202) 566–1742. 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 will also be available on the WWW through the Technology Transfer Network (TTN). Following signature by the EPA Administrator, a copy of the proposed rule will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules at *http://www.epa.gov/ttn/oarpg.* The TTN provides information and technology exchange in various areas of air pollution control. If more information regarding the TTN is needed, call the TTN HELP line at (919) 541–5384.

Regulated Entities. The source category definition includes facilities that apply coatings to plastic parts and

products. In general, facilities that coat plastic parts and products are covered under the Standard Industrial Classification (SIC) and North American Industrial Classification System (NAICS) codes listed in Table 1. However, facilities classified under other SIC or NAICS codes may be subject to the proposed standards if they meet the applicability criteria. Not all facilities classified under the SIC and NAICS codes in the following table will be subject to the proposed standards because some of the classifications cover products outside the scope of the NESHAP for plastic parts and products.

TABLE 1.—CATEGORIES AND ENTITIES POTENTIALLY REGULATED BY THE PROPOSED STANDARDS

Category	SIC	NAICS	Examples of potentially regulated entities
Industrial	2522	337214	Office furniture, except wood.
	3086	32614, 32615	Plastic foam products (*e.g.*, pool floats, wrestling mats, life jackets).
	3089	326199	Plastic products not elsewhere classified (*e.g.*, name plates, coin holders, storage boxes, license plate housings, cosmetic caps, cup holders).
	3579	333313	Office machines.
	3663	33422	Radio and television broadcasting and communications equipment (*e.g.*, cellular telephones).
	3711	336211	Motor Vehicle Body Manufacturing.
	3714	336399	Motor vehicle parts and accessories.
	3715	336212	Truck Trailer Manufacturing.
	3716	336213	Motor Home Manufacturing.
	3792	336214	Travel Trailer and Camper Manufacturing.
	3799	336999	Transportation equipment not elsewhere classified (*e.g.*, snowmobile hoods, running boards, tractor body panels, personal watercraft parts).
	3841	339111, 339112	Medical equipment and supplies.
	3949	33992	Sporting and athletic goods.
	3993	33995	Signs and advertising specialties.
	3999	339999	Manufacturing industries not elsewhere classified (*e.g.*, bezels, consoles, panels, lenses).
Federal, State, and Local Governments.			Government owned or operated facilities that perform plastic parts and products surface coating. Examples include Department of Defense facilities.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. To determine whether your coating operation is regulated by this action, you should examine the applicability criteria in § 63.4481 of the proposed rule. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

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

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E. Executive Order 13211, Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use
F. Unfunded Mandates Reform Act of 1995
G. Regulatory Flexibility Act (RFA), as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601, *et seq.*
H. Paperwork Reduction Act
I. National Technology Transfer and Advancement Act

I. Background

A. What Is the Source of Authority for Development of NESHAP?

Section 112 of the CAA requires us to list categories and subcategories of major sources and area sources of HAP and to establish NESHAP for the listed source categories and subcategories. The Plastic Parts and Products (Surface Coating) category of major sources was listed on July 16, 1992 (57 FR 31576) under the Surface Coating Processes industry group. Major sources of HAP are those that emit or have the potential to emit equal to, or greater than, 9.1

megagrams per year (Mg/yr) (10 tons per year (tpy)) of any one HAP or 22.7 Mg/yr (25 tpy) of any combination of HAP.

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

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

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

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

C. What Are the Health Effects Associated With HAP Emissions From the Surface Coating of Plastic Parts and Products?

The major HAP emitted from the plastic parts and products surface coating industry include MEK, MIBK, toluene, and xylenes. These compounds account for over 85 percent of the nationwide HAP emissions from this source category. Other HAP identified in emissions include ethylene glycol monobutyl ether (EGBE) and glycol ethers. The HAP that would be controlled with this proposed rule are associated with a variety of adverse health effects. These adverse health effects include chronic health disorders (*e.g.*, birth defects and effects on the central nervous system, liver, and heart), and acute health disorders (*e.g.*, irritation of the lung, skin, and mucous membranes, and effects on the central nervous system).

We do not have the type of current detailed data on each of the facilities covered by the proposed emission standards for this source category, and the people living around the facilities, that would be necessary to conduct an analysis to determine the actual population exposures to the HAP emitted from these facilities and potential for resultant health effects. Therefore, we do not know the extent to which the adverse health effects described above occur in the populations surrounding these facilities. However, to the extent the adverse effects do occur, the proposed rule would reduce emissions and subsequent exposures.

II. Summary of the Proposed Rule

A. What Source Categories and Subcategories Are Affected By This Proposed Rule?

The proposed rule will apply to you if you own or operate a plastic parts and products surface coating facility that is a major source, or is located at a major source, or is part of a major source of HAP emissions. We have defined a plastic parts and products surface coating facility as any facility engaged in the surface coating of any plastic part or product.

You will not be subject to the proposed rule if your plastic parts and products surface coating facility is located at an area source. An area source of HAP is any facility that has the potential to emit HAP but is not a major source. You may establish area source status by limiting the source's potential to emit HAP through appropriate mechanisms available through your permitting authority.

The source category does not include research or laboratory facilities or janitorial, building, and facility maintenance operations, or hobby shops that are operated for personal rather than commercial purposes. The source category also does not include coating of magnet wire, coating of plastics to produce fiberglass boats (except post-mold coating of personal watercraft or their parts), or the extrusion of plastic onto a part or product to form a coating. Post-mold coating of personal watercraft and their parts is included in the source category.

This source category also does not include surface coating of plastic parts and products that would be subject to certain other subparts of 40 CFR part 63. In particular, it does not include the following coating operations:

(1) Coating operations that are subject to the aerospace manufacturing and rework facilities NESHAP (40 CFR part 63, subpart GG).

(2) Operations coating plastic and wood that are subject to the wood furniture NESHAP (40 CFR part 63, subpart JJ).

(3) Operations coating plastic and metal parts of large appliances that are subject to the large appliance surface coating NESHAP (40 CFR part 63, subpart NNNN, 67 FR 48254, July 23, 2002).

(4) Operations coating plastic and metal parts of metal furniture that would be subject to the proposed metal furniture surface coating NESHAP (67 FR 20206, April 24, 2002).

(5) Operations coating plastic and wood parts of wood building products that would be subject to the proposed wood building products surface coating NESHAP (67 FR 42400, June 21, 2002).

(6) In-mold and gel coating operations in manufacturing of reinforced plastic composites that are subject to the proposed reinforced plastics composites production NESHAP (66 FR 40324, August 2, 2001).

(7) Surface coating of parts that are pre-assembled from plastic and metal components, where greater than 50 percent of the surface area coated is metal and subject to the proposed NESHAP for the surface coating of miscellaneous metal parts and products (subpart MMMM of part 63; 67 FR 52780, August 13, 2002). If you can demonstrate that more than 50 percent of the surface area coated is comprised of metal, then you would need to demonstrate compliance only with the proposed NESHAP for miscellaneous metal parts and products (proposed subpart MMMM of part 63; 67 FR 52780, August 13, 2002). You must maintain records to document that more than 50 percent of the surface area coated is metal.

We have established four subcategories in the plastic parts and products surface coating source category: (1) General use coating, (2) thermoplastic olefin (TPO) coating, (3) headlamp coating, and (4) assembled on-road vehicle coating. The general use coating subcategory includes all plastic parts and products coating operations except TPO, headlamp, and assembled on-road vehicle coating. This includes operations that coat a wide variety of substrates, surfaces, and types of plastic parts, as well as more specialized coating scenarios. Each subcategory consists of all coating operations, including associated surface

preparation, equipment cleaning, mixing, storage, and waste handling.

As discussed in section III.A. of this preamble, our analysis of data currently available to us indicates that while subcategories for headlamp coating, TPO coating, and assembled on-road vehicle coating are appropriate, there is no need for further subcategorization. We are, however, interested in public comments regarding whether there is additional information that would indicate the need for a separate subcategory for other plastic coating operations. Subcategorization may be appropriate in operations that employ separate and distinct processes for which there is no technology available (including reformulation) to allow compliance with the general use limits. We welcome public comments and data on any additional separate and distinct coating operations, including facility-specific data on processes, coating and cleaning material usage, emissions, and control techniques that may require consideration for subcategorization.

Late in development of the proposed rule, Department of Defense (DoD) stakeholders approached EPA and suggested that their operations are distinctly different from the kinds of operations addressed in these standards. Furthermore, DoD operations may present unique challenges in permitting, demonstrating compliance, and enforcement of potentially overlapping regulations. The DoD stakeholders suggested that a separate subcategory or source category dealing with multiple surface coating operations performed by DoD civilian and military personnel or performed at DoD installations may be appropriate.

Some of the specific concerns expressed by DoD stakeholders include the requirement to purchase materials that meet military specifications for their surface coating operations. Military specifications are typically based on the coating's performance characteristics (*e.g.*, chemical agent resistance), and the coatings must often be compatible with multiple substrates. These materials are purchased using a stock number which could represent hundreds of different formulations that meet the performance specifications; however, the HAP content of such materials could fluctuate widely between formulations. Additionally, since the materials may be used at the maintenance depot, DoD installation, or in the field, the options available to achieve emissions reductions (*e.g.*, add-on control technology) could be limited. Furthermore, much of DoD equipment is coated as an assembled product comprised of as many as five different substrates, in a wide range of shapes and sizes, which must be capable of serving in a multitude of challenging environments and situations. We are currently evaluating the need for a DoD source category or subcategory, and we request comment on the appropriate approach for addressing unique DoD coating operations.

An alternative approach to establishing separate emission limits for each subcategory would be to establish a ''multi-component'' emission limit for the entire source category. A multi-component approach could allow sources to calculate a source-specific emission limit based on a weighted-average using the MACT limit and the percentage solids for each component of the limit. The source would then calculate its emission rate to determine compliance with the source-specific emission limit.

The source-specific emission limit would be calculated as follows:

Emission Limit = [''component A'' MACT limit) × (''component A'' %solids)]+ [''component B'' MACT limit) × (''component B'' % solids)]

The source's emission rate would be calculated as follows:

$$\text{Emission Rate} = \frac{\text{Total pounds of organic HAP emitted}}{\text{Total pounds of solids used}}$$

The source-specific approach would allow averaging between the different components of the multi-component emission limit. However, there would be some additional requirements. In addition to the monitoring, recordkeeping, and reporting requirements included in these proposed standards, the multi-component emission limit approach would require a source to calculate and record the source-specific emission limit each month. The calculation would reflect a rolling 12-month compliance period based on the amount of coating solids used for each separate component during each rolling 12-month period.

We are requesting comments on the feasibility, and burden associated with each of the approaches (*i.e.*, subcategory or multi-component emission limits). Comments should include specific examples and supporting information for the advantages and disadvantages of each approach.

B. What Is the Relationship to Other Rules?

Affected sources subject to the proposed rule may also be subject to other rules if they perform surface coating of parts or products that are regulated by other NESHAP. For example, there may be facilities that coat plastic and metal parts using the same or different coatings, coating application processes, and conveyance equipment, either simultaneously or at alternative times. These facilities could be required to demonstrate compliance with two surface coating NESHAP (*e.g.*, proposed subparts MMMM (67 FR 52780, August 13, 2002) and PPPP) with limits based on different units (*i.e.*, pounds HAP emitted per gallon of coating solids used versus pounds HAP emitted per pound of coating solids used) and possibly different compliance dates. Furthermore, because their operations may not be dedicated to particular parts or products (*e.g.*, job shops or contract coaters), their compliance requirements could vary over time due to fluctuations in their operations. These types of facilities may present unique challenges with respect to permitting, demonstrating compliance (*e.g.*, possibly dual recordkeeping and reporting requirements), and enforcement.

Historically, EPA has handled this situation by giving facilities the option of complying with the NESHAP with the most stringent emission limits (*i.e.*, the NESHAP that results in the lowest emissions from the affected source), in lieu of complying with each otherwise applicable NESHAP. This option would require sources to demonstrate which of the applicable standards is the most stringent. This demonstration is necessary because, as stated previously, the emission limits may be expressed in different units. Under this compliance option, once the demonstration is made, a facility would ensure that all coating operations covered by a NESHAP comply with the single, more stringent NESHAP. This option allows a facility operational flexibility, while ensuring that the facility is in compliance with the requirements of the CAA (*i.e.*,

achieving emissions reductions consistent with section 112(d)). This option may also simplify permitting and provide clarity for compliance and enforcement. The EPA believes that this approach towards addressing potentially overlapping regulations is appropriate in this proposed rule and solicits comments on the desirability of providing such a compliance option.

A second option which may provide facilities with the desired operational flexibility is the ''predominant activity'' approach which was shared with stakeholders in May 2001. This approach would allow a facility to determine the predominant coating activity (*e.g.*, plastic parts) among all the coating activities that are subject to a NESHAP (*e.g.*, plastic parts and miscellaneous metal products) and demonstrate compliance with the NESHAP established for the source category represented by the predominant activity. A source not electing to comply with the predominant activity option would continue to be subject to separate NESHAP and would need to demonstrate compliance with each one.

Although EPA received encouraging feedback for a predominant activity approach from many stakeholders (*e.g.*, industry representatives, State and local authorities), there were few suggestions on either how to measure and document predominant (*e.g.*, surface area coated, volume solids used, *etc.*) or the appropriate criteria for establishing which activity is predominant (*e.g.*, a numerical percent of the facility's surface coating operations that would qualify appropriately as predominant).

In defining a predominant activity approach, the criteria used to define predominant should, for practical reasons, minimize fluctuation of the predominant activity between different source categories at job shops/contract coaters. In addition, the basis (*e.g.*, surface area coated, volume solids used, etc.) for measuring predominant would need to be established and should be suitable for all sources. One possible way to help minimize fluctuation over time in what is identified as the predominant activity would be to base predictions about which activity would be predominant on appropriate records for the most recent 3–5 years. Sources would then comply with the NESHAP relevant to that predominant activity under its operating permit and would have the opportunity to review its predominant activity designation, and modify as appropriate, during each permit renewal.

In implementing a predominant activity option, EPA needs to balance good public policy (avoiding overlapping regulations where feasible and sensible) with ensuring emissions reductions consistent with the legislative mandate of sections 112(d)(3) and (i)(3) of the CAA (*i.e.*, ensuring emission reductions achieved under the predominant activity option are comparable to those achieved through compliance with each applicable NESHAP separately). We specifically request comment on how a predominant activity approach should be structured to ensure that emission reductions achieved are consistent with the requirements of sections 112(d)(3) and (i)(3).

A third option under consideration is the development of a subcategory for facilities with coating operations that would otherwise be subject to more than one coating NESHAP. Based on survey data collected under CAA section 114, we would establish a MACT floor that reflects HAP emission rates from the relevant coating operations. The practical advantages associated with this approach are similar to the benefits stated for the more stringent NESHAP approach (*i.e.*, simplification of permitting, clarity of requirements, and achieving mandated emissions reductions). This approach may also limit the need for separate tracking systems for surface coating operations. A disadvantage with this option is that it may not afford facilities as much operational flexibility as the other two options.

A fourth option is to expand the definition of the source category and four subcategories currently under consideration to include ''incidental'' surface coating operations being performed on other substrates (*e.g.* metal) that meet the applicability criteria for another surface coating source category. Under this approach, a facility could demonstrate that a specified percentage of its NESHAP-regulated surface coating activities are within the scope of a specific category or subcategory. The remaining NESHAP-regulated coating operations would be considered incidental for purposes of determining which category or subcategory the overall operations were in, as they would represent a small portion of the total coating operations. Once this demonstration is made, all NESHAP-regulated coating operations conducted at the facility would be included in, and subject to, the emission limitations for the primary source category.

We request comment on the feasibility, benefits, and disadvantages associated with each option presented. We also request comment on additional options for consideration. For all options, we request facility-specific data that would support the recommended option. These data include information on the processes; coating and cleaning material usage; the proportion of coating and cleaning material being used with different substrates; and the difference in the emission reductions achieved based on complying with each applicable NESHAP separately and the option being recommended. Additionally, we request comment and supporting documentation on the criteria (*e.g.*, numerical percentage) and basis (*e.g.*, surface area coated) for determining predominant activity and defining incidental operations. Finally, we request comment on the burden associated with monitoring, recordkeeping, and reporting for each option.

Standards of Performance for Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines—40 CFR Part 60, Subpart TTT

The new source performance standards (NSPS) for plastic parts for business machines apply to facilities that apply coatings to plastic parts for use in business machines that began construction, reconstruction, or modification after January 8, 1986. The pollutants regulated are volatile organic compounds (VOC). Emissions of VOC are limited to 1.5 kilogram VOC per liter (kg VOC/liter) of coating solids applied for primers and color coats, and 2.3 kg VOC/liter of coating solids applied for texture coatings and touch-up coatings. The affected facility is each individual spray booth.

The proposed rule differs from the NSPS in three ways. First, the affected source for the proposed rule is defined broadly as the collection of all coating operations and related activities and equipment at the facility, whereas the affected facility for the NSPS is defined narrowly as each individual spray booth. The broader definition of an affected source allows a facility's emissions to be combined for compliance purposes. Second, the proposed rule regulates organic HAP. While most, although not all, organic HAP emitted from plastic parts and products surface coating operations are VOC, some VOC are not listed as HAP. Therefore, the NSPS regulate a potentially different range of pollutants than the proposed NESHAP. Third, the HAP emission limitations in the proposed rule are based on the amount of coating solids used at the affected source. The VOC limitations in the NSPS are based on the amount of coating solids actually applied to the

plastic parts and products, which necessitates estimates of transfer efficiency in the compliance calculations.

Because of the differences between the NSPS and the proposed NESHAP, compliance with either rule cannot be deemed compliance with the other. A plastic parts and products surface coating operation that meets the applicability requirements of both the NSPS and the proposed NESHAP must comply with both. Overlapping reporting, recordkeeping, and monitoring requirements may be resolved through your title V permit.

Aerospace Manufacturing and Rework Facilities NESHAP (40 CFR Part 63, Subpart GG)

The aerospace NESHAP establish HAP and VOC emission limitations for aerospace manufacturing and rework facilities that produce or repair aerospace vehicles (*e.g.*, airplanes, helicopters, space vehicles) or vehicle parts. The aerospace NESHAP apply only to parts and assemblies that are critical to the aerospace vehicle's structural integrity or flight performance. Therefore, the possibility exists that some facilities would be subject to the requirements of both the aerospace NESHAP and the proposed plastic parts and products surface coating NESHAP. For example, a facility that performs maintenance operations consisting of both exterior and interior reconstruction and overhaul of commercial airplanes may perform coating of plastic parts, such as tray tables and seat panels, that are not considered critical to the structural integrity or flight performance. These parts may be removed from the airplane and painted on-site to cover scratches and other wear marks before being reinstalled. Such coating activities and associated equipment would be subject to the proposed plastic parts and products coating NESHAP.

We do not foresee that any conflicts will exist between the requirements for the aerospace NESHAP and the proposed plastic parts and products surface coating NESHAP. If a plastic part that is critical to the aerospace vehicle's structural integrity or flight performance is coated, the coating operation for that part will fall under the aerospace NESHAP. Only plastic parts that are not critical to the aerospace vehicle's structural integrity or flight performance will fall under the proposed plastic parts and products surface coating NESHAP.

C. What Are the Primary Sources of Emissions and What Are the Emissions?

The proposed NESHAP would regulate emissions of organic HAP. Available emission data collected during the development of the proposed NESHAP show that the primary organic HAP emitted from plastic parts and products surface coating operations include MEK, MIBK, toluene, and xylenes. These compounds account for over 85 percent of this source category's nationwide organic HAP emissions. Other organic HAP emissions identified include EGBE and glycol ethers. The majority of organic HAP emissions from a facility engaged in plastic parts and products surface coating operations can be attributed to the application, drying, and curing of coatings. The remaining emissions are primarily from cleaning operations. In most cases, organic HAP emissions from mixing, storage, and waste handling are relatively small.

The organic HAP emissions associated with coatings (the term ''coatings'' includes protective and decorative coatings as well as adhesives) occur due to volatilization of solvents and carriers. Coatings are most often applied either by using a spray gun in a spray booth or by dipping the substrate in a tank containing the coating. In a spray booth, volatile components evaporate from the coating as it is applied to the part and from the overspray. The coated part then passes through a flash-off area where additional volatiles evaporate from the coating. Finally, the coated part passes through a drying/curing oven, or is allowed to air dry, where the remaining volatiles are evaporated.

Organic HAP emissions also occur from the activities undertaken during cleaning operations where solvent is used to remove coating residue or other unwanted materials. Cleaning in this industry includes cleaning of spray guns and transfer lines (*e.g.*, tubing or piping), tanks, and the interior of spray booths. Cleaning also includes applying solvents to manufactured parts prior to coating application and to equipment (*e.g.*, cleaning rollers, pumps, conveyors, *etc.*).

Mixing and storage are other sources of emissions. Organic HAP emissions can occur from displacement of organic vapor-laden air in containers used to store organic HAP solvents or to mix coatings containing organic HAP solvents. The displacement of vapor-laden air can occur during the filling of containers and can be caused by changes in temperature or barometric pressure, or by agitation during mixing. Volatilization of organic HAP can also occur during waste handling.

D. What Is the Affected Source?

We define an affected source as a stationary source, a group of stationary sources, or part of a stationary source to which a specific emission standard applies. The proposed standards define the affected source as the collection of all operations associated with the surface coating of plastic parts and products within each of the four subcategories (TPO, headlamps, assembled on-road vehicle and general use). These operations include preparation of a coating for application (*e.g.*, mixing with thinners or other additives); surface preparation of the plastic parts and products; coating application and flash-off; drying and/or curing of applied coatings; cleaning of equipment used in surface coating; storage of coatings, thinners, and cleaning materials; and handling and conveyance of waste materials from the surface coating operations. The coating operation does not include the application of coatings using hand-held aerosol containers.

A few facilities have coating operations in more than one subcategory. For example, a few facilities have TPO coating operations that are in the TPO coating subcategory and also have other plastic parts and products coating operations that are in the general use coating subcategory. In such a case, the facility would have two separate affected sources: (1) The collection of all operations associated with the surface coating of TPO, and (2) the collection of all operations associated with general use coating. Each of these affected sources would be required to meet the emission limits that apply to its subcategory.

Another example of a facility with coating operations in more than one subcategory would be a facility that assembles and paints motor homes. The use of adhesives, caulks, sealants, and associated materials in assembling the motor home would be in the general use coating subcategory and would constitute one affected source. The use of coatings and associated materials in painting the assembled motor home would be in the assembled on-road vehicle subcategory and would constitute a second affected source.

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

Emission Limits. We are proposing to limit organic HAP emissions from each existing affected source using the emission limits in Table 2. The proposed emission limits for each new

or reconstructed affected source are given in Table 3.

TABLE 2.—EMISSION LIMITS FOR EXISTING AFFECTED SOURCES

For any affected source applying coating to . . .	The organic HAP emission limit you must meet, in kg organic HAP emitted/kg coating solids used (lb organic HAP source emitted/lb coating solids used), is:
TPO substrates	0.23
Headlamps	0.45
Aassembled on-road vehicles	1.34
Other (general use) plastic parts and products.	0.16

TABLE 3.—EMISSION LIMITS FOR NEW OR RECONSTRUCTED AFFECTED SOURCES

For any affected source applying coating to . . .	The organic HAP emission limit you must meet, in kg organic HAP emitted/kg coating solids used (lb organic HAP emitted/lb coating solids used), is:
TPO substrates	0.17
Headlamps	0.26
Assembled on-road vehicles	1.34
Other (general use) plastic parts and products.	0.16

You can choose from several compliance options in the proposed rule to achieve the emission limits. You could comply by applying materials (coatings, thinners and other additives, and cleaning materials) that meet the emission limits, either individually or collectively, during each compliance period. You could also use a capture system and add-on control device to meet the emission limits. You could also comply by using a combination of both approaches.

Operating Limits. If you reduce emissions by using a capture system and add-on control device (other than a solvent recovery system for which you conduct a liquid-liquid material balance), the proposed operating limits would apply to you. These limits are site-specific parameter limits that you determine during the initial performance test of the system. For capture systems that are not permanent total enclosures, you would establish average volumetric flow rates or duct static pressure limits for each capture device (*e.g.*, a hood or enclosure) in each capture system. For capture systems that are permanent total enclosures, you would establish limits on average facial velocity or pressure drop across openings in the enclosure.

For thermal oxidizers, you would monitor the combustion temperature. For catalytic oxidizers, you would monitor the temperature immediately before and after the catalyst bed, or you would monitor the temperature before the catalyst bed and prepare and implement an inspection and maintenance plan that includes periodic catalyst activity checks. For carbon adsorbers for which you do not conduct a liquid-liquid material balance, you would monitor the carbon bed temperature and the amount of steam or nitrogen used to desorb the bed. For condensers for which you do not conduct a liquid-liquid material balance, you would monitor the outlet gas temperature from the condenser. For concentrators, you would monitor the temperature of the desorption stream and the pressure drop across the concentrator.

The site-specific parameter limits that you establish must reflect operation of the capture system and control device during a performance test that demonstrates achievement of the emission limits during representative operating conditions.

Work Practice Standards. If you use an emission capture system and control device for compliance, you would be required to develop and implement a work practice plan to minimize organic HAP emissions from mixing operations, storage tanks and other containers, and handling operations for coatings, thinners, cleaning materials, and waste materials.

If you use a capture system and control device for compliance, you would be required to develop and operate according to a startup, shutdown, and malfunction plan (SSMP) during periods of startup, shutdown, or malfunction of the capture system and control device.

The NESHAP General Provisions at 40 CFR part 63, subpart A, codify certain procedures and criteria for all 40 CFR part 63 NESHAP and would apply to you as indicated in the proposed rule. The General Provisions contain administrative procedures, preconstruction review procedures for new sources, and procedures for conducting compliance-related activities such as notifications, reporting and recordkeeping, performance testing, and monitoring. The proposed rule refers to individual sections of the General Provisions to emphasize key sections that are relevant. However, unless specifically overridden in the proposed rule, all of the applicable General Provisions requirements would apply to you.

F. What Are the Testing and Initial Compliance Requirements?

Existing affected sources would have to be in compliance with the final rule no later than 3 years after the effective date of the final rule. New and reconstructed sources would have to be in compliance upon initial startup of the affected source or by the effective date of the final rule, whichever is later. The effective date is the date on which the final rule is published in the **Federal Register**. However, affected sources would not be required to demonstrate compliance until the end of the initial compliance period when they will have accumulated the necessary records to document the rolling 12-month organic HAP emission rate.

Compliance with the emission limits is based on a rolling 12-month organic HAP emission rate determined each month. Each 12-month period is a compliance period. The initial compliance period, therefore, is the 12-month period beginning on the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period begins on the compliance date and extends through the end of that month plus the following 12 months. We have defined ''month'' as a calendar month or a pre-specified period of 28 to 35 days to allow for flexibility at sources where data are based on a business accounting period.

Being ''in compliance'' means that the owner or operator of the affected source meets the requirements to achieve the proposed emission limitations during the initial compliance period. However, they will not have accumulated the records for the rolling 12-month organic HAP emission rate until the end of the initial compliance period. At the end of the initial compliance period, the owner or operator would use the data and records generated to determine whether or not the affected source is in compliance with the organic HAP emission limit and other applicable requirements for that period. If the affected source does not meet the applicable limit and other requirements, it is out of compliance.

Emission Limits. There are three proposed options for complying with

the proposed emission limits, and the testing and initial compliance requirements vary accordingly. You may choose to use one compliance option for the entire affected source, or you may use different compliance options for different coating operations within the affected source. You may also use different compliance options for the same coating operation at different times.

Option 1: Compliant Materials

This option is a pollution prevention option that allows you to easily demonstrate compliance by using low-HAP or non-HAP coatings and other materials. If you use coatings that, based on their organic HAP content, individually meet the kg (pound (lb)) organic HAP emitted per kg (lb) coating solids used levels in the applicable emission limits and you use non-HAP thinners and other additives and cleaning materials, this compliance option is available to you. For this option, we have minimized recordkeeping and reporting requirements. You can demonstrate compliance by using manufacturer's formulation data and readily available purchase records to determine the organic HAP content of each coating or other material and the amount of each material used. You would not need to perform any detailed emission rate calculations.

If you demonstrate compliance based on the coatings and other materials used, you would demonstrate that the organic HAP content of each coating meets the emission limits for the appropriate subcategory as shown in Tables 2 and 3, and that you used no organic HAP-containing thinners, other additives, or cleaning materials. For example, if you are using the compliant materials option and your existing source has TPO coating operations, headlamp coating operations, assembled on-road vehicle coating operations, and general use coating operations, you would demonstrate that: (1) Each coating used in the TPO coating operation has an organic HAP content no greater than 0.23 kg (0.23 lb) organic HAP emitted per kg (lb) coating solids used; (2) each coating used in the headlamp coating operations has an organic HAP content no greater than 0.45 kg (0.45 lb) organic HAP emitted per kg (lb) coating solids used; (3) each coating used in the assembled on-road vehicle coating operations has an organic HAP content no greater than 1.34 kg (1.34 lb) organic HAP emitted per kg (lb) coating solids used; (4) each general use coating has an organic HAP content no greater than 0.16 kg (0.16 lb) organic HAP emitted per kg (lb) coating solids used; (5) and that you used no organic HAP-containing thinners, other additives, or cleaning materials. Note that ''no organic HAP'' is not intended to mean absolute zero. Materials that contain ''no organic HAP'' should be interpreted to mean materials that contain organic HAP levels below the levels specified in § 63.4541(a) of the proposed rule, which are typical reporting levels. These typical reporting levels only count organic HAP that are present at 0.1 percent or more by mass for Occupational Safety and Health Administration (OSHA)-defined carcinogens and at 1.0 percent or more by mass for other compounds.

To determine the mass of organic HAP in coatings, thinners, and cleaning materials and the mass fraction of coating solids, you could rely on manufacturer's formulation data. You would not be required to perform tests or analysis of the material if formulation data are available. Alternatively, you could use results from the test methods listed below. You may also use alternative test methods provided you get EPA approval in accordance with the NESHAP General Provisions, 40 CFR 63.7(f). However, if there is any inconsistency between the test method results (either EPA's or an approved alternative) and manufacturer's data, the test method results would prevail for compliance and enforcement purposes. If you elect to perform tests:

- For organic HAP content, use Method 311 of 40 CFR part 63, appendix A.
- The proposed rule would allow you to use nonaqueous volatile matter as a surrogate for organic HAP, which would include all organic HAP plus all other organic compounds, and excluding water. If you choose this option, use Method 24 of 40 CFR part 60, appendix A.
- For mass fraction of coating solids, use Method 24.

Option 2: Compliance Based on the Emission Rate Without Add-on Controls

This option is a pollution prevention option where you can demonstrate compliance based on the organic HAP contained in the mix of coatings, thinners and other additives, and cleaning materials you use. This option allows you the flexibility to use some individual coatings that do not, by themselves, meet the kg (lb) organic HAP emitted per kg (lb) coating solids used levels in the applicable emission limits if you use other low-HAP or non-HAP coatings such that overall emissions from the affected source over a 12-month period meet the emission limits. You must use this option if you use HAP-containing thinners, other additives, and cleaning materials and do not have add-on controls. You would keep track of the mass of organic HAP in each coating, thinner or other additive, and cleaning material, and the amount of each material you use in your affected source each month of the compliance period. You would use this information to determine the total mass of organic HAP in all coatings, thinners and other additives, and cleaning materials divided by the total mass of coating solids used during the compliance period. You would demonstrate that your emission rate (in kg (lb) organic HAP emitted per kg (lb) coating solids used) meets the applicable emission limit. You can use readily available purchase records and manufacturer's formulation data to determine the amount of each coating or other material you used and the organic HAP in each material. The proposed rule contains equations that show you how to perform the calculations to demonstrate compliance.

If you demonstrate compliance using Option 2, you would be required to:

- Determine the quantity of each coating, thinner and other additive, and cleaning material used.
- Determine the mass of organic HAP in each coating, thinner and other additive, and cleaning material using the same types of data and methods previously described for Option 1. You may rely on manufacturer's formulation data or you may choose to use test results as described under Option 1.
- Determine the mass fraction of coating solids for each coating using the same types of data or methods described under Option 1.
- Calculate the total mass of organic HAP in all materials and total mass of coating solids used each month. You may subtract from the total mass of organic HAP the amount contained in waste materials you send to a hazardous waste treatment, storage, and disposal facility regulated under 40 CFR part 262, 264, 265, or 266.
- Calculate the total mass of organic HAP emissions and total mass of coating solids for the initial compliance period by adding together all the monthly values for mass of organic HAP and for mass of coating solids for the 12 months of the initial compliance period.
- Calculate the ratio of the total mass of organic HAP emitted for the materials used to the total mass of coating solids used (kg (lb) organic HAP emitted per kg (lb) of coating solids used) for the initial compliance period.

• Record the calculations and results and include them in your Notification of Compliance Status.

Note that if you choose to use this option for a particular coating operation rather than for an entire affected source, you would calculate the organic HAP emission rate using just the materials used in that operation. Similarly, if your facility has multiple affected sources using this option (*e.g.*, a TPO affected source, a headlamp affected source, an assembled on-road vehicle affected source, and a general use affected source), you would do a separate calculation for each affected source to show that each affected source meets its emission limit.

Option 3: Emission Rate With Add-on Controls Option

This option allows sources to use a capture system and an add-on pollution control device, such as a combustion device or a recovery device, to meet the emission limits. While we believe that, based on typical emission characteristics, most sources will not use control devices, we are providing this option for sources that can use control devices. Fewer than 10 percent of the existing sources for which we have data use control devices and may continue using the control devices for compliance with the proposed standards. Under this option, testing is required to demonstrate the capture system and control device efficiency. Alternatively, you may conduct a liquid-liquid material balance to demonstrate the amount of organic HAP collected by your recovery device. The proposed rule provides equations showing you how to use records of materials usage, organic HAP contents of each material, capture and control efficiencies, and coating solids content to calculate your emission rate during the compliance period.

If you demonstrate compliance based on this option, you would demonstrate that your emission rate considering controls (in kg (lb) organic HAP emitted per kg (lb) of coating solids used) is less than the applicable emission limit. For a capture system and add-on control device other than a solvent recovery system for which you conduct a liquid-liquid material balance, your testing and initial compliance requirements would be as follows:

• Conduct an initial performance test to determine the capture and control efficiencies of the equipment and to establish operating limits to be achieved on a continuous basis. The performance test would have to be completed no later than the compliance date for existing sources and 180 days after the compliance date for new and reconstructed sources.

• Determine the mass of organic HAP in each coating and other material, and the mass fraction of coating solids for each coating used each month of the initial compliance period.

• Calculate the total mass of organic HAP in all coatings and other materials, and total mass of coating solids used each month in the controlled operation or group of coating operations. You may subtract from the total mass of organic HAP the amount contained in waste materials you send to a hazardous waste treatment, storage, and disposal facility regulated under 40 CFR part 262, 264, 265, or 266.

• Calculate the organic HAP emissions from the controlled coating operations each month using the capture and control efficiencies determined during the performance test, and the total mass of organic HAP in materials used in controlled coating operations that month.

• Calculate the total mass of organic HAP emissions and total volume of coating solids for the initial compliance period by adding together all the monthly values for mass of organic HAP emissions and for mass of coating solids for the 12 months in the initial compliance period.

• Calculate the ratio of the total mass of organic HAP emissions to the total mass of coating solids used during the initial compliance period.

• Record the calculations and results and include them in your Notification of Compliance Status.

• Develop and implement a work practice plan to minimize emissions from storage, mixing, and handling of organic HAP-containing materials.

Note that if you choose to use this option for a particular coating operation rather than for the entire affected source, you would calculate the organic HAP emission rate using just the materials used in that operation. Similarly, if your facility has multiple affected sources using this option (*e.g.*, a TPO affected source, a headlamp affected source, an assembled on-road vehicle affected source, and a general use affected source), you would do a separate calculation for each affected source to show that each affected source meets its emission limit.

If you use a capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances, you would use specified test methods to determine both the efficiency of the capture system and the emission reduction efficiency of the control device. 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 (and all materials must be applied and dried within the enclosure); or use one of three protocols in § 63.4565 of the proposed rule to measure capture efficiency. If you have a permanent total enclosure and all materials are applied and dried within the enclosure and you route all exhaust gases from the enclosure to a control device, you would assume 100 percent capture.

To determine the emission reduction efficiency of the control device, you would conduct measurements of the inlet and outlet gas streams. The test would consist of three runs, each run lasting 1 hour, using the following EPA Methods in 40 CFR part 60, appendix A:

• Method 1 or 1A for selection of the sampling sites.

• Method 2, 2A, 2C, 2D, 2F, or 2G to determine the gas volumetric flow rate.

• Method 3, 3A, or 3B for gas analysis to determine dry molecular weight.

• Method 4 to determine stack moisture.

• Method 25 or 25A 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, and approved by the Administrator, could be used.

If you use a solvent recovery system, you could choose to determine the overall control efficiency using a liquid-liquid material balance instead of conducting an initial performance test. If you use the material balance alternative, you would be required to measure the amount of all materials used in the controlled coating operations served by the solvent recovery system during each month of the initial compliance period and determine the total volatile matter contained in these materials. You would also measure the amount of volatile matter recovered by the solvent recovery system during each month of the initial compliance period. Then you would compare the amount recovered to the amount used to determine the overall control efficiency each month and apply this efficiency to the total mass of organic HAP in the materials used to determine total organic HAP emissions for the month. You would total these 12 monthly organic HAP emission values and divide by the total of the 12 monthly values for coating solids used to calculate the emission rate for the 12-month initial compliance period. You would record the calculations and

results and include them in your Notification of Compliance Status.

Operating Limits. As mentioned above, you would establish operating limits as part of the initial performance test of a capture system and control device other than a solvent recovery system for which you conduct liquid-liquid material balances. The operating limits are the minimum or maximum (as applicable) values achieved for capture systems and control devices during the most recent performance test, conducted under representative conditions, that demonstrated compliance with the emission limits.

The proposed rule specifies the parameters to monitor for the types of emission control systems commonly used in the industry. You would be required to install, calibrate, maintain, and continuously operate all monitoring equipment according to manufacturer's specifications and ensure that the continuous parameter monitoring systems (CPMS) meet the requirements in § 63.4568 of the proposed rule. If you use control devices other than those identified in the proposed rule, you would submit the operating parameters to be monitored to the Administrator for approval. The authority to approve the parameters to be monitored is retained by EPA and is not delegated to States.

If you use a thermal or catalytic oxidizer, you would continuously monitor the appropriate temperature and record it at least every 15 minutes. 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. The operating limit would be the average temperature measured during the performance test and for each consecutive 3-hour period, the average temperature would have to be at or above this limit. For catalytic oxidizers, temperature monitors are placed immediately before and after the catalyst bed. The operating limits would be the average temperature just before the catalyst bed and the average temperature difference across the catalyst bed during the performance test. For each 3-hour period, the average temperature and the average temperature difference would have to be at or above these limits. Alternatively, you would be allowed to meet only the temperature limit before the catalyst bed if you develop and implement an inspection and maintenance plan for the catalytic oxidizer.

If you use a carbon adsorber and do not conduct liquid-liquid material balances to demonstrate compliance, you would monitor the carbon bed temperature after each regeneration and the total amount of steam or nitrogen used to desorb the bed for each regeneration. The operating limits would be the carbon bed temperature at the time the carbon bed is returned to service (not to be exceeded) and the amount of steam or nitrogen used for desorption (to be met as a minimum).

If you use a condenser and do not conduct liquid-liquid material balances to demonstrate compliance, you would monitor the outlet gas temperature to ensure that the air stream is being cooled to a low enough temperature. The operating limit would be the average condenser outlet gas temperature measured during the performance test and for each consecutive 3-hour period the average temperature would have to be at or below this limit.

If you use a concentrator, you would monitor the temperature of the desorption concentrate stream and the pressure drop across the concentrator. These values would be recorded at least once every 15 minutes. The operating limits would be the average temperature (to be met as a minimum) and the average pressure drop (not to be exceeded) measured during the performance test.

For each capture system that is not a permanent total enclosure, you would establish operating limits for gas volumetric flow rate or duct static pressure for each enclosure or capture device. The operating limit would be the average volumetric flow rate or duct static pressure during the performance test, to be met as a minimum. For each capture system that is a permanent total enclosure, the operating limit would require the average facial velocity of air through all natural draft openings to be at least 200 feet per minute or the pressure drop across the enclosure to be at least 0.007 inches water.

Work Practices. If you use a capture system and control device for compliance, you would be required to develop and implement on an ongoing basis a work practice plan for minimizing organic HAP emissions from storage, mixing, material handling, and waste handling operations. This plan would include a description of all steps taken to minimize emissions from these sources (*e.g.*, using closed storage containers, practices to minimize emissions during filling and transfer of contents from containers, using spill minimization techniques, placing solvent-laden cloths in closed containers immediately after use, *etc.*). You would have to make the plan available for inspection if the Administrator requests to see it.

If you use a capture system and control device for compliance, you would be required to develop and operate according to a SSMP during periods of startup, shutdown, or malfunction of the capture system and control device.

G. What Are the Continuous Compliance Provisions?

Emission Limits. If you use the compliant materials option (Option 1), you would demonstrate continuous compliance if each coating meets the applicable emission limit and you use no organic HAP-containing thinners, other additives, or cleaning materials. If you use the emission rate without add-on controls option (Option 2), you would demonstrate continuous compliance if, for each 12-month compliance period, the ratio of kg (lb) organic HAP emitted to kg (lb) coating solids used is less than or equal to the applicable emission limit. You would follow the same procedures for calculating the organic HAP emitted to coating solids ratio that you used for the initial compliance period.

For each coating operation on which you use a capture system and control device (Option 3) other than a solvent recovery system for which you conduct a liquid-liquid material balance, you would use the continuous parameter monitoring results for the month as part of the determination of the mass of organic HAP emissions. If the monitoring results indicate no deviations from the operating limits and there were no bypasses of the control device, you would assume the capture system and control device are achieving the same percent emission reduction efficiency as they did during the most recent performance test in which compliance was demonstrated. You would then apply this percent reduction to the total mass of organic HAP in materials used in the controlled coating operations to determine the emissions from those operations during the month. If there were any deviations from the operating limits during the month or any bypasses of the control device, you would account for them in the calculation of the monthly emissions by assuming the capture system and control device were achieving zero emission reduction during the periods of deviation. Then you would determine the organic HAP emission rate by dividing the total mass of organic HAP emissions for the 12-month compliance period by the total mass of coating solids used during the 12-month compliance period. Every month, you would calculate the emission rate for the previous 12-month period.

For each coating operation on which you use a solvent recovery system and conduct a liquid-liquid material balance each month, you would use the liquid-liquid material balance to determine control efficiency. To determine the overall control efficiency, you must measure the amount of all materials used 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, calculate the overall control efficiency, and apply it to the total mass of organic HAP in the materials used to determine total organic HAP emissions each month. Then you would determine the 12-month organic HAP emission rate in the same manner described above.

Operating Limits. If you use a capture system and control device, the proposed rule would require you to achieve on a continuous basis the operating limits you establish during the performance test. If the continuous monitoring shows that the capture system and control device are operating outside the range of values established during the performance test, you have deviated from the established operating limits.

If you operate a capture system and control device with bypass lines that could allow emissions to bypass the control device, you would have to demonstrate that captured organic HAP emissions within the affected source are being routed to the control device by monitoring for potential bypass of the control device. You may choose from the following four monitoring procedures:

- Flow control position indicator to provide a record of whether the exhaust stream is directed to the control device;
- Car-seal or lock-and-key valve closures to secure the bypass line valve in the closed position when the control device is operating;
- Valve closure monitoring to ensure any bypass line valve or damper is closed when the control device is operating; or
- Automatic shutdown system to stop the coating operation when flow is diverted from the control device.

A deviation would occur for any period of time the bypass monitoring indicates that emissions are not routed to the control device.

Work Practices. If you use an emission capture system and control device for compliance, you would be required to implement, on an ongoing basis, the work practice plan you developed during the initial compliance period. If you did not develop a plan for reducing organic HAP emissions or you do not implement the plan, this would be a deviation from the work practice standard.

If you use a capture system and control device for compliance, you would be required to operate according to your SSMP during periods of startup, shutdown, or malfunction of the capture system and control device.

H. What Are the Notification, Recordkeeping, and Reporting Requirements?

You are required to comply with the applicable requirements in the NESHAP General Provisions, subpart A of 40 CFR part 63, as described in the proposed rule. The General Provisions notification requirements include: initial notifications, notification of performance test if you are complying using a capture system and control device, notification of compliance status, and additional notifications required for affected sources with continuous monitoring systems. The General Provisions also require certain records and periodic reports.

Initial Notifications. If you own or operate an existing affected source, you must send a notification to the EPA Regional Office in the region where your facility is located and to your State agency no later than 1 year after the final rule is published in the **Federal Register**. For new and reconstructed sources, you must send the notification within 120 days after the date of initial startup or 120 days after publication of the final rule, whichever is later. That report notifies us and your State agency that you have an existing affected source that is subject to the proposed standards or that you have constructed a new affected source. Thus, it allows you and the permitting authority to plan for compliance activities. You would also need to send a notification of planned construction or reconstruction of a source that would be subject to the proposed rule and apply for approval to construct or reconstruct.

Notification of Performance Test. If you demonstrate compliance by using a capture system and control device for which you do not conduct a liquid-liquid material balance, you would conduct a performance test. The performance test would be required no later than the compliance date for an existing affected source. For a new or reconstructed affected source, the performance test would be required no later than 180 days after startup or 180 days after **Federal Register** publication of the final rule, whichever is later. You must notify us (or the delegated State or local agency) at least 60 calendar days before the performance test is scheduled to begin and submit a report of the performance test results no later than 60 days after the test.

Notification of Compliance Status. You must submit a Notification of Compliance Status within 30 days after the end of the initial 12-month compliance period. In the notification, you must certify whether each affected source has complied with the proposed standards, identify the option(s) you used to demonstrate initial compliance, summarize the data and calculations supporting the compliance demonstration, and provide information on any deviations from the emission limits, operating limits, or other requirements.

If you elect to comply by using a capture system and control device for which you conduct performance tests, you must provide the results of the tests. Your notification must also include the measured range of each monitored parameter, the operating limits established during the performance test, and information showing whether the source has complied with its operating limits during the initial compliance period.

Recordkeeping Requirements. You must keep records of reported information and all other information necessary to document compliance with the proposed rule for 5 years. As required under the General Provisions, records for the 2 most recent years must be kept on-site; the other 3 years' records may be kept off-site. Records pertaining to the design and operation of the control and monitoring equipment must be kept for the life of the equipment.

Depending on the compliance option that you choose, you may need to keep records of the following:

- Organic HAP content or volatile organic matter content and coating solids content (for all compliance options).
- Quantity of the coatings, thinners and other additives, and cleaning materials used during each compliance period (for all compliance options).
- For the emission rate (with or without add-on controls) compliance options, calculations of your emission rate for each 12-month compliance period.
- All documentation supporting initial notifications and notifications of compliance status.

If you demonstrate compliance by using a capture system and control device, you must keep records of the following:

- All required measurements, calculations, and supporting documentation needed to demonstrate compliance with the standards.

• All results of performance tests and parameter monitoring.

• All information necessary to demonstrate conformance with your plan for minimizing emissions from mixing, storage, and waste handling operations.

• All information necessary to demonstrate conformance with the affected source's SSMP when the plan procedures are followed.

• The occurrence and duration of each startup, shutdown, or malfunction of the emission capture system and control device.

• Actions taken during startup, shutdown, and malfunction that are different from the procedures specified in the affected source's SSMP.

• Each period during which a CPMS is malfunctioning or inoperative (including out-of-control periods).

The proposed rule would require you to collect and keep records according to certain minimum data requirements for the CPMS. Failure to collect and keep the specified minimum data would be a deviation that is separate from any emission limits, operating limits, or work practice standards.

Deviations, as determined from these records, would need to be recorded and also reported. A deviation is any instance when any requirement or obligation established by the proposed rule including, but not limited to, the emission limits, operating limits, and work practice standards, is not met.

If you use a capture system and control device to reduce organic HAP emissions, you would have to make your SSMP available for inspection if the Administrator requests to see it. The plan would stay in your records for the life of the affected source or until the source is no longer subject to the proposed standards. If you revise the plan, you would need to keep the previous superseded versions on record for 5 years following the revision.

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 report stating that the affected source has been in continuous compliance. If deviations occur, you would include them in the report as follows:

• Report each deviation from the emission limit.

• Report each deviation from the work practice standards if you use an emission capture system and control device.

• If you use an emission capture system and control device other than a solvent recovery system for which you conduct liquid-liquid material balances, report each deviation from an operating limit and each time a bypass line diverts emissions from the control device to the atmosphere.

• Report other specific information on the periods of time the deviations occurred.

You would also have to include in each semiannual report an identification of the compliance option(s) you used for each affected source and any time periods when you changed to another compliance option.

Other Reports. You would be required to submit reports for periods of startup, shutdown, or malfunction of the capture system and control device. If the procedures you follow during any startup, shutdown, or malfunction are inconsistent with your plan, you would report those procedures with your semiannual reports in addition to immediate reports required by 40 CFR 63.10(d)(5)(ii).

III. Rationale for Selecting the Proposed Standards

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

The surface coating of plastic parts and products is a source category that is on the list of source categories to be regulated because it contains major sources which emit or have the potential to emit at least 9.07 Mg (10 tons) of any one HAP or at least 22.7 Mg (25 tons) of any combination of HAP annually. The proposed rule would control organic HAP emissions from both new and existing major sources. Area sources are not being regulated under this proposed rule.

The plastic parts and products surface coating category consists of facilities that apply protective or decorative coatings and adhesive coatings to plastic parts and products through a post-mold coating process. The surface coating of plastic parts and products includes any facility engaged in the surface coating of plastic parts or products, including panels, housings, bases, covers, and other components formed of synthetic polymers. We use the plastic parts and products lists contained in the SIC and NAICS code descriptions to describe the vast array of plastic parts and products.

Due to the broad scope of the plastic parts and products surface coating source category, the source category definition likewise needs to be broad in order to include the varieties of operations and activities that might occur at these facilities. However, a broad description has the potential to unintentionally include surface coating operations that we would not consider to be part of the source category. We intend the source category to include facilities for which the surface coating of plastic parts and products is either their principal activity or an integral part of a production process that is the principal activity. Most coating operations are located at plant sites that are dedicated to these activities. However, some may be located at sites for which some other activity is principal, such as automobile assembly plants that coat plastic automobile parts or accessories off the assembly line. Co-located surface coating operations comparable to the types and sizes of the dedicated plastic parts surface coating facilities, in terms of the coating operation and applicable emission control techniques, are included in the source category.

We reviewed the available data and information to identify a descriptor common to sources we intended to include in the category that would further help to describe the category. Based on our review, we believe the quantity of coating used is the most equitable descriptor for purposes of defining the scope of the category. Other descriptors that could have been used but were rejected because they would either be too difficult to implement or they are not as equitable as coating usage include production rate, quantity of emissions, and solvent usage.

In selecting the quantity of coating used, we found that facilities in the source category for which data were available to us reported annual coating usage of at least 100 gallons per year. Those facilities that reported below this amount used coatings to assist in or repair minor defects during product assembly operations, and the surface coating operations were not integral to plastic parts and products surface coating. Therefore, the MACT floor determination and the estimated environmental, energy, cost, and economic impacts were based on facilities that used greater than 100 gallons per year. We are not aware of any surface coating operation at a major source that is dedicated to plastic parts and products surface coating that is using less than 100 gallons per year and, thus, did not evaluate whether the MACT level of control would be appropriate for such operations if they exist.

The source category does not include research or laboratory facilities or janitorial, building, and facility maintenance operations, or hobby shops that are operated for personal rather than commercial purposes. The source category also does not include coating of magnet wire, coating of plastics to produce fiberglass boats (except the

post-mold coating of personal watercraft or their parts), or the extrusion of plastic onto a plastic part or product to form a coating. These activities and operations are not comparable to the types and sizes of the dedicated facilities in terms of coating operations and applicable control techniques and are regulated or are being considered for regulation as part of other source categories. Thus, they are not considered to be within the scope of the source category. The post-mold coating of personal watercraft and their parts is considered within the scope of the source category.

The source category also does not include certain other coatings of plastic parts and products that are already being, or would be, regulated by another NESHAP as part of a different source category. We want to avoid overlap of source categories where coating of the same part would be subject to multiple rules.

Subcategory Selection. The statute gives us discretion to determine if and how to subcategorize. Once the floor has been determined for new or reconstructed and existing affected sources for a source category or subcategory, we must set MACT standards that are no less stringent than the MACT floor. Such standards must then be met by all sources within the source category or subcategory. A subcategory is a group of similar sources within a given source category. As part of the regulatory development process, we evaluate the similarities and differences between industry segments or groups of facilities comprising a source category. In establishing subcategories, we consider factors such as process operations (type of process, raw materials, chemistry/formulation data, associated equipment, and final products); emission characteristics (amount and type of HAP); control device applicability; and opportunities for pollution prevention. We may also consider existing regulations or guidance from States and other regulatory agencies in determining subcategories.

After reviewing survey responses from the industry, facility site visit reports, and information received from stakeholders meetings, we found that the plastic parts and products surface coating industry could be grouped into four subcategories: (1) General use coating, (2) TPO coating, (3) headlamp coating, and (4) assembled on-road vehicle coating. The general use coating subcategory includes all plastic parts and products coating operations except TPO, headlamp, and assembled on-road vehicle coating. This includes operations that coat a wide variety of substrates, surfaces, and types of plastic parts, as well as more specialized coating scenarios. Each of the subcategories includes coating operations, including associated surface preparation, equipment cleaning, mixing and storage, and waste handling.

The TPO coating is considered a separate subcategory from other plastic parts and products coating operations because the surface coating of TPO substrates requires the use of an adhesion promoter in order to apply subsequent coatings to the substrate. The adhesion promoters required in TPO coating operations contain significant levels of organic HAP because these materials contain organic HAP solvents that are capable of wetting the TPO substrate and swelling the rubber content of the substrate. Wetting of the substrate requires a solvent in the adhesion promoter that spreads out over the substrate, and this is dictated by the surface tension of the substrate and the solvent. The surface tensions of organic HAP solvents such as toluene, xylene, and other aromatics are ideal for wetting TPO while other non-HAP solvents have surface tensions too high to allow the adhesion promoter to spread out over the TPO part. In conjunction with adequate wetting of the TPO, the solvents in the adhesion promoter must be capable of migrating through the surface of the TPO substrate to swell the rubber content (elastomer) in the TPO. It is this optimum swelling of the rubber content in the TPO and the subsequent entanglement of the elastomer with the paint that provides the adhesion necessary to coat TPO successfully. Many non-HAP solvents either evaporate too quickly to adequately migrate through and swell the rubber or the solvents swell the rubber content of the TPO to the point of distortion of the part. Therefore, the adhesion promoters used in TPO coating operations often contain high levels of organic HAP solvents to achieve adequate wetting of the substrate, swelling of the rubber, and ultimately, adhesion of the paint to the substrate. The need to use these HAP-containing materials would make it technically difficult for existing facilities coating TPO to achieve the lower emission rates established by facilities that do not coat TPO. In summary, the technical differences in the type of coatings required due to the nature of the TPO substrate warrant a separate subcategory for TPO coating.

Headlamp coating is considered as a separate subcategory because these coating operations require specialized reflective argent coatings and hard clear coatings to meet U.S. Department of Transportation Motor Vehicle Safety Standards for reflectivity, brightness, color, and other performance criteria. The reflective argent coatings often used in automotive headlamp coating operations contain significant levels of organic HAP because these coatings achieve the required reflective aluminum appearance with aluminum pigments contained in the coating. These coatings require the use of aromatic or aliphatic HAP solvents in order to allow the aluminum pigments to rise to the surface correctly to create the reflective finish required by Federal safety standards. The hard clear coatings often used in automotive headlamp coating operations, such as the thermal cure and silicone hardcoat technologies, are required to provide the polycarbonate headlamp substrate with necessary abrasion and scratch resistance. Polycarbonate is currently the only plastic substrate approved by the National Highway Traffic Safety Administration for use in automotive headlamps because this material is shatter resistant and resists high levels of heat. The hard clear coatings used on the polycarbonate headlamps require the use of certain organic HAP solvents, such as butyl cellosolve, in these coatings to avoid etching of the substrate surface. Other non-HAP solvents can etch the surface of the polycarbonate which would deflect light and create performance and safety concerns for the final headlamp product. The need to use these materials would make it technically difficult for existing facilities coating automotive headlamps to achieve the lower emission rates established by facilities that do not coat headlamps. In summary, technical differences in the type of coatings required to meet unique end-product requirements warrant a separate subcategory for headlamp coating.

Assembled on-road vehicle coating is considered a separate subcategory because these coating operations are performed on fully-assembled vehicles that may contain heat sensitive parts. In addition, fully assembled on-road vehicles are physically larger than the other parts and products coated in this source category. The large size and presence of heat sensitive parts make certain lower-HAP technologies, such as heat-cured waterborne coatings, not feasible for use on fully assembled on-road vehicles and make it technically difficult for these sources to achieve the same emission level as sources that do not coat assembled on-road vehicles.

The problems associated with coating of assembled on-road vehicles were first raised by recreational vehicle manufacturers that build motor homes

and travel trailers. The EPA recognized that the same problems (*i.e.*, large part size and heat sensitive components) would be encountered by other facilities that coat plastic bodies on other types of assembled on-road vehicles. In addition, some facilities coat a mix of assembled on-road vehicles including automobiles, recreational vehicles, public transportation vehicles, and fleet trucks. Therefore, EPA decided to include all of these in the assembled on-road vehicle subcategory and not limit the subcategory to just recreational vehicles. The on-road vehicle subcategory is limited to only surface coating on fully assembled on-road vehicles in order to avoid an overlap with source categories that include assembly-line coating operations at automobile, light-duty truck, and heavy-duty truck manufacturing facilities.

The EPA also recognizes that most assembled on-road vehicles are a mix of plastic and metal body components. An assembled on-road vehicle coating operation is considered part of this subcategory if greater than 50 percent of the surface being coated on a vehicle is plastic.

B. How Did We Select the Regulated Pollutants?

Available emission data collected during the development of the proposed NESHAP show that the primary organic HAP emitted from the surface coating of plastic parts and products include MEK, MIBK, toluene, and xylenes. These compounds account for more than 85 percent of this category's nationwide organic HAP emissions. Other organic HAP emissions include EGBE and other glycol ethers. However, many other organic HAP are used, or can be used, in coatings, thinners, and cleaning materials. Therefore, the proposed rule would regulate emissions of all organic HAP.

Although most of the coatings used in this source category do not contain inorganic HAP, a few special purpose coatings used by a few facilities in this source category contain inorganic HAP such as chromium and lead. No inorganic HAP were reported in cleaning materials. If coatings are applied by spraying, inorganic HAP components remain as solids in the dry coating film on the parts being coated or are deposited onto the walls, floor, and grates of the spray booths in which they are applied. Some of the inorganic HAP particles would be entrained in the spray booth exhaust air. Although these emissions have not been quantified, we believe that the inorganic HAP emission levels are very low. Furthermore, emissions of these materials to the atmosphere are minimal because very few of the facilities in this source category use spray application techniques to apply coatings that contain inorganic HAP compounds. At this time, it does not appear that emissions of inorganic HAP from this source category warrant Federal regulation.

C. How Did We Select the Affected Source?

In selecting the affected source(s) for emission standards, our primary goal is to ensure that MACT is applied to HAP-emitting operations or activities within the source category being regulated. The affected source also serves to establish where new source MACT applies under a particular standard. Specifically, the General Provisions in subpart A of 40 CFR part 63 define the terms ''construction'' and ''reconstruction'' with reference to the term ''affected source'' (40 CFR 63.2) and provide that new source MACT applies when construction or reconstruction of an affected source occurs (40 CFR 63.5). The collection of equipment and activities evaluated in determining MACT (including the MACT floor) is used in defining the affected source.

When emission standards are based on a collection of emissions sources or total facility emissions, we select an affected source based on that same collection of emission sources or the total facility as well. This approach for defining the affected source broadly is particularly appropriate for industries where a single emission standard encompassing multiple emission points within the plant provides the opportunity and incentive for owners and operators to utilize control strategies that are more cost effective than if separate standards were established for each emission point within a facility.

The affected source for these proposed standards is broadly defined to include all operations associated with the coating of plastic parts and products and the cleaning of products, substrates or coating operation equipment in a subcategory (*i.e.*, TPO coating, headlamp coating, assembled on-road vehicle coating, or general use coating). These operations include storage and mixing of coatings and other materials; surface preparation of the plastic parts and products prior to coating application; coating application and flash-off, drying and curing of applied coatings; cleaning operations; and waste handling operations.

A few facilities have coating operations in more than one subcategory. For example, a few facilities have TPO coating operations that are in the TPO coating subcategory and also have other plastic parts and products coating operations that are in the general use coating subcategory. In such a case, the facility would have two separate affected sources: (1) The collection of all operations associated with the surface coating of TPO, and (2) the collection of all operations associated with general use coating. Each of these affected sources would be required to meet the emission limits that apply to its subcategory.

In selecting the affected source, we considered, for each operation, the extent to which HAP-containing materials are used and the amount of HAP that are emitted. Cleaning and coating application, flash-off, and curing/drying operations account for the majority of HAP emissions at plastic parts and products surface coating operations. These operations are included in the affected source.

Mixing, storage, and waste handling operations are included in the affected source. Because we are assuming that all the organic HAP in the materials entering the affected source are volatilized (emitted), emissions from operations occurring within the affected source (*e.g.*, mixing operations and storage) are accounted for in the estimate of total materials usage at the affected source.

A broad definition of the affected source was selected to provide maximum flexibility in complying with the proposed emission limits for organic HAP. In planning its compliance, each facility can select among available coatings, thinners and other additives, and cleaning materials, as well as the use of emissions capture and add-on control systems, to comply with the emission limits for each subcategory in the most cost-effective manner. Additional information on the plastic parts and products surface coating operations selected for regulation, and other operations, are included in the docket for the proposed standards.

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

The MACT floor analysis was performed using a sourcewide emission rate approach for each of the four subcategories: (1) General use coating, (2) TPO coating, (3) headlamp coating, and (4) assembled on-road vehicle coating. Because organic HAP emissions from an affected source are directly related to the materials used, and since it is very difficult to estimate the emissions that occur in any one area within the affected source, an emission

rate approach for affected sources in each subcategory is the most feasible way to determine emission limits. The emission rate approach covers the emissions from all areas within the affected source for each subcategory, including the application and curing process, equipment cleaning and surface preparation operations, mixing and storage of organic HAP materials, and waste handling.

The broad emission rate approach will allow for the maximum flexibility for those affected sources in the general use coating subcategory that perform many different types of coating applications and coat many different types of parts during a given year. It would be very difficult to define and set limits on each individual coating step within every coating process. Also, such rules would allow no flexibility and might not be technically feasible for every source. An emission limit that includes all coating operations within an affected source allows an owner/operator to determine how to most efficiently and cost effectively meet the emission limit for each subcategory.

To determine the existing and new source MACT floor for each subcategory, we determined the organic HAP emission rate for each facility in units of kg (lb) organic HAP emitted per kg (lb) of coating solids used for each subcategory. We then ranked the sources in each subcategory from lowest to highest emission rate to identify the best-performing sources. We used information obtained from industry survey responses and subsequent changes and clarifications received from the facilities to estimate the sourcewide organic HAP emission rate from each survey respondent. In the relatively few cases where a facility had coating operations in more than one subcategory (*e.g.*, a TPO coating operation, headlamp coating operation, or assembled on-road vehicle coating operation, and a general use coating operation), we calculated the organic HAP emission rate for each subcategory separately. For facilities that reported no add-on control devices, we calculated total organic HAP emissions by assuming that the organic HAP components in all coatings, thinners and other additives, and cleaning materials are emitted. If add-on control devices were reported, their capture and control efficiencies were taken into account. Sources included in the population for determining the MACT floor emission limits were those facilities that are identified as major sources based on their potential to emit, and those that were identified as ''synthetic minor'' sources.

For each of the four subcategories, the best-performing 12 percent of sources (or the best five sources) were the sources with the lowest calculated organic HAP emission rates. The average, or arithmetic mean, of the best-performing 12 percent of sources (or best five sources) was calculated to determine the MACT floor level for each subcategory. For the general use coating subcategory, the average of the best-performing 12 percent of existing sources was determined to be 0.16 kg (0.16 lb) organic HAP emitted per kg (lb) coating solids used. For the TPO coating subcategory, the average of the best-performing five existing sources was 0.23 kg (0.23 lb) organic HAP emitted per kg (lb) coating solids used. For the headlamp coating subcategory, the average of the best-performing five existing sources was 0.45 kg (0.45 lb) organic HAP emitted per kg (lb) coating solids used. For the assembled on-road vehicle coating subcategory, the average of the best-performing five existing sources was 1.34 kg (1.34 lb) organic HAP emitted per kg (lb) coating solids used.

The facilities represented by the average MACT floor emission level for each of the subcategories were reviewed to assess the achievability of the emission levels for the range of sources in the subcategory. The parameters that were considered in the review included coating types and technologies, application methods, curing temperatures, substrates, regulatory and performance specifications, location by state, part types, industry sectors and amounts of materials used. The review resulted in the determination that there were no differences in the ability of sources within a given subcategory to achieve the existing source MACT floor emission levels, and therefore, it appears that all sources could achieve the existing source MACT floor emission rate for their subcategory. The MACT floor memorandum in the docket includes additional details of our review. We request comment on the analysis and our conclusions.

The new source MACT floor level for the general use coating subcategory was determined to be the same as the MACT floor level for existing sources. For the general use coating subcategory, the facilities whose emission rates were lower than the existing source floor (0.16 kg (0.16 lb) organic HAP emitted per kg (lb) coating solids used) were evaluated to determine whether one of them could be considered the best-performing similar source and represent the diversity of operations included in the subcategory. We evaluated whether a single source with a lower emission rate was sufficiently similar to all other operations in the subcategory in terms of parts coated, coating types, and application methods used. No single source with an emission rate lower than the existing source MACT floor emission rate represented the full range of variability in the subcategory. For example, some of the facilities with the lowest emission rates used only one or two types of coatings with a narrow range of types of parts and coating application methods. Because a new facility might need to use a variety of coating types and technologies, we rejected facilities using only one or two types of coatings with a limited range of coated parts and application methods as similar sources for the purpose of setting a floor for new sources. Therefore, the new source MACT floor is determined to be the same as the MACT floor for existing sources. You may refer to the MACT floor memorandum in the docket for additional details.

The new source MACT floor levels for the TPO coating and headlamp coating subcategories are more stringent than the existing source MACT floor levels for these subcategories. For the TPO coating subcategory, the best-performing single source achieves an emission level of 0.17 kg (0.17 lb) organic HAP emitted per kg (lb) coating solids used. The facility is using a waterborne TPO coating process. Available information indicates that waterborne coatings are feasible for TPO substrates, including TPO used in external parts such as bumpers, and can meet performance specifications for the coated parts. When designing a new source, it would be feasible to design the TPO coating operations to use a waterborne coating process, or otherwise control emissions to achieve the emission level of the best-performing individual source in this subcategory. Therefore, the MACT floor for new sources in the TPO subcategory is determined to be 0.17 kg (0.17 lb) organic HAP emitted per kg (lb) coating solids used.

For the headlamp coating subcategory, the identification of best-performing similar source was conducted by reviewing the emission rates for existing headlamp coating sources, excluding any organic HAP and solids from adhesives that are used in these operations. The two best-performing headlamp coating sources both use low-HAP, high-solids adhesives in the headlamp operation to do final assembly of the headlamp. While the use of these adhesives is representative of the operations at these existing sources, it is unclear whether new sources in the headlamp coating

subcategory would be performing final assembly of the headlamps or would only be coating one component of the headlamp body. The use of adhesives in headlamp coating operations is purely dependent upon individual customer needs and business decisions on whether to assemble the headlamps at the same site. New headlamp sources with lower emission rates that include adhesives do not represent a similar source that would establish a new source level for the range of new sources in the subcategory. The two best-performing similar sources in the headlamp subcategory achieve emission rates (excluding adhesives) of 0.034 kg (0.034 lb) HAP emitted per kg (lb) coating solids used and 0.26 kg (0.26 lb) HAP emitted per kg (lb) coating solids used. The source that is achieving the emission rate of 0.034 kg (0.034 lb) HAP emitted per kg (lb) coating solids used has total enclosures and add-on control devices on a portion of its headlamp coating operation. It is uncertain whether other new headlamp coating sources would be able to use enclosures and add-on control devices and achieve this emission rate. Typical organics stream concentrations estimated for sources in this subcategory are generally too low to make the use of enclosures and control devices technically feasible. However, the source that is achieving the emission rate of 0.26 kg (0.26 lb) HAP emitted per kg (lb) coating solids used coats automotive headlamps using low-HAP, ultra violet (UV)-cure clearcoat technology and low-HAP, vacuum metallizing technology on polycarbonate substrate. Although this emission rate is not achievable for existing sources that do not currently have the capability to use UV-cure clearcoat technology or vacuum metallizing technology, it would be feasible to design a new headlamp coating process to use similar low-HAP, UV-cure clearcoats and low-HAP, vacuum metallizing technology, or otherwise control emissions to achieve the emission level of this best-performing similar source in the headlamp subcategory. Therefore, the MACT floor for new sources in the headlamp coating subcategory is determined to be 0.26 kg (0.26 lb) HAP emitted per kg (lb) coating solids used.

The new source MACT floor level for the assembled on-road vehicle coating subcategory was determined to be the same as the MACT floor level for existing sources. For this coating subcategory, the facilities whose emission rates were lower than the existing source floor (1.34 kg (1.34 lb) organic HAP emitted per kg (lb) coating solids used) were evaluated to determine whether one of them could be considered the best-performing similar source (and sufficiently representative of the diversity of operations encompassing the subcategory). Some of the variables considered were the types of vehicles coated (*e.g.*, motorhomes or towable RVs), the amount of the vehicle coated (either fully painted or only partially painted), whether multiple colors of basecoat were used and the overall ratio of basecoat to clearcoat, and whether or not repair coating operations were performed. Given the diversity of assembled on-road vehicle coating operations observed during EPA site visits and among the facilities present in the MACT database, EPA has determined that the sources with emission rates lower than the existing source MACT floor emission rate are not representative of the possible range of new sources in the subcategory. For example, some facilities may use only a single color of basecoat per vehicle, while others may use up to four colors of basecoat in more elaborate color schemes. Some facilities may apply a single layer of clearcoat while others may apply two or three layers for a more durable finish. Additionally, some facilities may perform a combination of these during a single compliance period. Given the variability in these factors, EPA does not believe that any single source with a lower emission rate than the existing source floor represents a similar source for the full range of variability for this subcategory. Therefore, the new source MACT floor is determined to be the same as the MACT floor for existing sources.

After the MACT floors have been determined for new and existing sources in a source category or subcategory, we must set emission standards that are technically achievable and no less stringent than the floors. Such standards must then be met by all sources within the category or subcategory. We identify and consider any reasonable regulatory alternatives that are ''beyond-the-floor,'' taking into account emissions reductions, cost, non-air quality health and environmental impacts, and energy requirements. These alternatives may be different for new and existing sources because of different MACT floors, and separate standards may be established for new and existing sources.

No options beyond the MACT floor could be identified for the general use coating subcategory that would be technically feasible for all new or existing facilities in the subcategory.

For the TPO coating subcategory, the use of a waterborne coating technology was identified as a beyond-the-floor option for existing sources to be considered. There are currently at least two existing sources that coat TPO using waterborne adhesion promoters and other coatings, and the new source MACT floor (0.17 kg (0.17 lb) HAP emitted per kg (lb) coating solids used) is based on a facility using the waterborne TPO coating process. We considered the beyond-the-floor option of requiring other existing sources coating TPO to switch their TPO coating operations to the waterborne process. However, requiring existing sources to switch to waterborne coating technology would require many costly retrofits to an existing TPO coating operation, including the addition of special pretreatment steps prior to coating application, the installation of curing ovens that aren't currently available at all existing TPO facilities, a lengthening of the coating line to allow for increased drying/flash-off time required for waterborne coatings, and a switch to stainless steel spray guns and lines to prevent corrosion of equipment. Information from an existing TPO source that retrofitted its existing coating lines to allow for waterborne TPO coating indicates that their cost to switch to waterborne coating was approximately $9 million. The HAP emissions reductions that would be achieved by a typical existing source complying with the MACT floor for TPO coating sources would be approximately 75 percent reduction. If the same typical existing source achieved the beyond the floor level of 0.17 kg (0.17 lb) HAP emitted per kg (lb) coating solids used, it would achieve approximately an additional 7 percent emission reduction. Without having information on the benefits that would be achieved by further reducing emissions beyond-the-floor, we do not believe the additional cost of going beyond the floor is warranted at this time without a further evaluation of risk. Therefore, we are not requiring beyond-the-floor levels of emissions reductions at this time. After implementation of these standards, we will evaluate the remaining health and environmental risks that may be posed as a result of exposure to emissions from the plastic parts and products surface coating source category. At that time, we will determine whether the additional costs are warranted in light of the available risk information.

For the headlamp coating subcategory, we considered two low-HAP technologies as beyond-the-floor options for existing sources. These technologies are UV-cure clearcoat and vacuum metallizing. There are currently two existing sources that use UV-cure

clearcoats and one existing source that uses vacuum metallizing to obtain the necessary reflectivity for the headlamps. The new source MACT floor for headlamp coating (0.26 kg (0.26 lb) HAP emitted per kg (lb) coating solids used) is based on a facility using both technologies to coat automotive headlamps.

We considered the beyond-the-floor option of requiring other existing sources to switch their coating operations to either of these low-HAP technologies. However, based on industry information, requiring existing sources to switch to UV-cure clearcoats or vacuum metallizing could require costly retrofits to an existing headlamp coating operation. The switch to UV-cure clearcoat technology could require extensive modifications to coating line design as well as the installation of UV-lamps to cure the coatings. Furthermore, since UV-cure processes do not have production capacities as high as thermal-cure clearcoat processes, existing sources could be required to build additional coating lines to maintain the same production capacity, and this would require more floor space.

The switch to vacuum metallizing from liquid argent coatings could require extensive modifications to the coating line design and raw materials used, as well as the purchase and installation of vacuum metallizing equipment. A single vacuum metallizing chamber can produce approximately 500,000 headlamp lens bodies a year and could cost approximately $2 million per chamber. Many sources could need multiple chambers. In addition to the purchase and installation of vacuum metallizing chambers, existing sources would need to purchase more expensive raw plastic materials (*i.e.*, thermoplastics) in order to achieve the beyond-the-floor level of 0.26 kg (0.26 lb) organic HAP emitted per kg (lb) coating solids used. Vacuum metallizing requires an absolutely smooth surface for proper reflectivity, and this can be achieved with thermoplastics. Less expensive thermoset plastics that can be used in liquid argent coating processes do not produce the necessary surface to vacuum metallize, without a pre-coating step that would result in additional HAP emissions. For an existing facility to switch to vacuum metallizing from liquid argent coating without adding a pre-coating step, the cost of thermoplastic raw materials could be three times the cost of thermoset materials. Therefore, assuming existing headlamp coating sources would require at least two vacuum metallizing chambers and a switch to thermoplastic raw materials, retrofitting an existing headlamp source could result in capital costs of at least $4 million for the metallizing chambers and an annual material purchase cost of three times current annual material costs. These costs do not account for additional process line modifications, oven replacements, and testing requirements that will vary in cost from source to source.

The HAP emission reductions that would be achieved by a typical existing source complying with the MACT floor for headlamp coating sources would be approximately 78 percent reduction. The incremental emission reduction that would be achieved for the same typical source to reduce its emissions to the beyond-the-floor level would be approximately 9 percent. Without having information on the benefits that would be achieved by further reducing emissions beyond-the-floor, we do not believe the additional cost of going beyond the floor is warranted at this time without a further evaluation of risk. Therefore, we are not requiring beyond-the-floor levels of emission reductions at this time. After implementation of these standards, we will evaluate the remaining health and environmental risks that may be posed as a result of exposure to emissions from the plastic parts and products surface coating source category. At that time, we will determine whether the additional costs are warranted in light of the available risk information.

No options beyond the MACT floor could be identified for the assembled on-road vehicle coating subcategory that would be technically feasible for all new or existing facilities in the subcategory.

Add-on controls were also reviewed to determine if a facility using add-on controls would represent a technically feasible beyond-the-floor option for all new or existing sources in any of the four subcategories. Add-on controls are used at a few individual facilities in the plastic parts and products surface coating source category and three of its four subcategories. No add-on controls are used in the assembled off-road vehicle subcategory. However, based on typical organics stream concentrations estimated for typical facilities in the four subcategories, add-on control techniques are generally not technically feasible. Therefore, add-on control techniques were not considered as a beyond-the-floor option.

For existing sources, we based the proposed standards on the existing source MACT floors for each of the four subcategories. As described earlier, we determined that beyond-the-floor options were not technically or economically feasible for all existing sources. For the same reasons, we based the proposed standards for new sources on the new source MACT floor.

The MACT levels of control for new and existing sources can be achieved in several different ways. Many sources would be able to use lower-HAP coatings, although they may not be available to meet the needs of every source. If a source is also using cleaning materials that contain organic HAP, then it may be able to switch to lower-HAP or non-HAP cleaning materials, which are widely available, to reduce the sourcewide organic HAP emissions rate to the MACT level. Other available options might be the use of capture systems and add-on control devices to reduce emissions.

We note here that our assumption, used in the development of the MACT floors, that 100 percent of the organic HAP in the materials used are emitted by the affected source would not apply when the source sends organic HAP-containing waste materials to a facility for treatment or disposal. We made that assumption because the industry survey responses provided little information as to the amount of organic HAP recovered and recycled or treated and disposed. We, therefore, concluded that offsite or onsite treatment and disposal may not be common within the plastic parts and products surface coating industry. We recognize, however, that some facilities may conduct such activities and should be allowed to account for such activities in determining their emissions. Thus, the proposed rule allows you to reduce the organic HAP emissions by the amount of any organic HAP contained in waste treated or disposed at a hazardous waste treatment, storage, and disposal facility that is regulated under 40 CFR part 262, 264, 265, or 266.

E. How Did We Select the Format of the Proposed Standards?

We selected the format of the proposed standards to be an emission rate expressed in terms of the mass of organic HAP emitted per mass of coating solids used. The emission rate format would allow plastic parts and products surface coating operation owners and operators flexibility in choosing any combination of means (including coating reformulation, use of lower-HAP or non-HAP materials, solvent elimination, work practices, and add-on control devices) that is workable for their particular situation to comply with the emission limits.

We selected mass of coating solids used as a component of the proposed format to normalize the rate of organic HAP emissions across all sizes and

types of facilities. We also selected kg (lb) organic HAP emitted per kg (lb) coating solids used because this is consistent with the data generally available in this industry through Material Safety Data Sheets and other manufacturers' formulation data. Considering the primary means of compliance is likely to be the use of low- and no-organic HAP coatings and other materials, this format best ensures that comparable levels of control are achieved by all affected sources. Also, this format allows sources flexibility to use a combination of emission capture and control systems, as well as low-HAP content coatings and other materials.

Other choices for the format of the proposed standards that we considered, but rejected, included a usage limit (mass per unit time) and a never-to-be-exceeded limit on the organic HAP content of each coating, solvent, or cleaning material. As it is not our intent to limit a facility's production under these proposed standards, we rejected a usage limit. We also rejected a never-to-be-exceeded organic HAP content limit in order to provide for averaging of HAP emissions from the materials used during the compliance period. In this decision, we considered the nature of the available data, as well as the need to allow for seasonal variations and frequent changes in some coating operations, such as job shops. Finally, we rejected a percent reduction limit as most plastic parts and products surface coating facilities are not expected to use capture systems and add-on control devices for compliance.

In lieu of emission standards, section 112(h) of the CAA allows work practice standards or other requirements to be established when a pollutant cannot be emitted through a conveyance or capture system, or when measurement is not practicable because of technological and economic limitations. Many plastic parts and products surface coating facilities use some type of work practice measure to reduce HAP emissions from mixing, cleaning, storage, and waste handling areas as part of their standard operating procedures. They use these measures to decrease solvent usage and minimize exposure to workers. However, we do not have data to quantify accurately the emissions reductions achievable by the work practice measures. The level of emissions depends on the type of equipment and the work practices used at the facility and would be very site-specific. For example, emissions from solvent-laden rags used to clean spray booths would depend on the method used to isolate and store such rags. In addition to lacking adequate data and information to quantify an emissions level for such operations, it is not practicable to measure emissions from these operations since they often occur in large open areas not amenable to testing. Therefore, work practice standards are appropriate for such operations under section 112(h) of the CAA.

Under the compliance options where emissions are reduced by using low- or no-HAP materials, the compliance determination procedure assumes that all the organic HAP in the materials entering the affected source are volatilized (emitted). Therefore, emissions from operations occurring within the affected source (*e.g.*, mixing operations) are accounted for in the determination of total materials usage and emission rate at the affected source. This may not be true when you comply by using capture systems and add-on control devices, particularly if some coating operations at your facility use capture systems and add-on control devices and others do not. In this case, you might determine usage of coatings and other materials in the controlled coating operations by some method other than total solvent purchase records. It is possible that emissions from mixing and transport of the materials prior to their use in the controlled coating operation might not be included in your usage and emission rate calculations. Emissions from mixing, storage, and waste handling operations are often not routed to the control devices and would not be practicable to measure for inclusion in a determination of compliance with the emission limit. Therefore, the proposed rule would require development and implementation of an emission reduction work practice plan to assure that emissions are reduced from such operations.

F. How Did We Select the Testing and Initial Compliance Requirements?

The proposed standards would allow you to choose among several options to demonstrate compliance with the proposed standards for organic HAP: compliant materials (*i.e.*, coatings and other materials with low or no organic HAP); emission rate without add-on controls option; or emission rate with add-on controls option.

Compliant Materials Option. You would be required to document the organic HAP content of all coatings (general use, TPO, headlamp, and assembled on-road vehicle coatings) on an as-received basis and show that each is less than the applicable emission limit. You would also have to show that each thinner, other additive, and cleaning material on an as-received basis contains no organic HAP. Note that ''no organic HAP'' is not intended to mean absolute zero. Materials that contain ''no organic HAP'' should be interpreted to mean materials that contain organic HAP levels below 0.1 percent by mass for OSHA-defined carcinogens and 1.0 percent by mass for other compounds.

You may use manufacturer's formulation data to demonstrate the HAP content of each material and the solids content of each coating. If you choose to use test data, you would use the following procedures on each coating, thinner or other additive, and cleaning material in the condition it is in when it is received from its manufacturer or supplier and before any alteration. If you recycle or reclaim coatings, thinners, cleaning materials, or other additives at your facility, you do not need to demonstrate that these materials meet the emission limit, provided they were initially demonstrated to comply with the compliant material option.

Method 311 is the method developed by EPA for determining the mass fraction of organic HAP in coatings and has been used in previous surface coating NESHAP. We have not identified any other methods that provide advantages over Method 311 for use in the proposed standards for determining organic HAP content.

Method 24 is the method developed by EPA for determining the mass fraction of volatile matter for coatings and can be used if you choose to determine the nonaqueous volatile matter content as a surrogate for organic HAP. In past standards, VOC emission control measures have been implemented in coating industries, with Method 24 as the compliance method. We have not identified any other methods that provide advantages over Method 24 for use in the proposed standards.

Method 24 is the method specified for determining the coating solids content of each coating. We have not identified any other methods that provide advantages over Method 24 for use in the proposed standards.

Emission Rate Without Add-on Controls Option. To demonstrate initial compliance using this option, you would calculate the organic HAP emission rate for one or more coating operations in each affected source, based on the mass of organic HAP in all coatings, thinners and other additives, and cleaners, and the mass of coating solids used during the compliance period. You would demonstrate that your emission rate does not exceed the

applicable emission limit for the affected source. You would determine the HAP content from manufacturer's formulation data or by using EPA Method 24 or 311 as discussed previously.

Emission Rate With Add-on Controls Option. If you use a capture system and control device other than a solvent recovery device for which you conduct a liquid-liquid material balance, you would be required to conduct an initial performance test of the system to determine its overall control efficiency using EPA Method 25 or 25A depending on the type of control device and the outlet concentration. You would also need to determine the capture efficiency of the capture system using EPA Methods 204 and 204A through 204F. For a solvent recovery system for which you conduct a liquid-liquid material balance, you would determine the quantity of volatile matter applied and the quantity recovered during the initial compliance period to determine its overall control efficiency. For both cases, the overall control efficiency would be combined with the monthly mass of organic HAP in the coatings and other materials used to calculate the monthly organic HAP emissions in kg (lb) HAP emitted. The monthly amount (kg (lb)) of coating solids used would also be determined. These values would be combined to calculate your emission rate for the 12-month compliance period according to equations in the proposed rule. You would demonstrate that your emission rate does not exceed the applicable emission limit for the affected source. If you conduct a performance test, you would also determine parameter operating limits during the test. The proposed test methods for the performance test have been required in many NSPS for industrial surface coating sources under 40 CFR part 60 and NESHAP under 40 CFR part 63. We have not identified any other methods that provide advantages over these methods.

G. How Did We Select the Continuous Compliance Requirements?

To demonstrate continuous compliance with either the compliant materials option or the emission rate without add-on controls option, you would need records of the data and calculations supporting your determination of the organic HAP content and solids content of each material used. You would also need records of the quantity of coatings and other materials used. For the compliant materials option, you would demonstrate compliance for each material used. For the emission rate without add-on controls option, you would demonstrate compliance with the applicable 12-month emission limit on a monthly basis using data from the previous 12 months of operation.

If you use the emission rate with add-on controls option, you would also be required to continuously monitor operating parameters of capture systems and control devices and maintain records of this monitoring. We selected the following requirements based on reasonable cost, ease of execution, and usefulness of the resulting data to both the owners or operators and EPA for ensuring continuous compliance with the emission limits and/or operating limits.

We are proposing that certain parameters be continuously monitored for the types of capture systems and control devices commonly used in the industry. These monitoring parameters have been used in other standards for similar industries and control devices. The values of these parameters are established during the initial or most recent performance test that demonstrates compliance. These values are your operating limits for the capture system and control device.

You would be required to determine 3-hour average values for most monitored parameters for the controlled coating operations within the affected source. We selected this averaging period to reflect operating conditions during the performance test to ensure the control system is continuously operating at the same or better control level as during a performance test demonstrating compliance with the emission limits.

If you conduct liquid-liquid material balances, you would need records of the quantity of volatile matter used and the quantity recovered by the solvent recovery system. You would demonstrate compliance with the emission limit on a monthly basis using data from the previous 12 months of operation.

H. How Did We Select the Notification, Recordkeeping, and Reporting Requirements?

You would be required to comply with the applicable requirements in the NESHAP General Provisions, subpart A of 40 CFR part 63, as described in Table 2 of the proposed subpart PPPP. We evaluated the General Provisions requirements and included those we determined to be the minimum notification, recordkeeping, and reporting necessary to ensure compliance with, and effective enforcement of, the proposed standards, modifying them as appropriate for the plastic parts and products surface coating source category.

I. How Did We Select the Compliance Date?

You would be allowed 3 years to comply with the final standards for existing affected sources. This is the maximum period allowed by the CAA. We believe that 3 years for compliance is necessary to allow adequate time to accommodate the variety of compliance methods that existing sources may use. Most sources in this category would need this 3-year maximum amount of time to develop and test reformulated coatings, particularly those that may opt to comply using a different lower-emitting coating technology. We want to encourage the use of these pollution prevention technologies. In addition, time would be needed to establish records management systems required for enforcement purposes. Some sources may need the time to purchase and install emission capture and control systems. In such cases, you would need to obtain permits for the use of add-on controls, which will require time for approval from the permitting authority.

The CAA requires that new or reconstructed affected sources comply with standards immediately upon startup or the effective date of the final rule, whichever is later.

IV. Summary of Environmental, Energy, and Economic Impacts

For the purpose of assessing impacts, we assumed that all sources would convert to liquid coatings, thinners, and other additives with lower organic HAP content than those presently used and would convert to lower-HAP or no-HAP cleaning materials rather than using add-on control devices, except for those already using add-on control devices.

A. What Are the Air Impacts?

The 1997 nationwide baseline organic HAP emissions for the 202 major source plastic parts and products surface coating facilities of which EPA is aware are estimated to be 9,820 tpy. Implementation of the emission limitations as proposed would reduce these emissions by approximately 80 percent to 2,260 tpy. In addition, the proposed emission limitations will not result in any significant secondary air impacts. We expect that the majority of facilities will switch to low- or no-organic HAP-containing materials to comply with the standards rather than installing add-on control devices. Thus, increases in electricity consumption (which could lead to increases in emissions of nitrogen oxides, sulfur dioxide, carbon monoxide, and carbon

dioxide from electric utilities) will be minimal.

B. What Are the Cost Impacts?

The total capital cost (including monitoring costs) for existing sources is estimated to be approximately $803,830. The nationwide annual cost (including monitoring, recordkeeping, and reporting costs) for existing sources is approximately $10.7 million per year. Costs for new sources were based on an estimate of six new sources being constructed within 5 years after promulgation of the final standards. The total capital cost (including monitoring costs) for new sources is $28,000. The total annual cost (including monitoring, recordkeeping, and reporting costs) for new sources is estimated to be approximately $194,000 per year.

Cost estimates are based on information available to the Administrator and presented in the economic analysis of this rule. The costs are calculated assuming that the majority of sources would comply by using lower HAP-containing or non-HAP coatings and cleaning materials because such materials are generally available, and add-on controls would not be technically feasible for typical facilities. Waterborne coatings are a type of potentially lower-HAP coating which could be used by facilities and may contribute to higher costs due to increased drying times or temperatures that may be needed for waterborne coatings. However, the data available in the plastic parts ICR database did not indicate any definite relationship between coating types and drying times or curing temperatures. We also assumed that facilities presently equipped with add-on controls would continue to operate those control devices and capture systems and would perform the required performance tests and parameter monitoring. During development of the proposed emission limitations, limited information was available on the costs associated with the switch to low-HAP or non-HAP coatings and cleaning materials. Thus, we request comment on the assumptions and methodology used to determine these costs. Any comments should provide detailed information that includes identification of the coatings or cleaning materials (and associated costs) currently being used and the coatings or cleaning materials (and associated costs) that would be used to comply with the proposed emission limitations, as well as the basis for the cost information. You may refer to the Determination of Baseline Emissions and Costs and Emissions Impacts for New and Existing Sources in the Plastic Parts and Products Surface Coating Source Category memorandum in the docket for additional details.

C. What Are the Economic Impacts?

We prepared an economic impacts analysis (EIA) to evaluate the impacts the proposed rule would have on the plastic parts and products surface coating industry, consumers, and society. Economic impacts were calculated on a facility-specific basis, as well as on a market segment basis (*e.g.*, automobile manufacturing, sporting goods, electronics equipment, etc.). Economic impact indicators examined included price, output, and employment impacts.

The EIA shows that the expected price increase for affected plastic parts and products would be less than 0.1 percent as a result of the proposed standards. Therefore, we do not expect any adverse impact to occur for those industries that produce or consume plastic parts and products such as home appliances, computer hardware producers, motor vehicle manufacturers, and recreational vehicle manufacturers.

The distribution of costs across plastic parts and products production facilities is slanted toward the lower impact levels with many facilities incurring costs related only to annually recurring monitoring, reporting, and recordkeeping activities. The EIA indicates that these regulatory costs are expected to represent only 0.25 percent of the value of coating services, which should not cause producers to cease or alter their current operations. Hence, no firms or facilities are at risk of closures because of the proposed standards.

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

Based on information from the industry survey responses, we found no indication that the use of low-organic HAP content coatings, thinners and other additives, and cleaning materials at affected sources would result in any increase or decrease in non-air health, environmental, and energy impacts. There would be no change in the utility requirements associated with the use of these materials, so there would be no change in the amount of energy consumed as a result of the material conversion. We estimate that the proposed emission limitations will have a minimal impact on water quality because only a few facilities are expected to comply by making process modifications or by using add-on control devices that would generate wastewater. However, because many low-HAP and no-HAP materials are waterborne, an increase in wastewater generation from cleaning activities may result. Although additional wastewater may be generated by facilities switching to waterborne coatings, the amount of wastewater generated by these facilities is not expected to increase significantly. We also estimate that the proposed emission limitations will result in a decrease in the amount of both solid and hazardous waste from facilities, as the majority of facilities will be using lower organic HAP-containing materials which will result in a decrease in the amount of waste materials that would have to be disposed of as hazardous. In addition, we expect that the majority of facilities will comply by using low-HAP or no-organic HAP-containing materials rather than add-on control devices. Thus, there will be little or no increase in energy usage caused by the operation of add-on controls.

V. 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, OMB has notified EPA that it considers this a ''significant regulatory action'' within the meaning of the Executive Order. The EPA has submitted this action to OMB for review. Changes made in response to OMB suggestions or recommendations will be documented in the public record.

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. Pursuant to the terms of Executive Order 13132, it has been determined that this proposed rule does not have ''federalism implications'' because it does not meet the necessary criteria. Thus, the requirements of section 6 of the Executive Order do not apply to this proposed rule.

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

Executive Order 13175, entitled ''Consultation and Coordination with Indian Tribal Governments'' (65 FR 67249, November 6, 2000), requires EPA to develop an accountable process to ensure ''meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.''

This proposed rule does not have tribal implications. It will not have substantial direct effects on tribal governments, or the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified in Executive Order 13175. No tribal governments own or operate plastic parts and products surface coating facilities. Thus, Executive Order 13175 does not apply to this proposed rule. EPA specifically solicits additional comment on this proposed rule from tribal officials.

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

Executive Order 13045, ''Protection of Children from Environmental Health Risks and Safety Risks'' (62 FR 19885, April 23, 1997) applies to any rule that: (1) Is determined to be ''economically significant'' as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, 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 does not establish environmental standards based on an assessment of health or safety risks. No children's risk analysis was performed because no alternative technologies exist that would provide greater stringency at a reasonable cost. Furthermore, this proposed rule has been determined not to be ''economically significant'' as defined under Executive Order 12866.

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

This proposed rule is not a ''significant energy action'' as defined in Executive Order 13211, ''Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355, May 22, 2001) because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. Further, we have concluded that this proposed rule is not likely to have any adverse energy effects. Affected sources are expected to comply with the proposed rule through pollution prevention rather than end-of-pipe controls, and therefore, there would be no increase in energy usage.

F. Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104–4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with ''Federal mandates'' that may result in expenditures to State, local, and tribal governments, in aggregate, or to the private sector, of $100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires 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 1 year has been estimated to be slightly less than $11 million. Thus, today's proposed rule is not subject to the requirements of sections 202 and 205 of the UMRA. In addition, EPA has determined that this proposed rule contains no regulatory requirements that

might significantly or uniquely affect small governments because it contains no requirements that apply to such governments or impose obligations upon them. Therefore, today's proposed rule is not subject to the requirements of section 203 of the UMRA.

G. 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 Procedures 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 whose parent company has fewer than 500 or 1,000 employees, depending on the size definition for the affected NAICS Code; (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 that is independently owned and operated and is not dominant in its field. It should be noted that companies in 32 NAICS codes are affected by this proposed rule, and the small business definition applied to each industry by NAICS code is that listed in the Small Business Administration size standards (13 CFR part 121).

After considering the economic impacts of today's proposed rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. We have determined that 67 of the 130 firms, or 51 percent of the total, affected by this proposed rule may be small entities. While the number of small firms appears to be a large proportion of the total number of affected firms, the small firms only experience 21 percent of the total national compliance cost of $11 million (1997 $). Of the 67 affected small firms, only three firms are estimated to have compliance costs that exceed 1 percent of their revenues. The maximum impact on any affected small entity is a compliance cost of 1.8 percent of its sales. Finally, while there is a difference between the median compliance cost-to-sales estimates for the affected small and large firms (0.08 percent compared to 0.01 percent for the large firms, and 0.03 percent across all affected firms), no adverse economic impacts are expected for either small or large firms affected by the proposed rule. Therefore, the affected small firms are not disproportionately affected by this proposed rule as compared to the affected large firms.

Although this proposed rule will not have a significant economic impact on a substantial number of small entities, EPA nonetheless has tried to reduce the impact of this proposed rule on small entities. The Agency has also reached out to small entities as part of our outreach to affected industries. Representatives of small entities have participated in stakeholder meetings held during the last 3 years as well as site visits conducted by the EPA for data gathering purposes. Small entities will be afforded extensive flexibility in demonstrating compliance through pollution prevention rather than the use of add-on control technology. 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 and other materials (*i.e.,* pollution prevention) that meet the proposed standards instead of using add-on capture and control systems. This method of compliance can be demonstrated with minimum burden by using purchase and usage records. No testing of materials would be required, as the facility owner could show that their coatings and other materials meet the emission limits by providing formulation data supplied by the manufacturer.

We continue to be interested in the potential impacts of the proposed standards on small entities and welcome comments on issues related to such impacts.

H. 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 EPA (ICR No. 2044.01) and a copy may be obtained from Susan Auby by mail at U.S. EPA, Office of Environmental Information, Collection Strategies Division (2822T), 1200 Pennsylvania Avenue, NW., Washington DC 20460, by e-mail at *auby.susan@epa.gov*, or by calling (202) 566–1672. A copy may also be downloaded off the Internet at *http://www.epa.gov/icr.* The information collection requirements are not effective until OMB approves them.

The information collection 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 proposed standards would require maintaining records of all coatings, thinners and other additives, and cleaning materials data and calculations used to determine compliance. This information includes the volume used during each compliance period, mass fraction of organic HAP, density, and mass fraction of coating solids.

If an add-on control device is used, records must be kept of the capture efficiency of the capture system, destruction or removal efficiency of the add-on control device, and the monitored operating parameters. In addition, records must be kept of each calculation of the affected source's emissions for each 12-month compliance period and all data, calculations, test results, and other supporting information used to determine this value.

The monitoring, recordkeeping, and reporting burden in the 3rd year after the effective date of the promulgated rule is estimated to be 118,835 labor hours at a cost of $5.4 million for new and existing sources. This estimate includes the cost of determining and recording organic HAP content, solids content, and density, as needed, of the regulated materials, and developing a system for determining and recording the amount of each material used and performing the calculations needed for demonstrating compliance.

For those affected sources using an add-on control device to comply, the costs also include a one-time performance test and report (with repeat tests where needed) of the add-on control device, one-time purchase and installation of CPMS, one-time submission of a SSMP, and any required startup, shutdown, and malfunction reports. Total capital/startup costs associated with the monitoring requirements over the 3-year period of

the ICR are estimated at $133,000, with operation and maintenance costs of $655 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 the EPA's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques. By U.S. Postal Service, send comments on the ICR to the Director, Collection Strategies Division, U.S. EPA (2822T), 1200 Pennsylvania Avenue, NW., Washington DC 20460; or by courier, send comments on the ICR to the Director, Collection Strategies Division, U.S. EPA (2822T), 1301 Constitution Avenue, NW., Room 6143, Washington DC 20460 (202 566–1700); and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th St., 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 December 4, 2002, a comment to OMB is best assured of having its full effect if OMB receives it by January 3, 2003. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104–113, section 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards (VCS) in its regulatory and procurement activities unless to do so would be inconsistent with applicable law or otherwise impractical. The VCS are technical standards (*e.g.*, materials specifications, test methods, sampling procedures, and business practices) developed or adopted by one or more voluntary consensus bodies. The NTTAA directs EPA to provide Congress, through annual reports to OMB, with explanations when the Agency does not use available and applicable VCS.

This proposed rulemaking involves technical standards. The EPA proposes in this rule to use EPA Methods 1, 1A, 2, 2A, 2C, 2D, 2F, 2G, 3, 3A, 3B, 4, 24, 25, 25A, 204, 204A–F, and 311. Consistent with the NTTAA, EPA conducted searches to identify VCS in addition to these EPA methods. No applicable VCS were identified for EPA Methods 1A, 2A, 2D, 2F, 2G, 204, 204A–F, and 311. The search and review results have been documented and are placed in the docket (Docket No. A–99–12) for this proposed rule.

Six VCS: 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. In addition, we are separately specifying the use of ASTM D1475–98, ''Standard Test Method for Density of Liquid Coatings, Inks, and Related Products,'' for measuring the density of individual coating components, such as organic solvents.

Five VCS: ASTM D1979–91, ASTM D3432–89, ASTM D4747–87, ASTM D4827–93, and ASTM PS9–94 are incorporated by reference in EPA Method 311. The VCS ASTM D4457–85 (Reapproved 1996), ''Standard Test Method for Determination of Dichloromethane (Methylene chloride) and 1,1,1-Trichloroethane (Methyl chloroform) in Paints and Coatings by Direct Injection into a Gas Chromatograph,'' is not a complete alternative to EPA Method 311, but is an acceptable alternative to EPA Method 311 for the following two HAP: (1) Dichloromethane (methylene chloride) and (2) 1,1,1-Trichlorethane (methyl chloroform). Therefore, EPA will incorporate by reference ASTM D4457 into 40 CFR 63.14 in the future.

In addition to the VCS EPA proposes to use in this proposed rule, the search for emission measurement procedures identified 17 other VCS. The EPA determined that 13 of these 17 standards were impractical alternatives to EPA test methods for the purposes of this proposed rulemaking. Therefore, EPA does not propose to adopt these standards today. (*See* docket A–99–12 for further information on the methods.)

The following four of the 17 VCS identified in this search were not available at the time the review was conducted for the purposes of this proposed rulemaking because they are under development by a voluntary consensus body: ASME/BSR MFC 13M, ''Flow Measurement by Velocity Traverse,'' for EPA Method 2 (and possibly 1); ASME/BSR MFC 12M, ''Flow in Closed Conduits Using Multiport Averaging Pitot Primary Flowmeters,'' for EPA Method 2; ISO/DIS 12039, ''Stationary Source Emissions—Determination of Carbon Monoxide, Carbon Dioxide, and Oxygen—Automated Methods,'' for EPA Method 3A; and ISO/PWI 17895, ''Paints and Varnishes—Determination of the Volatile Organic Compound Content of Water-based Emulsion Paints,'' for EPA Method 24. While we are not proposing to include these four VCS in today's proposal, the EPA will consider the VCS when finalized.

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

Sections 63.4541, 63.4551, 63.4561, 63.4565, and 63.4566 of the proposed standards list the EPA testing methods included in the proposed standards. Under 40 CFR 63.7(f) of the General Provisions, a source may apply to EPA for permission to use alternative test methods in place of any of the EPA testing methods.

List of Subjects in 40 CFR Part 63

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

Dated: November 8, 2002.

Christine Todd Whitman,

Administrator.

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

PART 63—[AMENDED]

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

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

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

Subpart PPPP—National Emission Standards for Hazardous Air Pollutants: Surface Coating of Plastic Parts and Products

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Tables to Subpart PPPP of Part 63

Table 1 to Subpart PPPP of Part 63—Operating Limits if Using the Emission Rate with Add-On Controls Option.

Table 2 to Subpart PPPP of Part 63—Applicability of General Provisions to Subpart PPPP of Part 63.

Table 3 to Subpart PPPP of Part 63—Default Organic HAP Mass Fraction of Solvents and Solvent Blends.

Table 4 to Subpart PPPP of Part 63—Default Organic HAP Mass Fraction for Petroleum Solvent Groups.

Subpart PPPP—National Emission Standards for Hazardous Air Pollutants: Surface Coating of Plastic Parts and Products

What This Subpart Covers

§ 63.4480 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for plastic parts and products surface coating facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

§ 63.4481 Am I subject to this subpart?

(a) Plastic parts and products include, but are not limited to, plastic components of the following types of products as well as the products themselves: motor vehicle parts and accessories for automobiles, trucks, recreational vehicles; sporting and recreational goods; toys; business machines; laboratory and medical equipment; and household and other consumer products. Except as provided in paragraph (c) of this section, the source category to which this subpart applies is the surface coating of any plastic part or product, as described in paragraph (a)(1) of this section, and it includes the subcategories listed in paragraphs (a)(2) through (5) of this section.

(1) Surface coating is the application of coating to a substrate using, for example, spray guns or dip tanks, and associated activities, such as surface preparation, cleaning, mixing, and storage, etc.

(2) The general use coating subcategory includes all coating operations that are not headlamp coating operations, thermoplastic olefin (TPO) coating operations, or assembled on-road vehicle coating operations.

(3) The headlamp coating subcategory includes the surface coating of plastic components of the body of an automotive headlamp; typical coatings used are reflective argent coatings and clear topcoats.

(4) The TPO coating subcategory includes the surface coating of TPO substrates; typical coatings used are adhesion promoters, primers, color coatings, clear coatings and topcoats. The coating of TPO substrates on fully assembled on-road vehicles is not included in the TPO coating subcategory.

(5) The assembled on-road vehicle coating subcategory includes the surface coating of plastic parts on fully assembled motor vehicles and trailers intended for on-road use, including, but not limited to, plastic parts on: automobiles and light trucks that have been repaired after a collision or otherwise repainted, fleet delivery trucks, and motor homes and other recreational vehicles (including camping trailers and fifth wheels). The assembled on-road vehicle coating subcategory does not include the surface coating of plastic parts prior to their attachment to an on-road vehicle on an original equipment manufacturer's (OEM) assembly line. The assembled on-road vehicle coating subcategory also does not include the use of adhesives, sealants, and caulks used in assembling on-road vehicles.

(b) You are subject to this subpart if you own or operate a new, reconstructed, or existing affected source, as defined in § 63.4482, that uses 100 gallons per year, or more, of coatings in the surface coating of plastic parts and products defined in paragraph (a) of this section; and that is a major source, is located at a major source, or is part of a major source of emissions of hazardous air pollutants (HAP). A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (Mg) (10 tons) or more per year or any

combination of HAP at a rate of 22.68 Mg (25 tons) or more per year.

(c) This subpart does not apply to surface coating that meets the criteria of paragraphs (c)(1) through (12) of this section.

(1) Surface coating conducted at a source that uses only coatings, thinners and other additives, and cleaning materials that contain no organic HAP, as determined according to § 63.4541(a).

(2) Surface coating of plastic subject to the NESHAP for aerospace manufacturing and rework facilities (subpart GG of this part).

(3) Surface coating of plastic and wood subject to the NESHAP for wood furniture manufacturing facilities (subpart JJ of this part).

(4) Surface coating of plastic and metal subject to the NESHAP for large appliance surface coating (subpart NNNN of this part).

(5) Surface coating of plastic and metal subject to the NESHAP for metal furniture surface coating.[1]

(6) Surface coating of plastic and wood subject to the NESHAP for wood building products surface coating.[2]

(7) In-mold coating operations or gel coating operations in the manufacture of reinforced plastic composite parts subject to the NESHAP for reinforced plastics composites production.[3]

(8) Surface coating of parts that are pre-assembled from plastic and metal components, where greater than 50 percent of the coatings (by volume, determined on a rolling 12-month basis) are applied to the metal surfaces, and where the source is subject to the NESHAP for miscellaneous metal parts surface coating.[4] If your source is subject to the NESHAP for miscellaneous metal parts surface coating[5] and you can demonstrate that more than 50 percent of coatings are applied to metal surfaces, then compliance with the NESHAP for miscellaneous metal parts surface coating[6] constitutes compliance with subpart PPPP. You must maintain records (such as coating usage or surface area) to document that more than 50 percent of coatings are applied to metal surfaces.

(9) Surface coating that occurs at research or laboratory facilities or is part of janitorial, building, and facility maintenance operations, or hobby shops that are operated for personal rather than commercial purposes.

(10) Surface coating of magnet wire.

(11) Surface coating of fiberglass boats or parts of fiberglass boats where the facility is subject to the requirements for fiberglass boat manufacturing facilities in the NESHAP for boat manufacturing (subpart VVVV of this part), except where the surface coating of the boat is a post-mold coating operation performed on personal watercraft or parts of personal watercraft. This subpart applies to post-mold coating operations performed on personal watercraft or parts of personal watercraft. For the purposes of this subpart, a personal watercraft is defined as a vessel (boat) which uses an inboard motor powering a water jet pump as its primary source of motive power and which is designed to be operated by a person or persons sitting, standing, or kneeling on the vessel, rather than in the conventional manner of sitting or standing inside the vessel.

(12) Operations where plastic is extruded onto the plastic part or product to form a coating.

(d) If you own or operate an affected source that is subject to this subpart and at the same affected source you also perform surface coating subject to any other NESHAP in this part, you may choose to be subject to the requirements of the more stringent of the subparts for the entire surface coating facility. If you choose to be subject to the requirements of another subpart and demonstrate that, by doing so, your facility-wide HAP emissions in kilograms (kg) per year (tons per year) from surface coating operations will be less than or equal to the emissions achieved by complying separately with all applicable subparts, compliance with the more stringent NESHAP will constitute compliance with this subpart.

§ 63.4482 What parts of my plant does this subpart cover?

(a) This subpart applies to each new, reconstructed, and existing affected source within each of the four subcategories listed in § 63.4481(a).

(b) The affected source is the collection of all of the items listed in paragraphs (b)(1) through (4) of this section that are used for surface coating of plastic parts and products within each subcategory:

(1) All coating operations as defined in § 63.4581;

(2) All storage containers and mixing vessels in which coatings, thinners and other additives, and cleaning materials are stored or mixed;

(3) All manual and automated equipment and containers used for conveying coatings, thinners and other additives, and cleaning materials; and

(4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

(c) An affected source is a new source if it meets the criteria in paragraph (c)(1) of this section and the criteria in either paragraph (c)(2) or (3) of this section.

(1) You commenced the construction of the source after December 4, 2002, by installing new coating equipment.

(2) The new coating equipment is used to coat plastic parts and products at a source where no plastic parts surface coating was previously performed.

(3) The new coating equipment is used to perform plastic parts and products coating in a subcategory that was not previously performed.

(d) An affected source is reconstructed if you meet the criteria as defined in § 63.2.

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

§ 63.4483 When do I have to comply with this subpart?

The date by which you must comply with this subpart is called the compliance date. The compliance date for each type of affected source is specified in paragraphs (a) through (c) of this section. The compliance date begins the initial compliance period during which you conduct the initial compliance demonstration described in §§ 63.4540, 63.4550, and 63.4560.

(a) For a new or reconstructed affected source, the compliance date is the applicable date in paragraph (a)(1) or (2) of this section:

(1) If the initial startup of your new or reconstructed affected source is before [DATE OF PUBLICATION OF FINAL RULE IN THE **Federal Register**], the compliance date is [DATE OF PUBLICATION OF FINAL RULE IN THE **Federal Register**].

(2) If the initial startup of your new or reconstructed affected source occurs after [DATE OF PUBLICATION OF FINAL RULE IN THE **Federal Register**], the compliance date is the date of initial startup of your affected source.

(b) For an existing affected source, the compliance date is the date 3 years after [DATE OF PUBLICATION OF FINAL RULE IN THE **Federal Register**].

(c) For an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP emissions, the compliance date is specified in paragraphs (c)(1) and (2) of this section.

(1) For any portion of the source that becomes a new or reconstructed affected source subject to this subpart, the

[1] Proposed at 67 FR 20206, April 24, 2002.
[2] Proposed at 67 FR 42400, June 21, 2002.
[3] Proposed at 66 FR 40323, August 2, 2001.
[4] Proposed at 67 FR 62780, August 13, 2002.
[5] Proposed at 67 FR 52780, August 13, 2002.
[6] Proposed at 67 FR 52780, August 13, 2002.

compliance date is the date of initial startup of the affected source or [DATE OF PUBLICATION OF FINAL RULE IN THE **Federal Register**], whichever is later.

(2) For any portion of the source that becomes an existing affected source subject to this subpart, the compliance date is the date 1 year after the area source becomes a major source or 3 years after [DATE OF PUBLICATION OF FINAL RULE IN THE **Federal Register**], whichever is later.

(d) You must meet the notification requirements in § 63.4510 according to the dates specified in that section and in subpart A of this part. Some of the notifications must be submitted before the compliance dates described in paragraphs (a) through (c) of this section.

Emission Limitations

§ 63.4490 What emission limits must I meet?

(a) For a new or reconstructed affected source, you must limit organic HAP emissions to the atmosphere from the affected source to the applicable limit specified in paragraphs (a)(1) through (4) of this section, determined according to the requirements in § 63.4541, § 63.4551, or § 63.4561.

(1) For each new general use coating affected source, limit organic HAP emissions to no more than 0.16 kg (0.16 pound (lb)) of organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

(2) For each new headlamp coating affected source, limit organic HAP emissions to no more than 0.26 kg (0.26 lb) of organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

(3) For each new TPO coating affected source, limit organic HAP emissions to no more than 0.17 kg (0.17 lb) of organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

(4) For each new assembled on-road vehicle coating affected source, limit organic HAP emissions to no more than 1.34 kg (1.34 lb) of organic HAP emitted per kg (lb) of coating solids used during each 12-month compliance period.

(b) For an existing affected source, you must limit organic HAP emissions to the atmosphere from the affected source to the applicable limit specified in paragraphs (b)(1) through (4) of this section, determined according to the requirements in § 63.4541, § 63.4551, or § 63.4561.

(1) For each existing general use coating affected source, limit organic HAP emissions to no more than 0.16 kg (0.16 lb) of organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

(2) For each existing headlamp coating affected source, limit organic HAP emissions to no more than 0.45 kg (0.45 lb) of organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

(3) For each existing TPO coating affected source, limit organic HAP emissions to no more than 0.23 kg (0.23 lb) of organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

(4) For each existing assembled on-road vehicle coating affected source, limit organic HAP emissions to no more than 1.34 kg (1.34 lb) of organic HAP emitted per kg (lb) of coating solids used during each 12-month compliance period.

§ 63.4491 What are my options for meeting the emission limits?

You must include all coatings (as defined in § 63.4581), thinners and other additives, and cleaning materials used in the affected source when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit in § 63.4490. To make this determination, you must use at least one of the three compliance options listed in paragraphs (a) through (c) of this section. You may apply any of the compliance options to an individual coating operation, or to multiple coating operations as a group, or to the entire affected source. You may use different compliance options for different coating operations, or at different times on the same coating operation. However, you may not use different compliance options at the same time on the same coating operation. If you switch between compliance options for any coating operation or group of coating operations, you must document this switch as required by § 63.4530(c), and you must report it in the next semiannual compliance report required in § 63.4520.

(a) *Compliant material option.* Demonstrate that the organic HAP content of each coating used in the coating operation(s) is less than or equal to the applicable emission limit in § 63.4490, and that each thinner, other additive, and cleaning material used contains no organic HAP. You must meet all the requirements of §§ 63.4540, 63.4541, and 63.4542 to demonstrate compliance with the applicable emission limit using this option.

(b) *Emission rate without add-on controls option.* Demonstrate that, based on the coatings, thinners and other additives, and cleaning materials used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in § 63.4490, calculated as a rolling 12-month emission rate and determined on a monthly basis. You must meet all the requirements of §§ 63.4550, 63.4551, and 63.4552 to demonstrate compliance with the emission limit using this option.

(c) *Emission rate with add-on controls option.* Demonstrate that, based on the coatings, thinners and other additives, cleaning materials used in the coating operation(s), and the emissions reductions achieved by emission capture systems and add-on controls, the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in § 63.4490, calculated as a rolling 12-month emission rate and determined on a monthly basis. If you use this compliance option, you must also demonstrate that all emission capture systems and add-on control devices for the coating operation(s) meet the operating limits required in § 63.4492, except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.4561(j), and that you meet the work practice standards required in § 63.4493. You must meet all the requirements of §§ 63.4560 through 63.4568 to demonstrate compliance with the emission limits, operating limits, and work practice standards using this option.

§ 63.4492 What operating limits must I meet?

(a) For any coating operation(s) on which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any operating limits.

(b) For any controlled coating operation(s) on which you use the emission rate with add-on controls option, except those for which you use a solvent recovery system and conduct a liquid-liquid material balance according to § 63.4561(j), you must meet the operating limits specified in table 1 of this subpart. These operating limits apply to the emission capture and control systems on the coating operation(s) for which you use this option, and you must establish the operating limits during the performance test according to the requirements in § 63.4567. You must meet the operating limits at all times after you establish them.

(c) If you use an add-on control device other than those listed in table 1 of this

subpart, or wish to monitor an alternative parameter and comply with a different operating limit, you must apply to the Administrator for approval of alternative monitoring under § 63.8(f).

§ 63.4493 What work practice standards must I meet?

(a) For any coating operation(s) on which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any work practice standards.

(b) If you use the emission rate with add-on controls option, you must develop and implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners and other additives, and cleaning materials used in, and waste materials generated by, the controlled coating operation(s) for which you use this option; or you must meet an alternative standard as provided in paragraph (c) of this section. The plan must specify practices and procedures to ensure that, at a minimum, the elements specified in paragraphs (b)(1) through (5) of this section are implemented.

(1) All organic-HAP-containing coatings, thinners and other additives, cleaning materials, and waste materials must be stored in closed containers.

(2) Spills of organic-HAP-containing coatings, thinners and other additives, cleaning materials, and waste materials must be minimized.

(3) Organic-HAP-containing coatings, thinners and other additives, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.

(4) Mixing vessels which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.

(5) Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.

(c) As provided in § 63.6(g), we, the U.S. Environmental Protection Agency (EPA), may choose to grant you permission to use an alternative to the work practice standards in this section.

General Compliance Requirements

§ 63.4500 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations in this subpart as specified in paragraphs (a)(1) and (2) of this section.

(1) Any coating operation(s) for which you use the compliant material option or the emission rate without add-on controls option, as specified in § 63.4491(a) and (b), must be in compliance with the applicable emission limit in § 63.4490 at all times.

(2) Any coating operation(s) for which you use the emission rate with add-on controls option, as specified in § 63.4491(c), must be in compliance with the emission limitations as specified in paragraphs (a)(2)(i) through (iii) of this section.

(i) The coating operation(s) must be in compliance with the applicable emission limit in § 63.4490 at all times except during periods of startup, shutdown, and malfunction.

(ii) The coating operation(s) must be in compliance with the operating limits for emission capture systems and add-on control devices required by § 63.4492 at all times except during periods of startup, shutdown, and malfunction, and except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.4561(j).

(iii) The coating operation(s) must be in compliance with the work practice standards in § 63.4493 at all times.

(b) You must always operate and maintain your affected source, including all air pollution control and monitoring equipment you use for purposes of complying with this subpart, according to the provisions in § 63.6(e)(1)(i).

(c) If your affected source uses an emission capture system and add-on control device, you must develop and implement a written startup, shutdown, and malfunction plan according to the provisions in § 63.6(e)(3). The plan must address the startup, shutdown, and corrective actions in the event of a malfunction of the emission capture system or the add-on control device. The plan must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures.

§ 63.4501 What parts of the General Provisions apply to me?

Table 2 of this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you.

Notifications, Reports, and Records

§ 63.4510 What notifications must I submit?

(a) *General.* You must submit the notifications in §§ 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to you by the dates specified in those sections, except as provided in paragraphs (b) and (c) of this section.

(b) *Initial notification.* You must submit the Initial Notification required by § 63.9(b) for a new or reconstructed affected source no later than 120 days after initial startup or 120 days after [DATE OF PUBLICATION OF FINAL RULE IN THE **Federal Register**], whichever is later. For an existing affected source, you must submit the Initial Notification no later than 1 year after [DATE OF PUBLICATION OF FINAL RULE IN THE **Federal Register**].

(c) *Notification of compliance status.* You must submit the Notification of Compliance Status required by § 63.9(h) no later than 30 calendar days following the end of the initial compliance period described in § 63.4540, § 63.4550, or § 63.4560 that applies to your affected source. The Notification of Compliance Status must contain the information specified in paragraphs (c)(1) through (9) of this section and in § 63.9(h).

(1) Company name and address.

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

(3) Date of the report and beginning and ending dates of the reporting period. The reporting period is the initial compliance period described in § 63.4540, § 63.4550, or § 63.4560 that applies to your affected source.

(4) Identification of the compliance option or options specified in § 63.4491 that you used on each coating operation in the affected source during the initial compliance period.

(5) Statement of whether or not the affected source achieved the emission limitations for the initial compliance period.

(6) If you had a deviation, include the information in paragraphs (c)(6)(i) and (ii) of this section.

(i) A description and statement of the cause of the deviation.

(ii) If you failed to meet the applicable emission limit in § 63.4490, include all the calculations you used to determine the kg (lb) of organic HAP emitted per kg (lb) coating solids used. You do not need to submit information provided by the materials suppliers or manufacturers, or test reports.

(7) For each of the data items listed in paragraphs (c)(7)(i) through (iv) of this section that is required by the compliance option(s) you used to demonstrate compliance with the emission limit, include an example of how you determined the value, including calculations and supporting data. Supporting data can include a copy of the information provided by the supplier or manufacturer of the example coating or material, or a summary of the

results of testing conducted according to § 63.4541(a), (b), or (c). You do not need to submit copies of any test reports.

(i) Mass fraction of organic HAP for one coating, for one thinner or other additive, and for one cleaning material.

(ii) Mass fraction of coating solids for one coating.

(iii) Density for one coating, one thinner or other additive, and one cleaning material, except that if you use the compliant material option, only the example coating density is required.

(iv) The amount of waste materials and the mass of organic HAP contained in the waste materials for which you are claiming an allowance in Equation 1 of § 63.4551.

(8) The calculation of kg (lb) of organic HAP emitted per kg (lb) coating solids used for the compliance option(s) you used, as specified in paragraphs (c)(8)(i) through (iii) of this section.

(i) For the compliant material option, provide an example calculation of the organic HAP content for one coating, using Equation 1 of § 63.4541.

(ii) For the emission rate without add-on controls option, provide the calculation of the total mass of organic HAP emissions for each month; the calculation of the total mass of coating solids used each month; and the calculation of the 12-month organic HAP emission rate, using Equations 1 and 1A through 1C, 2, and 3, respectively, of § 63.4551.

(iii) For the emission rate with add-on controls option, provide the calculation of the total mass of organic HAP emissions for the coatings, thinners and other additives, and cleaning materials used each month, using Equations 1 and 1A through 1C of § 63.4551; the calculation of the total mass of coating solids used each month using Equation 2 of § 63.4551; the mass of organic HAP emission reduction each month by emission capture systems and add-on control devices, using Equations 1 and 1A through 1D of § 63.4561 and Equations 2, 3, and 3A through 3C of § 63.4561, as applicable; the calculation of the total mass of organic HAP emissions each month, using Equation 4 of § 63.4561; and the calculation of the 12-month organic HAP emission rate, using Equation 5 of § 63.4561.

(9) For the emission rate with add-on controls option, you must include the information specified in paragraphs (c)(9)(i) through (iv) of this section, except that the requirements in paragraphs (c)(9)(i) through (iii) of this section do not apply to solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.4561(j).

(i) For each emission capture system, a summary of the data and copies of the calculations supporting the determination that the emission capture system is a permanent total enclosure (PTE) or a measurement of the emission capture system efficiency. Include a description of the protocol followed for measuring capture efficiency, summaries of any capture efficiency tests conducted, and any calculations supporting the capture efficiency determination. If you use the data quality objective (DQO) or lower confidence limit (LCL) approach, you must also include the statistical calculations to show you meet the DQO or LCL criteria in appendix A to subpart KK of this part. You do not need to submit complete test reports.

(ii) A summary of the results of each add-on control device performance test. You do not need to submit complete test reports.

(iii) A list of each emission capture system's and add-on control device's operating limits and a summary of the data used to calculate those limits.

(iv) A statement of whether or not you developed and implemented the work practice plan required by § 63.4493.

§ 63.4520 What reports must I submit?

(a) *Semiannual compliance reports.* You must submit semiannual compliance reports for each affected source according to the requirements of paragraphs (a)(1) through (7) of this section. The semiannual compliance reporting requirements may be satisfied by reports required under other parts of the Clean Air Act (CAA), as specified in paragraph (a)(2) of this section.

(1) *Dates.* Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), you must prepare and submit each semiannual compliance report according to the dates specified in paragraphs (a)(1)(i) through (iv) of this section. Note that the information reported for each of the months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.

(i) The first semiannual compliance report must cover the first semiannual reporting period which begins the day after the end of the initial compliance period described in § 63.4540, § 63.4550, or § 63.4560 that applies to your affected source and ends on June 30 or December 31, whichever occurs first following the end of the initial compliance period.

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

(iii) Each semiannual 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.

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

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

(3) *General requirements.* The semiannual compliance report must contain the information specified in paragraphs (a)(3)(i) through (v) of this section, and the information specified in paragraphs (a)(4) through (7) and (c)(1) of this section that is applicable to your affected source.

(i) Company name and address.

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

(iii) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12

months of data prior to the date of each monthly calculation.

(iv) Identification of the compliance option or options specified in § 63.4491 that you used on each coating operation during the reporting period. If you switched between compliance options during the reporting period, you must report the beginning and ending dates you used each option.

(v) If you used the emission rate without add-on controls or the emission rate with add-on controls compliance option (§ 63.4491(b) or (c)), the calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period.

(4) *No deviations.* If there were no deviations from the emission limitations in §§ 63.4490, 63.4492, and 63.4493 that apply to you, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period. If you used the emission rate with add-on controls option and there were no periods during which the continuous parameter monitoring systems (CPMS) were out-of-control as specified in § 63.8(c)(7), the semiannual compliance report must include a statement that there were no periods during which the CPMS were out-of-control during the reporting period.

(5) *Deviations: Compliant material option.* If you used the compliant material option and there was a deviation from the applicable HAP content requirements in § 63.4490, the semiannual compliance report must contain the information in paragraphs (a)(5)(i) through (iv) of this section.

(i) Identification of each coating used that deviated from the applicable emission limit, and each thinner, other additive, and cleaning material used that contained organic HAP, and the dates and time periods each was used.

(ii) The calculation of the organic HAP content (using Equation 1 of § 63.4541) for each coating identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation (e.g., information provided by coating suppliers or manufacturers, or test reports).

(iii) The determination of mass fraction of organic HAP for each thinner, other additive, and cleaning material identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation (e.g., information provided by material suppliers or manufacturers, or test reports).

(iv) A statement of the cause of each deviation.

(6) *Deviations: Emission rate without add-on controls option.* If you used the emission rate without add-on controls option and there was a deviation from the applicable emission limit in § 63.4490, the semiannual compliance report must contain the information in paragraphs (a)(6)(i) through (iii) of this section.

(i) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in § 63.4490.

(ii) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. You must submit the calculations for Equations 1, 1A through 1C, 2, and 3 of § 63.4551; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to § 63.4551(e)(4). You do not need to submit background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports).

(iii) A statement of the cause of each deviation.

(7) *Deviations: Emission rate with add-on controls option.* If you used the emission rate with add-on controls option and there was a deviation from an emission limitation (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere), the semiannual compliance report must contain the information in paragraphs (a)(7)(i) through (xiv) of this section. This includes periods of startup, shutdown, and malfunction during which deviations occurred.

(i) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in § 63.4490.

(ii) The calculations used to determine the 12-month organic HAP emission rate for each compliance period in which a deviation occurred. You must provide the calculation of the total mass of organic HAP emissions for the coatings, thinners and other additives, and cleaning materials used each month, using Equations 1 and 1A through 1C of § 63.4551; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to § 63.4551(e)(4); the calculation of the total mass of coating solids used each month, using Equation 2 of § 63.4551; the calculation of the mass of organic HAP emission reduction each month by emission capture systems and add-on control devices, using Equations 1 and 1A through 1D of § 63.4561, and Equations 2, 3, and 3A through 3C of § 63.4561, as applicable; the calculation of the total mass of organic HAP emissions each month, using Equation 4 of § 63.4561; and the calculation of the 12-month organic HAP emission rate, using Equation 5 of § 63.4561. You do not need to submit the background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports).

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

(iv) A brief description of the CPMS.

(v) The date of the latest CPMS certification or audit.

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

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

(viii) The date and time period of each deviation from an operating limit in Table 1 of this subpart; date and time period of any bypass of the add-on control device; and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(ix) A summary of the total duration of each deviation from an operating limit in Table 1 of this subpart and each bypass of the add-on control device during the semiannual reporting period, and the total duration as a percent of the total source operating time during that semiannual reporting period.

(x) A breakdown of the total duration of the deviations from the operating limits in Table 1 of this subpart and bypasses of the add-on control device during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(xi) A summary of the total duration of CPMS downtime during the semiannual reporting period and the total duration of CPMS downtime as a percent of the total source operating time during that semiannual reporting period.

(xii) A description of any changes in the CPMS, coating operation, emission capture system, or add-on control device since the last semiannual reporting period.

(xiii) For each deviation from the work practice standards, a description of the deviation, the date and time period of the deviation, and the actions you took to correct the deviation.

(xiv) A statement of the cause of each deviation.

(b) *Performance test reports.* If you use the emission rate with add-on controls option, you must submit reports of performance test results for emission capture systems and add-on control devices no later than 60 days after completing the tests as specified in § 63.10(d)(2).

(c) *Startup, shutdown, malfunction reports.* If you used the emission rate with add-on controls option and you had a startup, shutdown, or malfunction during the semiannual reporting period, you must submit the reports specified in paragraphs (c)(1) and (2) of this section.

(1) If your actions were consistent with your startup, shutdown, and malfunction plan, you must include the information specified in § 63.10(d) in the semiannual compliance report required by paragraph (a) of this section.

(2) If your actions were not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report as described in paragraph (c)(2)(i) and (ii) of this section.

(i) You must describe the actions taken during the event in a report delivered by facsimile, telephone, or other means to the Administrator within 2 working days after starting actions that are inconsistent with the plan.

(ii) You must submit a letter to the Administrator within 7 working days after the end of the event, unless you have made alternative arrangements with the Administrator as specified in § 63.10(d)(5)(ii). The letter must contain the information specified in § 63.10(d)(5)(ii).

§ 63.4530 What records must I keep?

You must collect and keep records of the data and information specified in this section. Failure to collect and keep these records is a deviation from the applicable standard.

(a) A copy of each notification and report that you submitted to comply with this subpart, and the documentation supporting each notification and report.

(b) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner or other additive and cleaning material, and the mass fraction of coating solids for each coating. If you conducted testing to determine mass fraction of organic HAP, density, or mass fraction of coating solids, you must keep a copy of the complete test report. If you use information provided to you by the manufacturer or supplier of the material that was based on testing, you must keep the summary sheet of results provided to you by the manufacturer or supplier. You are not required to obtain the test report or other supporting documentation from the manufacturer or supplier.

(c) For each compliance period, the records specified in paragraphs (c)(1) through (4) of this section.

(1) A record of the coating operations on which you used each compliance option and the time periods (beginning and ending dates and times) you used each option.

(2) For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 1 of § 63.4541.

(3) For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and other additives, and cleaning materials used each month, using Equations 1, 1A through 1C, and 2 of § 63.4551 and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to § 63.4551(e)(4); the calculation of the total mass of coating solids used each month using Equation 2 of § 63.4551; and the calculation of each 12-month organic HAP emission rate, using Equation 3 of § 63.4551.

(4) For the emission rate with add-on controls option, records of the calculations specified in paragraphs (c)(4)(i) through (v) of this section.

(i) The calculation of the total mass of organic HAP emissions for the coatings, thinners and other additives, and cleaning materials used each month, using Equations 1 and 1A through 1C of § 63.4551; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to § 63.4551(e)(4);

(ii) The calculation of the total mass of coating solids used each month, using Equation 2 of § 63.4551;

(iii) The calculation of the mass of organic HAP emission reduction by emission capture systems and add-on control devices, using Equations 1 and 1A through 1D of § 63.4561 and Equations 2, 3, and 3A through 3C of § 63.4561, as applicable;

(iv) The calculation of each month's organic HAP emission rate, using Equation 4 of § 63.4561; and

(v) The calculation of each 12-month organic HAP emission rate, using Equation 5 of § 63.4561.

(d) A record of the name and volume of each coating, thinner or other additive, and cleaning material used during each compliance period. If you are using the compliant material option for all coatings at the source, you may maintain purchase records for each material used rather than a record of the volume used.

(e) A record of the mass fraction of organic HAP for each coating, thinner or other additive, and cleaning material used during each compliance period.

(f) A record of the mass fraction of coating solids for each coating used during each compliance period.

(g) If you use either the emission rate without add-on controls or the emission rate with add-on controls compliance option, the density for each coating, thinner or other additive, and cleaning material used during each compliance period.

(h) If you use an allowance in Equation 1 of § 63.4551 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to § 63.4551(e)(4), you must keep records of the information specified in paragraphs (h)(1) through (3) of this section.

(1) The name and address of each TSDF to which you sent waste materials for which you use an allowance in Equation 1 of § 63.4551, a statement of which subparts under 40 CFR parts 262, 264, 265, and 266 apply to the facility, and the date of each shipment.

(2) Identification of the coating operations producing waste materials included in each shipment and the month or months in which you used the allowance for these materials in Equation 1 of § 63.4551.

(3) The methodology used in accordance with § 63.4551(e)(4) to determine the total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materials. This must include the sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment.

(i) [Reserved]

(j) You must keep records of the date, time, and duration of each deviation.

(k) If you use the emission rate with add-on controls option, you must keep the records specified in paragraphs (k)(1) through (8) of this section.

(1) For each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction.

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

(3) The records required to show continuous compliance with each operating limit specified in Table 1 of this subpart that applies to you.

(4) For each capture system that is a PTE, the data and documentation you used to support a determination that the capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and has a capture efficiency of 100 percent, as specified in § 63.4565(a).

(5) For each capture system that is not a PTE, the data and documentation you used to determine capture efficiency according to the requirements specified in §§ 63.4564 and 63.4565(b) through (e), including the records specified in paragraphs (k)(5)(i) through (iii) of this section that apply to you.

(i) *Records for a liquid-to-uncaptured gas protocol using a temporary total enclosure or building enclosure.* Records of the mass of total volatile hydrocarbon (TVH) as measured by Method 204A or F of appendix M to 40 CFR part 51 for each material used in the coating operation, and the total TVH for all materials used during each capture efficiency test run, including a copy of the test report. Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run, as measured by Method 204D or E of appendix M to 40 CFR part 51, including a copy of the test report. Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR part 51 for either a temporary total enclosure or a building enclosure.

(ii) *Records for a gas-to-gas protocol using a temporary total enclosure or a building enclosure.* Records of the mass of TVH emissions captured by the emission capture system as measured by Method 204B or C of appendix M to 40 CFR part 51 at the inlet to the add-on control device, including a copy of the test report. Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run as measured by Method 204D or E of appendix M to 40 CFR part 51, including a copy of the test report. Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR part 51 for either a temporary total enclosure or a building enclosure.

(iii) *Records for an alternative protocol.* Records needed to document a capture efficiency determination using an alternative method or protocol as specified in § 63.4565(e), if applicable.

(6) The records specified in paragraphs (k)(6)(i) and (ii) of this section for each add-on control device organic HAP destruction or removal efficiency determination as specified in § 63.4566.

(i) Records of each add-on control device performance test conducted according to §§ 63.4564 and 63.4566.

(ii) Records of the coating operation conditions during the add-on control device performance test showing that the performance test was conducted under representative operating conditions.

(7) Records of the data and calculations you used to establish the emission capture and add-on control device operating limits as specified in § 63.4567 and to document compliance with the operating limits as specified in Table 1 of this subpart.

(8) A record of the work practice plan required by § 63.4493 and documentation that you are implementing the plan on a continuous basis.

§ 63.4531 In what form and for how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database.

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

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

Compliance Requirements for the Compliant Material Option

§ 63.4540 By what date must I conduct the initial compliance demonstration?

You must complete the initial compliance demonstration for the initial compliance period according to the requirements in § 63.4541. The initial compliance period begins on the applicable compliance date specified in § 63.4483 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through that month plus the next 12 months. The initial compliance demonstration includes the calculations according to § 63.4541 and supporting documentation showing that during the initial compliance period, you used no coating with an organic HAP content that exceeded the applicable emission limit in § 63.4490, and that you used no thinners, other additives, or cleaning materials that contained organic HAP as determined according to § 63.4541(a).

§ 63.4541 How do I demonstrate initial compliance with the emission limitations?

You may use the compliant material option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. You must use either the emission rate without add-on controls option or the emission rate with add-on controls option for any coating operation in the affected source for which you do not use this option. To demonstrate initial compliance using the compliant material option, the coating operation or group of coating operations must use no coating with an organic HAP content that exceeds the applicable emission limit in § 63.4490 and must use no thinner or other additive, or cleaning material that contains organic HAP as determined according to this section. Any coating operation for which you use the compliant material option is not required to meet the operating limits or work practice standards required in §§ 63.4492 and 63.4493, respectively. You must conduct a separate initial compliance demonstration for each general use coating, TPO coating, headlamp coating, and assembled on-road vehicle coating affected source. You must meet all the requirements of this section. Use the procedures in this section on each coating, thinner or other additive, and cleaning material in the condition it is in when it is received from its manufacturer or supplier and prior to any alteration. You do not need to redetermine the HAP content of coatings, thinners and other additives, and cleaning materials that are reclaimed onsite and reused in the coating operation for which you use the compliant material option, provided these materials in their condition as received were demonstrated to comply with the compliant material option.

(a) *Determine the mass fraction of organic HAP for each material used.* You must determine the mass fraction of organic HAP for each coating, thinner or other additive, and cleaning material used during the compliance period by

using one of the options in paragraphs (a)(1) through (5) of this section.

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

(i) Count each organic HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, you do not have to count it. Express the mass fraction of each organic HAP you count as a value truncated to four places after the decimal point (*e.g.*, 0.3791).

(ii) Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to three places after the decimal point (*e.g.*, 0.763).

(2) *Method 24 (appendix A to 40 CFR part 60).* For coatings, you may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP.

(3) *Alternative method.* You may use an alternative test method for determining the mass fraction of organic HAP once the Administrator has approved it. You must follow the procedure in § 63.7(f) to submit an alternative test method for approval.

(4) *Information from the supplier or manufacturer of the material.* You may rely on information other than that generated by the test methods specified in paragraphs (a)(1) through (3) of this section, such as manufacturer's formulation data, if it represents each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, you do not have to count it. If there is a disagreement between such information and results of a test conducted according to paragraphs (a)(1) through (3) of this section, then the test method results will take precedence.

(5) *Solvent blends.* Solvent blends may be listed as single components for some materials in data provided by manufacturers or suppliers. Solvent blends may contain organic HAP which must be counted toward the total organic HAP mass fraction of the materials. When test data and manufacturer's data for solvent blends are not available, you may use the default values for the mass fraction of organic HAP in these solvent blends listed in Table 3 or 4 of this subpart. If you use the tables, you must use the values in Table 3 for all solvent blends that match Table 3 entries, and you may only use Table 4 if the solvent blends in the materials you use do not match any of the solvent blends in Table 3 and you only know whether the blend is aliphatic or aromatic. However, if the results of a Method 311 test indicate higher values than those listed on Table 3 or 4 of this subpart, the Method 311 results will take precedence.

(b) *Determine the mass fraction of coating solids for each coating.* You must determine the mass fraction of coating solids (pounds of coating solids per pound of coating) for each coating used during the compliance period by a test or by information provided by the supplier or the manufacturer of the material, as specified in paragraphs (b)(1) through (3) of this section. If test results obtained according to paragraph (b)(1) or (2) of this section do not agree with the information obtained under paragraph (b)(3) of this section, the test results will take precedence.

(1) *Method 24 (appendix A to 40 CFR part 60).* You may use Method 24 for determining the mass fraction of solids of coatings.

(2) *Alternative method.* You may use an alternative test method for determining the solids content of each coating once the Administrator has approved it. You must follow the procedure in § 63.7(f) to submit an alternative test method for approval.

(3) *Information from the supplier or manufacturer of the material.* You may obtain the mass fraction of coating solids for each coating from the supplier or manufacturer. If there is disagreement between such information and the test method results, then the test method results will take precedence.

(c) *Calculate the organic HAP content of each coating.* Calculate the organic HAP content, kg (lb) of organic HAP emitted per kg (lb) coating solids used, of each coating used during the compliance period, using Equation 1 of this section:

$$H_c = \frac{W_c}{S_c} \qquad \text{(Eq. 1)}$$

Where:

H_c = organic HAP content of the coating, kg (lb) of organic HAP emitted per kg (lb) coating solids used.

W_c = mass fraction of organic HAP in the coating, lb organic HAP per lb coating, determined according to paragraph (a) of this section.

S_c = mass fraction of coating solids, lb coating solids per lb coating, determined according to paragraph (b) of this section.

(d) *Compliance demonstration.* The calculated organic HAP content for each coating used during the initial compliance period must be less than or equal to the applicable emission limit in § 63.4490; and each thinner or other additive, and cleaning material used during the initial compliance period must contain no organic HAP, determined according to paragraph (a) of this section. You must keep all records required by §§ 63.4530 and 63.4531. As part of the Notification of Compliance Status required in § 63.4510, you must identify the coating operation(s) for which you used the compliant material option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because you used no coatings for which the organic HAP content exceeded the applicable emission limit in § 63.4490, and you used no thinners, other additives, or cleaning materials that contained organic HAP, determined according to the procedures in paragraph (a) of this section.

§ 63.4542 How do I demonstrate continuous compliance with the emission limitations?

(a) For each compliance period to demonstrate continuous compliance, you must use no coating for which the organic HAP content (determined using Equation 1 of § 63.4541) exceeds the applicable emission limit in § 63.4490, and use no thinner or other additive, or cleaning material that contains organic HAP, determined according to § 63.4541(a). A compliance period consists of 12 months. Each month, after the end of the initial compliance period described in § 63.4540, is the end of a compliance period consisting of that month and the preceding 11 months.

(b) If you choose to comply with the emission limitations by using the compliant material option, the use of any coating, thinner or other additive, or cleaning material that does not meet the criteria specified in paragraph (a) of this section is a deviation from the emission limitations that must be reported as specified in §§ 63.4510(c)(6) and 63.4520(a)(5).

(c) As part of each semiannual compliance report required by § 63.4520, you must identify the coating

operation(s) for which you used the compliant material option. If there were no deviations from the applicable emission limit in § 63.4490, submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because you used no coatings for which the organic HAP content exceeded the applicable emission limit in § 63.4490, and you used no thinner or other additive, or cleaning material that contained organic HAP, determined according to § 63.4541(a).

(d) You must maintain records as specified in §§ 63.4530 and 63.4531.

Compliance Requirements for the Emission Rate Without Add-On Controls Option

§ 63.4550 By what date must I conduct the initial compliance demonstration?

You must complete the initial compliance demonstration for the initial compliance period according to the requirements of § 63.4551. The initial compliance period begins on the applicable compliance date specified in § 63.4483 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months. You must determine the mass of organic HAP emissions and mass of coating solids used each month and then calculate a 12-month organic HAP emission rate at the end of the initial 12-month compliance period. The initial compliance demonstration includes the calculations according to § 63.4551 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in § 63.4490.

§ 63.4551 How do I demonstrate initial compliance with the emission limitations?

You may use the emission rate without add-on controls option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. You must use either the compliant material option or the emission rate with add-on controls option for any coating operation in the affected source for which you do not use this option. To demonstrate initial compliance using the emission rate without add-on controls option, the coating operation or group of coating operations must meet the applicable emission limit in § 63.4490, but is not required to meet the operating limits or work practice standards in §§ 63.4492 and 63.4493, respectively. You must conduct a separate initial compliance demonstration for each general use coating, TPO coating, headlamp coating, and assembled on-road vehicle coating affected source. You must meet all the requirements of this section. When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners or other additives, or cleaning materials used on coating operations for which you use the compliant material option or the emission rate with add-on controls option or coating operations in a different affected source in a different subcategory. You do not need to redetermine the mass of organic HAP in coatings, thinners and other additives, or cleaning materials that have been reclaimed onsite and reused in the coating operation for which you use the emission rate without add-on controls option.

(a) *Determine the mass fraction of organic HAP for each material.* Determine the mass fraction of organic HAP for each coating, thinner or other additive, and cleaning material used during each month according to the requirements in § 63.4541(a).

(b) *Determine the mass fraction of coating solids.* Determine the mass fraction of coating solids (pounds of solids per pound of coating) for each coating used during each month according to the requirements in § 63.4541(b).

(c) *Determine the density of each material.* Determine the density of each coating, thinner or other additive, and cleaning material used during each month from test results using ASTM Method D1475–98, information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475–98 test results and other such information sources, the test results will take precedence.

(d) *Determine the volume of each material used.* Determine the volume (gallons) of each coating, thinner or other additive, and cleaning material used during each month by measurement or usage records.

(e) *Calculate the mass of organic HAP emissions.* The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. Calculate the mass of organic HAP emissions using Equation 1 of this section.

$$H_e = A + B + C - R_w \qquad \text{(Eq. 1)}$$

Where:

H_e = total mass of organic HAP emissions during the month, lb.

A = total mass of organic HAP in the coatings used during the month, lb, as calculated in Equation 1A of this section.

B = total mass of organic HAP in the thinners and other additives used during the month, lb, as calculated in Equation 1B of this section.

C = total mass of organic HAP in the cleaning materials used during the month, lb, as calculated in Equation 1C of this section.

R_w = total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, lb, determined according to paragraph (e)(4) of this section. (You may assign a value of zero to R_w if you do not wish to use this allowance.)

(1) Calculate the lb organic HAP in the coatings used during the month using Equation 1A of this section:

$$A = \sum_{i=1}^{m} \left(Vol_{c,i}\right)\left(D_{c,i}\right)\left(W_{c,i}\right) \qquad \text{(Eq. 1A)}$$

Where:

A = total mass of organic HAP in the coatings used during the month, lb.

$Vol_{c,i}$ = total volume of coating, i, used during the month, gallons.

$D_{c,i}$ = density of coating, i, lb coating per gallon coating.

$W_{c,i}$ = mass fraction of organic HAP in coating, i, lb organic HAP per lb coating.

m = number of different coatings used during the month.

(2) Calculate the lb of organic HAP in the thinners and other additives used

during the month using Equation 1B of this section:

$$B = \sum_{j=1}^{n} \left(Vol_{t,j}\right)\left(D_{t,j}\right)\left(W_{t,j}\right) \qquad \text{(Eq. 1B)}$$

Where:

B = total mass of organic HAP in the thinners and other additives used during the month, lb.

$Vol_{t,j}$ = total volume of thinner or other additive, j, used during the month, gallons.

$D_{t,j}$ = density of thinner or other additive, j, lb per gallon.

$W_{t,j}$ = mass fraction of organic HAP in thinner or other additive, j, lb organic HAP per lb thinner.

n = number of different thinners or other additives used during the month.

(3) Calculate the lb organic HAP in the cleaning materials used during the month using Equation 1C of this section:

$$C = \sum_{k=1}^{p} \left(Vol_{s,k}\right)\left(D_{s,k}\right)\left(W_{s,k}\right) \qquad \text{(Eq. 1C)}$$

Where:

C = total mass of organic HAP in the cleaning materials used during the month, lb.

$Vol_{s,k}$ = total volume of cleaning material, k, used during the month, gallons.

$D_{s,k}$ = density of cleaning material, k, lb per gallon.

$W_{s,k}$ = mass fraction of organic HAP in cleaning material, k, lb organic HAP per lb material.

p = number of different cleaning materials used during the month.

(4) If you choose to account for the mass of organic HAP contained in waste materials sent or designated for shipment to a hazardous waste TSDF in Equation 1 of this section, then you must determine it according to paragraphs (e)(4)(i) through (iv) of this section.

(i) You may include in the determination only waste materials that are generated by coating operations in the affected source for which you use Equation 1 of this section and that will be treated or disposed of by a facility that is regulated as a TSDF under 40 CFR part 262, 264, 265, or 266. The TSDF may be either off-site or on-site. You may not include organic HAP contained in wastewater.

(ii) You must determine either the amount of the waste materials sent to a TSDF during the month or the amount collected and stored during the month and designated for future transport to a TSDF. Do not include in your determination any waste materials sent to a TSDF during a month if you have already included them in the amount collected and stored during that month or a previous month.

(iii) Determine the total mass of organic HAP contained in the waste materials specified in paragraph (e)(4)(ii) of this section.

(iv) You must document the methodology you use to determine the amount of waste materials and the total mass of organic HAP they contain, as required in § 63.4530(h). To the extent that waste manifests include this, they may be used as part of the documentation of the amount of waste materials and mass of organic HAP contained in them.

(f) *Calculate the total mass of coating solids used.* Determine the total mass of coating solids used, lb, which is the combined mass of coating solids for all coatings used during each month using Equation 2 of this section:

$$M_{st} = \sum_{i=1}^{m} \left(Vol_{c,i}\right)\left(D_{c,i}\right)\left(M_{s,i}\right) \qquad \text{(Eq. 2)}$$

Where:

M_{st} = total mass of coating solids used during the month, lb.

$Vol_{c,i}$ = total volume of coating, i, used during the month, gallons.

$D_{c,i}$ = density of coating, i, lbs per gallon coating, determined according to 63.4551(c).

$M_{s,i}$ = mass fraction of coating solids for coating, i, lbs solids per lb coating, determined according to § 63.4541(b).

m = number of coatings used during the month.

(g) Calculate the organic HAP emission rate for the 12-month compliance period, kg (lb) of organic HAP emitted per kg (lb) coating solids used, using Equation 3 of this section:

$$H_{yr} = \frac{\sum_{y=1}^{12} H_e}{\sum_{y=1}^{12} M_{st}} \qquad \text{(Eq. 3)}$$

Where:

H_{yr} = average organic HAP emission rate for the 12-month compliance period, kg (lb) of organic HAP emitted per kg (lb) coating solids used.

H_e = total mass of organic HAP emissions from all materials used during month, y, lb, as calculated by Equation 1 of this section.

M_{st} = total mass of coating solids used during month, y, lb, as calculated by Equation 2 of this section.

y = identifier for months.

(h) *Compliance demonstration.* The organic HAP emission rate for the initial 12-month compliance period must be less than or equal to the applicable emission limit in § 63.4490. You must keep all records as required by §§ 63.4530 and 63.4531. As part of the Notification of Compliance Status required by § 63.4510, you must identify the coating operation(s) for which you used the emission rate without add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in § 63.4490, determined according to the procedures in this section.

§ 63.4552 How do I demonstrate continuous compliance with the emission limitations?

(a) To demonstrate continuous compliance, the organic HAP emission rate for each compliance period, determined according to § 63.4551(a) through (g), must be less than or equal to the applicable emission limit in § 63.4490. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in § 63.4550 is the end of a compliance period consisting of that month and the preceding 11 months. You must perform the calculations in § 63.4551(a) through (g) on a monthly basis using data from the previous 12 months of operation.

(b) If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in § 63.4490, this is a deviation from the emission limitation for that compliance period and must be reported as specified in §§ 63.4510(c)(6) and 63.4520(a)(6).

(c) As part of each semiannual compliance report required by § 63.4520, you must identify the coating operation(s) for which you used the emission rate without add-on controls option. If there were no deviations from the emission limitations, you must submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in § 63.4490, determined according to § 63.4551(a) through (g).

(d) You must maintain records as specified in §§ 63.4530 and 63.4531.

Compliance Requirements for the Emission Rate With Add-On Controls Option

§ 63.4560 By what date must I conduct performance tests and other initial compliance demonstrations?

(a) *New and reconstructed affected sources.* For a new or reconstructed affected source, you must meet the requirements of paragraphs (a)(1) through (4) of this section.

(1) All emission capture systems, add-on control devices, and CPMS must be installed and operating no later than the applicable compliance date specified in § 63.4483. Except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.4561(j), you must conduct a performance test of each capture system and add-on control device according to §§ 63.4564, 63.4565, and 63.4566 and establish the operating limits required by § 63.4492 no later than 180 days after the applicable compliance date specified in § 63.4483. For a solvent recovery system for which you conduct liquid-liquid material balances according to § 63.4561(j), you must initiate the first material balance no later than the applicable compliance date specified in § 63.4483.

(2) You must develop and begin implementing the work practice plan required by § 63.4493 no later than the compliance date specified in § 63.4483.

(3) You must complete the initial compliance demonstration for the initial compliance period according to the requirements of § 63.4561. The initial compliance period begins on the applicable compliance date specified in § 63.4483 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months. You must determine the mass of organic HAP emissions and mass of coatings solids used each month and then calculate a 12-month organic HAP emission rate at the end of the initial 12-month compliance period. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to §§ 63.4564, 63.4565, and 63.4566; results of liquid-liquid material balances conducted according to § 63.4561(j); calculations according to § 63.4561 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in § 63.4490; the operating limits established during the performance tests and the results of the continuous parameter monitoring required by § 63.4568; and documentation of whether you developed and implemented the work practice plan required by § 63.4493.

(4) You do not need to comply with the operating limits for the emission capture system and add-on control device required by § 63.4492 until after you have completed the performance tests specified in paragraph (a)(1) of this section. Instead, you must maintain a log detailing the operation and maintenance of the emission capture system, add-on control device, and continuous parameter monitors during the period between the compliance date and the performance test. You must begin complying with the operating limits for your affected source on the date you complete the performance tests specified in paragraph (a)(1) of this section. The requirements in this paragraph do not apply to solvent recovery systems for which you conduct liquid-liquid material balances according to the requirements in § 63.4561(j).

(b) *Existing affected sources.* For an existing affected source, you must meet the requirements of paragraphs (b)(1) through (3) of this section.

(1) All emission capture systems, add-on control devices, and CPMS must be installed and operating no later than the applicable compliance date specified in § 63.4483. Except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.4561(j), you must conduct a performance test of each capture system and add-on control device according to the procedures in §§ 63.4564, 63.4565, and 63.4566 and establish the operating limits required by § 63.4492 no later than the compliance date specified in § 63.4483. For a solvent recovery system for which you conduct liquid-liquid material balances according to § 63.4561(j), you must initiate the first material balance no later than the compliance date specified in § 63.4483.

(2) You must develop and begin implementing the work practice plan required by § 63.4493 no later than the compliance date specified in § 63.4483.

(3) You must complete the compliance demonstration for the initial compliance period according to the requirements of § 63.4561. The initial compliance period begins on the applicable compliance date specified in § 63.4483 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months. You must determine the mass of organic HAP emissions and mass of coatings solids used each month and then calculate a 12-month organic HAP emission rate at the end of the initial 12-month compliance period. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to §§ 63.4564, 63.4565, and 63.4566; results of liquid-liquid material balances conducted according to § 63.4561(j); calculations according to § 63.4561 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in § 63.4490; the operating limits established during the performance tests and the results of the continuous parameter monitoring required by § 63.4568; and documentation of whether you developed and implemented the work practice plan required by § 63.4493.

§ 63.4561 How do I demonstrate initial compliance?

(a) You may use the emission rate with add-on controls option for any coating operation, for any group of coating operations in the affected source, or for all of the coating operations in the affected source. You may include both controlled and uncontrolled coating operations in a group for which you use this option. You must use either the compliant material option or the emission rate without add-on controls option for any coating operation in the affected source for which you do not use the emission rate with add-on controls option. To demonstrate initial compliance, the coating operation(s) for which you use the emission rate with add-on controls option must meet the applicable emission limitations in §§ 63.4490,

63.4492, and 63.4493. You must conduct a separate initial compliance demonstration for each general use coating, TPO coating, headlamp coating and assembled on-road vehicle coating affected source. You must meet all the requirements of this section. When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners and other additives, or cleaning materials used on coating operations for which you use the compliant material option or the emission rate without add-on controls option or coating operations in a different affected source in a different subcategory. You do not need to redetermine the mass of organic HAP in coatings, thinners and other additives, or cleaning materials that have been reclaimed onsite and reused in the coatings operation(s) for which you use the emission rate with add-on controls option.

(b) *Compliance with operating limits.* Except as provided in § 63.4560(a)(4), and except for solvent recovery systems for which you conduct liquid-liquid material balances according to the requirements of paragraph (j) of this section, you must establish and demonstrate continuous compliance during the initial compliance period with the operating limits required by § 63.4492, using the procedures specified in §§ 63.4567 and 63.4568.

(c) *Compliance with work practice requirements.* You must develop, implement, and document your implementation of the work practice plan required by § 63.4493 during the initial compliance period, as specified in § 63.4530.

(d) *Compliance with emission limits.* You must follow the procedures in paragraphs (e) through (n) of this section to demonstrate compliance with the applicable emission limit in § 63.4490 for each affected source in each subcategory.

(e) *Determine the mass fraction of organic HAP, density, volume used, and mass fraction of coating solids.* Follow the procedures specified in § 63.4551(a) through (d) to determine the mass fraction of organic HAP, density, and volume of each coating, thinner or other additive, and cleaning material used during each month; and the mass fraction of coating solids for each coating used during each month.

(f) *Calculate the total mass of organic HAP emissions before add-on controls.* Using Equation 1 of § 63.4551, calculate the total mass of organic HAP emissions before add-on controls from all coatings, thinners and other additives, and cleaning materials used during each month in the coating operation or group of coating operations for which you use the emission rate with add-on controls option.

(g) *Calculate the organic HAP emission reduction for each controlled coating operation.* Determine the mass of organic HAP emissions reduced for each controlled coating operation during each month. The emission reduction determination quantifies the total organic HAP emissions that pass through the emission capture system and are destroyed or removed by the add-on control device. Use the procedures in paragraph (h) of this section to calculate the mass of organic HAP emission reduction for each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances. For each controlled coating operation using a solvent recovery system for which you conduct a liquid-liquid material balance, use the procedures in paragraph (j) of this section to calculate the organic HAP emission reduction.

(h) *Calculate the organic HAP emission reduction for each controlled coating operation not using liquid-liquid material balance.* For each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances, calculate the organic HAP emission reduction, using Equation 1 of this section. The calculation applies the emission capture system efficiency and add-on control device efficiency to the mass of organic HAP contained in the coatings, thinners and other additives, and cleaning materials that are used in the coating operation served by the emission capture system and add-on control device during each month. For any period of time a deviation specified in § 63.4563(c) or (d) occurs in the controlled coating operation, including a deviation during a period of startup, shutdown, or malfunction, then you must assume zero efficiency for the emission capture system and add-on control device. Equation 1 of this section treats the materials used during such a deviation as if they were used on an uncontrolled coating operation for the time period of the deviation.

$$H_C = \left(A_C + B_C + C_C - H_{UNC}\right)\left(\frac{CE}{100} \times \frac{DRE}{100}\right) \qquad \text{(Eq. 1)}$$

Where:

H_C = mass of organic HAP emission reduction for the controlled coating operation during the month, lb.

A_C = total mass of organic HAP in the coatings used in the controlled coating operation during the month, lb, as calculated in Equation 1A of this section.

B_C = total mass of organic HAP in the thinners and other additives used in the controlled coating operation during the month, lb, as calculated in Equation 1B of this section.

C_C = total mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, lb, as calculated in Equation 1C of this section.

H_{UNC} = total mass of organic HAP in the coatings, thinners and other additives, and cleaning materials used during all deviations specified in § 63.4563(c) and (d) that occurred during the month in the controlled coating operation, lb, as calculated in Equation 1D of this section.

CE = capture efficiency of the emission capture system vented to the add-on control device, percent. Use the test methods and procedures specified in §§ 63.4564 and 63.4565 to measure and record capture efficiency.

DRE = organic HAP destruction or removal efficiency of the add-on control device, percent. Use the test methods and procedures in §§ 63.4564 and 63.4566 to measure and record the organic HAP destruction or removal efficiency.

(1) Calculate the mass of organic HAP in the coatings used in the controlled coating operation, lb, using Equation 1A of this section:

$$A_C = \sum_{i=1}^{m} \left(Vol_{c,i}\right)\left(D_{c,i}\right)\left(W_{c,i}\right) \qquad \text{(Eq. 1A)}$$

Where:

A_C = total mass of organic HAP in the coatings used in the controlled coating operation during the month, lb.

$Vol_{c,i}$ = total volume of coating, i, used during the month, gallons.

$D_{c,i}$ = density of coating, i, lb per gallon.

$W_{c,i}$ = mass fraction of organic HAP in coating, i, lb per lb.

m = number of different coatings used.

(2) Calculate the mass of organic HAP in the thinners and other additives used in the controlled coating operation, lb using Equation 1B of this section.

$$B_C = \sum_{j=1}^{n} \left(Vol_{t,j}\right)\left(D_{t,j}\right)\left(W_{t,j}\right) \qquad \text{(Eq. 1B)}$$

Where:

B_C = total mass of organic HAP in the thinners and other additives used in the controlled coating operation during the month, lb.

$Vol_{t,j}$ = total volume of thinner or other additive, j, used during the month, gallons.

$D_{t,j}$ = density of thinner or other additive, j, lb per gallon.

$W_{t,j}$ = mass fraction of organic HAP in thinner or other additive, j, lb per lb.

n = number of different thinners and other additives used.

(3) Calculate the mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, lb, using Equation 1C of this section.

$$C_C = \sum_{k=1}^{p} \left(Vol_{s,k}\right)\left(D_{s,k}\right)\left(W_{s,k}\right) \qquad \text{(Eq. 1C)}$$

Where:

C_C = total mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, lb.

$Vol_{s,k}$ = total volume of cleaning material, k, used during the month, gallons.

$D_{s,k}$ = density of cleaning material, k, lb per gallon.

$W_{s,k}$ = mass fraction of organic HAP in cleaning material, k, lb per lb.

p = number of different cleaning materials used.

(4) Calculate the mass of organic HAP in the coatings, thinners and other additives, and cleaning materials used in the controlled coating operation during deviations specified in § 63.4563(c) and (d), using Equation 1D of this section.

$$H_{UNC} = \sum_{h=1}^{q} \left(Vol_h\right)\left(D_h\right)\left(W_h\right) \qquad \text{(Eq. 1D)}$$

Where:

H_{UNC} = total mass of organic HAP in the coatings, thinners and other additives, and cleaning materials used during all deviations specified in § 63.4563(c) and (d) that occurred during the month in the controlled coating operation, lb.

Vol_h = total volume of coating, thinner or other additive, or cleaning material, h, used in the controlled coating operation during deviations, gallons.

D_h = density of coating, thinner or other additive, or cleaning material, h, lb per gallon.

W_h = mass fraction of organic HAP in coating, thinner or other additive, or cleaning material, h, lb organic HAP per lb coating.

q = number of different coatings, thinners and other additives, and cleaning materials used.

(i) [Reserved]

(j) *Calculate the organic HAP emission reduction for each controlled coating operation using liquid-liquid material balances.* For each controlled coating operation using a solvent recovery system for which you conduct liquid-liquid material balances, calculate the organic HAP emission reduction by applying the volatile organic matter collection and recovery efficiency to the mass of organic HAP contained in the coatings, thinners and other additives, and cleaning materials that are used in the coating operation controlled by the solvent recovery system during each month. Perform a liquid-liquid material balance for each month as specified in paragraphs (j)(1) through (6) of this section. Calculate the mass of organic HAP emission reduction by the solvent recovery system as specified in paragraph (j)(7) of this section.

(1) For each solvent recovery system, install, calibrate, maintain, and operate according to the manufacturer's specifications, a device that indicates the cumulative amount of volatile organic matter recovered by the solvent recovery system each month. The device must be initially certified by the manufacturer to be accurate to within ± 2.0 percent of the mass of volatile organic matter recovered.

(2) For each solvent recovery system, determine the mass of volatile organic matter recovered for the month, based on measurement with the device required in paragraph (j)(1) of this section.

(3) Determine the mass fraction of volatile organic matter for each coating, thinner or other additive, and cleaning material used in the coating operation

controlled by the solvent recovery system during the month, lb volatile organic matter per lb coating. You may determine the volatile organic matter mass fraction using Method 24 of 40 CFR part 60, appendix A, or an EPA approved alternative method, or you may use information provided by the manufacturer or supplier of the coating. In the event of any inconsistency between information provided by the manufacturer or supplier and the results of Method 24 of 40 CFR part 60, appendix A, or an approved alternative method, the test method results will govern.

(4) Determine the density of each coating, thinner or other additive, and cleaning material used in the coating operation controlled by the solvent recovery system during the month, lb per gallon, according to § 63.4551(c).

(5) Measure the volume of each coating, thinner or other additive, and cleaning material used in the coating operation controlled by the solvent recovery system during the month, gallons.

(6) Each month, calculate the solvent recovery system's volatile organic matter collection and recovery efficiency, using Equation 2 of this section:

$$R_v = 100 \frac{M_{VR}}{\sum_{i=1}^{m} Vol_i D_i WV_{c,i} + \sum_{j=1}^{n} Vol_j D_j WV_{t,j} + \sum_{k=1}^{p} Vol_k D_k WV_{s,k}} \qquad \text{(Eq. 2)}$$

Where:

R_V = volatile organic matter collection and recovery efficiency of the solvent recovery system during the month, percent.

M_{VR} = mass of volatile organic matter recovered by the solvent recovery system during the month, lb.

Vol_i = volume of coating, i, used in the coating operation controlled by the solvent recovery system during the month, gallons.

D_i = density of coating, i, lb per gallon.

$WV_{c,i}$ = mass fraction of volatile organic matter for coating, i, lb volatile organic matter per lb coating.

Vol_j = volume of thinner or other additive, j, used in the coating operation controlled by the solvent recovery system during the month, gallons.

D_j = density of thinner or other additive, j, lb per gallon.

$WV_{t,j}$ = mass fraction of volatile organic matter for thinner or other additive, j, lb volatile organic matter per lb thinner or other additive.

Vol_k = volume of cleaning material, k, used in the coating operation controlled by the solvent recovery system during the month, gallons.

D_k = density of cleaning material, k, lb per gallon.

$WV_{s,k}$ = mass fraction of volatile organic matter for cleaning material, k, lb volatile organic matter per lb cleaning material.

m = number of different coatings used in the coating operation controlled by the solvent recovery system during the month.

n = number of different thinners and other additives used in the coating operation controlled by the solvent recovery system during the month.

p = number of different cleaning materials used in the coating operation controlled by the solvent recovery system during the month.

(7) Calculate the mass of organic HAP emission reduction for the coating operation controlled by the solvent recovery system during the month, using Equation 3 of this section and according to paragraphs (j)(7)(i) through (iii) of this section:

$$H_{CSR} = \left(A_{CSR} + B_{CSR} + C_{CSR}\right)\left(\frac{R_V}{100}\right) \qquad \text{(Eq. 3)}$$

Where:

H_{CSR} = mass of organic HAP emission reduction for the coating operation controlled by the solvent recovery system using a liquid-liquid material balance during the month, lb.

A_{CSR} = total mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system, lb, calculated using Equation 3A of this section.

B_{CSR} = total mass of organic HAP in the thinners and other additives used in the coating operation controlled by the solvent recovery system, lb, calculated using Equation 3B of this section.

C_{CSR} = total mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system, lb, calculated using Equation 3C of this section.

R_V = volatile organic matter collection and recovery efficiency of the solvent recovery system, percent, from Equation 2 of this section.

(i) Calculate the mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system, lb, using Equation 3A of this section:

$$A_{CSR} = \sum_{i=1}^{m} \left(Vol_{c,i}\right)\left(D_{c,i}\right)\left(W_{c,i}\right) \qquad \text{(Eq. 3A)}$$

Where:

A_{CSR} = total mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system during the month, lb.

$Vol_{c,i}$ = total volume of coating, i, used during the month in the coating operation controlled by the solvent recovery system, gallons.

$D_{c,i}$ = density of coating, i, lb per gallon.

$W_{c,i}$ = mass fraction of organic HAP in coating, i, lb organic HAP per lb coating.

m = number of different coatings used.

(ii) Calculate the mass of organic HAP in the thinners and other additives used in the coating operation controlled by the solvent recovery system, lb, using Equation 3B of this section:

$$B_{CSR} = \sum_{j=1}^{n} \left(Vol_{t,j}\right)\left(D_{t,j}\right)\left(W_{t,j}\right) \qquad \text{(Eq. 3B)}$$

Where:

B_{CSR} = total mass of organic HAP in the thinners and other additives used in the coating operation controlled by the solvent recovery system during the month, lb.

$Vol_{t,j}$ = total volume of thinner or other additive, j, used during the month in the coating operation controlled by the solvent recovery system, gallons.

$D_{t,j}$ = density of thinner or other additive, j, lb per gallon.

$W_{t,j}$ = mass fraction of organic HAP in thinner or other additive, j, lb organic HAP per lb thinner or other additive.

n = number of different thinners and other additives used.

(iii) Calculate the mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system during the month, lb, using Equation 3C of this section.

$$C_{CSR} = \sum_{k=1}^{p} \left(Vol_{s,k}\right)\left(D_{s,k}\right)\left(W_{s,k}\right) \qquad \text{(Eq. 3C)}$$

Where:

C_{CSR} = total mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system during the month, lb.

$Vol_{s,k}$ = total volume of cleaning material, k, used during the month in the coating operation controlled by the solvent recovery system, gallons.

$D_{s,k}$ = density of cleaning material, k, lb per gallon.

$W_{s,k}$ = mass fraction of organic HAP in cleaning material, k, lb organic HAP per lb cleaning material.

p = number of different cleaning materials used.

(k) *Calculate the total mass of coating solids used.* Determine the total mass of coating solids used, pounds, which is the combined mass of coating solids for all the coatings used during each month in the coating operation or group of coating operations for which you use the emission rate with add-on controls option, using Equation 2 of § 63.4551.

(l) *Calculate the mass of organic HAP emissions for each month.* Determine the mass of organic HAP emissions, lb, during each month, using Equation 4 of this section:

$$H_{HAP} = H_e - \sum_{i=1}^{q}\left(H_{C,i}\right) - \sum_{j=1}^{r}\left(H_{CSR,j}\right) \qquad \text{(Eq. 4)}$$

Where:

H_{HAP} = total mass of organic HAP emissions for the month, lb.

H_e = total mass of organic HAP emissions before add-on controls from all the coatings, thinners and other additives, and cleaning materials used during the month, lb, determined according to paragraph (f) of this section.

$H_{C,i}$ = total mass of organic HAP emission reduction for controlled coating operation, i, not using a liquid-liquid material balance, during the month, lb, from Equation 1 of this section.

$H_{CSR,j}$ = total mass of organic HAP emission reduction for coating operation, j, controlled by a solvent recovery system using a liquid-liquid material balance, during the month, lb, from Equation 3 of this section.

q = Number of controlled coating operations not using a liquid-liquid material balance.

r = Number of coating operations controlled by a solvent recovery system using a liquid-liquid material balance.

(m) *Calculate the organic HAP emission rate for the 12-month compliance period.* Determine the organic HAP emission rate for the 12-month compliance period, kg (lb) of organic HAP emitted per kg (lb) coating solids used, using Equation 5 of this section:

$$H_{annual} = \frac{\sum_{y=1}^{12} H_{HAP,y}}{\sum_{y=1}^{12} M_{st,y}} \qquad \text{(Eq. 5)}$$

Where:

H_{annual} = organic HAP emission rate for the 12-month compliance period, kg of organic HAP emitted per kg coating solids used (lb organic HAP emitted per lb coating solids used).

$H_{HAP,y}$ = organic HAP emission rate for month, y, determined according to Equation 4 of this section.

$M_{st,y}$ = total mass of coating solids used during month, y, lb, from Equation 2 of § 63.4551.

y = identifier for months.

(n) *Compliance demonstration.* To demonstrate initial compliance with the emission limit, calculated using Equation 5 of this section, must be less than or equal to the applicable emission limit for each subcategory in § 63.4490. You must keep all records as required by §§ 63.4530 and 63.4531. As part of the Notification of Compliance Status required by § 63.4510, you must identify the coating operation(s) for which you used the emission rate with add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission

limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in § 63.4490, and you achieved the operating limits required by § 63.4492 and the work practice standards required by § 63.4493.

§ 63.4562 [Reserved.]

§ 63.4563 How do I demonstrate continuous compliance with the emission limitations?

(a) To demonstrate continuous compliance with the applicable emission limit in § 63.4490, the organic HAP emission rate for each compliance period, determined according to the procedures in § 63.4561, must be equal to or less than the applicable emission limit in § 63.4490 for that subcategory. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in § 63.4560 is the end of a compliance period consisting of that month and the preceding 11 months. You must perform the calculations in § 63.4561 on a monthly basis using data from the previous 12 months of operation.

(b) If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in § 63.4490, this is a deviation from the emission limitation for that compliance period and must be reported as specified in §§ 63.4510(b)(6) and 63.4520(a)(7).

(c) You must demonstrate continuous compliance with each operating limit required by § 63.4492 that applies to you, as specified in Table 1 of this subpart.

(1) If an operating parameter is out of the allowed range specified in Table 1 of this subpart, this is a deviation from the operating limit that must be reported as specified in §§ 63.4510(b)(6) and 63.4520(a)(7).

(2) If an operating parameter deviates from the operating limit specified in Table 1 of this subpart, then you must assume that the emission capture system and add-on control device were achieving zero efficiency during the time period of the deviation. For the purposes of completing the compliance calculations specified in §§ 63.4561(h), you must treat the materials used during a deviation on a controlled coating operation as if they were used on an uncontrolled coating operation for the time period of the deviation as indicated in Equation 1 of § 63.4561.

(d) You must meet the requirements for bypass lines in § 63.4568(b) for controlled coating operations for which you do not conduct liquid-liquid material balances. If any bypass line is opened and emissions are diverted to the atmosphere when the coating operation is running, this is a deviation that must be reported as specified in §§ 63.4510(b)(6) and 63.4520(a)(7). For the purposes of completing the compliance calculations specified in §§ 63.4561(h), you must treat the materials used during a deviation on a controlled coating operation as if they were used on an uncontrolled coating operation for the time period of the deviation as indicated in Equation 1 of § 63.4561.

(e) You must demonstrate continuous compliance with the work practice standards in § 63.4493. If you did not develop a work practice plan, or you did not implement the plan, or you did not keep the records required by § 63.4530(k)(8), this is a deviation from the work practice standards that must be reported as specified in §§ 63.4510(c)(6) and 63.4520(a)(7).

(f) As part of each semiannual compliance report required in § 63.4520, you must identify the coating operation(s) for which you used the emission rate with add-on controls option. If there were no deviations from the emission limitations, submit a statement that you were in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in § 63.4490, and you achieved the operating limits required by § 63.4492 and the work practice standards required by § 63.4493 during each compliance period.

(g) During periods of startup, shutdown, or malfunction of the emission capture system, add-on control device, or coating operation that may affect emission capture or control device efficiency, you must operate in accordance with the startup, shutdown, and malfunction plan required by § 63.4500(c).

(h) Consistent with §§ 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction of the emission capture system, add-on control device, or coating operation that may affect emission capture or control device efficiency are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with the startup, shutdown, and malfunction plan. The Administrator will determine whether deviations that occur during a period you identify as a startup, shutdown, or malfunction are violations, according to the provisions in § 63.6(e).

(i) [Reserved]

(j) You must maintain records as specified in §§ 63.4530 and 63.4531.

§ 63.4564 What are the general requirements for performance tests?

(a) You must conduct each performance test required by § 63.4560 according to the requirements in § 63.7(e)(1) and under the conditions in this section, unless you obtain a waiver of the performance test according to the provisions in § 63.7(h).

(1) *Representative coating operation operating conditions.* You must conduct the performance test under representative operating conditions for the coating operation. Operations during periods of startup, shutdown, or malfunction and during periods of nonoperation do not constitute representative conditions. You must record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation.

(2) *Representative emission capture system and add-on control device operating conditions.* You must conduct the performance test when the emission capture system and add-on control device are operating at a representative flow rate, and the add-on control device is operating at a representative inlet concentration. You must record information that is necessary to document emission capture system and add-on control device operating conditions during the test and explain why the conditions represent normal operation.

(b) You must conduct each performance test of an emission capture system according to the requirements in § 63.4565. You must conduct each performance test of an add-on control device according to the requirements in § 63.4566.

§ 63.4565 How do I determine the emission capture system efficiency?

You must use the procedures and test methods in this section to determine capture efficiency as part of the performance test required by § 63.4560.

(a) *Assuming 100 percent capture efficiency.* You may assume the capture system efficiency is 100 percent if both of the conditions in paragraphs (a)(1) and (2) of this section are met:

(1) The capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and directs all the exhaust gases from the enclosure to an add-on control device.

(2) All coatings, thinners and other additives, and cleaning materials used in the coating operation are applied within the capture system; coating

solvent flash-off, curing, and drying occurs within the capture system; and the removal or evaporation of cleaning materials from the surfaces they are applied to occurs within the capture system. For example, this criterion is not met if parts enter the open shop environment when being moved between a spray booth and a curing oven.

(b) *Measuring capture efficiency.* If the capture system does not meet both of the criteria in paragraphs (a)(1) and (2) of this section, then you must use one of the three protocols described in paragraphs (c), (d), and (e) of this section to measure capture efficiency. The capture efficiency measurements use TVH capture efficiency as a surrogate for organic HAP capture efficiency. For the protocols in paragraphs (c) and (d) of this section, the capture efficiency measurement must consist of three test runs. Each test run must be at least 3 hours duration or the length of a production run, whichever is longer, up to 8 hours. For the purposes of this test, a production run means the time required for a single part to go from the beginning to the end of the production, which includes surface preparation activities and drying and curing time.

(c) *Liquid-to-uncaptured-gas protocol using a temporary total enclosure or building enclosure.* The liquid-to-uncaptured-gas protocol compares the mass of liquid TVH in materials used in the coating operation to the mass of TVH emissions not captured by the emission capture system. Use a temporary total enclosure or a building enclosure and the procedures in paragraphs (c)(1) through (6) of this section to measure emission capture system efficiency using the liquid-to-uncaptured-gas protocol.

(1) Either use a building enclosure or construct an enclosure around the coating operation where coatings, thinners and other additives, and cleaning materials are applied, and all areas where emissions from these applied coatings and materials subsequently occur, such as flash-off, curing, and drying areas. The areas of the coating operation where capture devices collect emissions for routing to an add-on control device, such as the entrance and exit areas of an oven or spray booth, must also be inside the enclosure. The enclosure must meet the applicable definition of a temporary total enclosure or building enclosure in Method 204 of appendix M to 40 CFR part 51.

(2) Use Method 204A or 204F of appendix M to 40 CFR part 51 to determine the mass fraction of TVH liquid input from each coating, thinner and other additive, and cleaning material used in the coating operation during each capture efficiency test run. To make the determination, substitute TVH for each occurrence of the term volatile organic compounds (VOC) in the methods.

(3) Use Equation 1 of this section to calculate the total mass of TVH liquid input from all the coatings, thinners and other additives, and cleaning materials used in the coating operation during each capture efficiency test run:

$$TVH_{used} = \sum_{i=1}^{n} (TVH_i)(Vol_i)(D_i) \qquad \text{(Eq. 1)}$$

Where:

TVH_{used} = Mass of liquid TVH in materials used in the coating operation during the capture efficiency test run, lb.

TVH_i = mass fraction of TVH in coating, thinner or other additive, or cleaning material, i, that is used in the coating operation during the capture efficiency test run, lb TVH per lb material.

Vol_i = total volume of coating, thinner or other additive, or cleaning material, i, used in the coating operation during the capture efficiency test run, gallons.

D_i = density of coating, thinner or other additive, or cleaning material, i, lb material per gallon material.

n = number of different coatings, thinners and other additives, and cleaning materials used in the coating operation during the capture efficiency test run.

(4) Use Method 204D or E of appendix M to 40 CFR part 51 to measure the total mass, lb, of TVH emissions that are not captured by the emission capture system; they are measured as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.

(i) Use Method 204D if the enclosure is a temporary total enclosure.

(ii) Use Method 204E if the enclosure is a building enclosure. During the capture efficiency measurement, all organic compound emitting operations inside the building enclosure, other than the coating operation for which capture efficiency is being determined, must be shut down, but all fans and blowers must be operating normally.

(5) For each capture efficiency test run, determine the percent capture efficiency of the emission capture system using Equation 2 of this section:

$$CE = \frac{(TVH_{used} - TVH_{uncaptured})}{TVH_{used}} \times 100 \qquad \text{(Eq. 2)}$$

Where:

CE = capture efficiency of the emission capture system vented to the add-on control device, percent.

TVH_{used} = total mass of TVH liquid input used in the coating operation during the capture efficiency test run, lb.

$TVH_{uncaptured}$ = total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, lb.

(6) Determine the capture efficiency of the emission capture system as the average of the capture efficiencies measured in the three test runs.

(d) *Gas-to-gas protocol using a temporary total enclosure or a building enclosure.* The gas-to-gas protocol compares the mass of TVH emissions captured by the emission capture system to the mass of TVH emissions not captured. Use a temporary total enclosure or a building enclosure and the procedures in paragraphs (d)(1) through (5) of this section to measure emission capture system efficiency using the gas-to-gas protocol.

(1) Either use a building enclosure or construct an enclosure around the coating operation where coatings, thinners and other additives, and cleaning materials are applied, and all areas where emissions from these applied coatings and materials subsequently occur, such as flash-off, curing, and drying areas. The areas of the coating operation where capture devices collect emissions generated by the coating operation for routing to an add-on control device, such as the entrance and exit areas of an oven or a spray booth, must also be inside the enclosure. The enclosure must meet the applicable definition of a temporary total enclosure or building enclosure in Method 204 of appendix M to 40 CFR part 51.

(2) Use Method 204B or 204C of appendix M to 40 CFR part 51 to measure the total mass, lb, of TVH emissions captured by the emission capture system during each capture efficiency test run as measured at the inlet to the add-on control device. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.

(i) The sampling points for the Method 204B or 204C measurement must be upstream from the add-on control device and must represent total emissions routed from the capture system and entering the add-on control device.

(ii) If multiple emission streams from the capture system enter the add-on control device without a single common duct, then the emissions entering the add-on control device must be simultaneously measured in each duct and the total emissions entering the add-on control device must be determined.

(3) Use Method 204D or 204E of appendix M to 40 CFR part 51 to measure the total mass, lb, of TVH emissions that are not captured by the emission capture system; they are measured as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.

(i) Use Method 204D if the enclosure is a temporary total enclosure.

(ii) Use Method 204E if the enclosure is a building enclosure. During the capture efficiency measurement, all organic compound emitting operations inside the building enclosure, other than the coating operation for which capture efficiency is being determined, must be shut down, but all fans and blowers must be operating normally.

(4) For each capture efficiency test run, determine the percent capture efficiency of the emission capture system using Equation 3 of this section:

$$CE = \frac{TVH_{captured}}{\left(TVH_{captured} + TVH_{uncaptured}\right)} \times 100 \qquad \text{(Eq. 3)}$$

Where:

CE = capture efficiency of the emission capture system vented to the add-on control device, percent.

$TVH_{captured}$ = total mass of TVH captured by the emission capture system as measured at the inlet to the add-on control device during the emission capture efficiency test run, lb.

$TVH_{uncaptured}$ = total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, lb.

(5) Determine the capture efficiency of the emission capture system as the average of the capture efficiencies measured in the three test runs.

(e) *Alternative capture efficiency protocol.* As an alternative to the procedures specified in paragraphs (c) and (d) of this section, you may determine capture efficiency using any other capture efficiency protocol and test methods that satisfy the criteria of either the DQO or LCL approach as described in appendix A to subpart KK of this part.

§ 63.4566 How do I determine the add-on control device emission destruction or removal efficiency?

You must use the procedures and test methods in this section to determine the add-on control device emission destruction or removal efficiency as part of the performance test required by § 63.4560. You must conduct three test runs as specified in § 63.7(e)(3) and each test run must last at least 1 hour.

(a) For all types of add-on control devices, use the test methods specified in paragraphs (a)(1) through (5) of this section.

(1) Use Method 1 or 1A of appendix A to 40 CFR part 60, as appropriate, to select sampling sites and velocity traverse points.

(2) Use Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A to 40 CFR part 60, as appropriate, to measure gas volumetric flow rate.

(3) Use Method 3, 3A, or 3B of appendix A to 40 CFR part 60, as appropriate, for gas analysis to determine dry molecular weight.

(4) Use Method 4 of appendix A to 40 CFR part 60, to determine stack gas moisture.

(5) Methods for determining gas volumetric flow rate, dry molecular weight, and stack gas moisture must be performed, as applicable, during each test run.

(b) Measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-on control device simultaneously, using either Method 25 or 25A of appendix A to 40 CFR part 60.

(1) Use Method 25 if the add-on control device is an oxidizer and you expect the total gaseous organic concentration as carbon to be more than 50 parts per million (ppm) at the control device outlet.

(2) Use Method 25A if the add-on control device is an oxidizer and you expect the total gaseous organic concentration as carbon to be 50 ppm or less at the control device outlet.

(3) Use Method 25A if the add-on control device is not an oxidizer.

(c) If two or more add-on control devices are used for the same emission stream, then you must measure emissions at the outlet to the atmosphere of each device. For example, if one add-on control device is a concentrator with an outlet to the atmosphere for the high-volume, dilute stream that has been treated by the concentrator, and a second add-on control device is an oxidizer with an outlet to the atmosphere for the low-volume, concentrated stream that is treated with the oxidizer, you must measure emissions at the outlet of the oxidizer and the high volume dilute stream outlet of the concentrator.

(d) For each test run, determine the total gaseous organic emissions mass flow rates for the inlet and the outlet of the add-on control device, using Equation 1 of this section. If there is more than one inlet or outlet to the add-on control device, you must calculate the total gaseous organic mass flow rate using Equation 1 of this section for each inlet and each outlet and then total all of the inlet emissions and total all of the outlet emissions:

$$M_f = Q_{sd}\, C_c\, (12)\, (0.0416)\, (10^{-6}) \qquad \text{(Eq. 1)}$$

Where:

M_f = total gaseous organic emissions mass flow rate, kg/per hour (h).

C_c = concentration of organic compounds as carbon in the vent gas, as determined by Method 25 or Method 25A, parts per million by volume (ppmv), dry basis.

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

0.0416 = conversion factor for molar volume, kg-moles per cubic meter (mol/m^3) (@ 293 Kelvin (K) and 760 millimeters of mercury (mmHg)).

(e) For each test run, determine the add-on control device organic emissions destruction or removal efficiency, using Equation 2 of this section:

$$DRE = \frac{M_{fi} - M_{fo}}{M_{fi}} \cdot 100 \qquad \text{(Eq. 2)}$$

Where:

DRE = organic emissions destruction or removal efficiency of the add-on control device, percent.

M_{fi} = total gaseous organic emissions mass flow rate at the inlet(s) to the add-on control device, using Equation 1 of this section, kg/h.

M_{fo} = total gaseous organic emissions mass flow rate at the outlet(s) of the add-on control device, using Equation 1 of this section, kg/h.

(f) Determine the emission destruction or removal efficiency of the add-on control device as the average of the efficiencies determined in the three test runs and calculated in Equation 2 of this section.

§ 63.4567 How do I establish the emission capture system and add-on control device operating limits during the performance test?

During the performance test required by § 63.4560 and described in §§ 63.4564, 63.4565, and 63.4566, you must establish the operating limits required by § 63.4492 according to this section, unless you have received approval for alternative monitoring and operating limits under § 63.8(f) as specified in § 63.4492.

(a) *Thermal oxidizers.* If your add-on control device is a thermal oxidizer, establish the operating limits according to paragraphs (a)(1) and (2) of this section.

(1) During the performance test, you must monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. You must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs.

(2) Use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. This average combustion temperature is the minimum operating limit for your thermal oxidizer.

(b) *Catalytic oxidizers.* If your add-on control device is a catalytic oxidizer, establish the operating limits according to either paragraphs (b)(1) and (2) or paragraphs (b)(3) and (4) of this section.

(1) During the performance test, you must monitor and record the temperature just before the catalyst bed and the temperature difference across the catalyst bed at least once every 15 minutes during each of the three test runs.

(2) Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed and the average temperature difference across the catalyst bed maintained during the performance test. These are the minimum operating limits for your catalytic oxidizer.

(3) As an alternative to monitoring the temperature difference across the catalyst bed, you may monitor the temperature at the inlet to the catalyst bed and implement a site-specific inspection and maintenance plan for your catalytic oxidizer as specified in paragraph (b)(4) of this section. During the performance test, you must monitor and record the temperature just before the catalyst bed at least once every 15 minutes during each of the three test runs. Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed during the performance test. This is the minimum operating limit for your catalytic oxidizer.

(4) You must develop and implement an inspection and maintenance plan for your catalytic oxidizer(s) for which you elect to monitor according to paragraph (b)(3) of this section. The plan must address, at a minimum, the elements specified in paragraphs (b)(4)(i) through (iii) of this section.

(i) Annual sampling and analysis of the catalyst activity (i.e, conversion efficiency) following the manufacturer's or catalyst supplier's recommended procedures.

(ii) Monthly inspection of the oxidizer system, including the burner assembly and fuel supply lines for problems and, as necessary, adjust the equipment to assure proper air-to-fuel mixtures.

(iii) Annual internal and monthly external visual inspection of the catalyst bed to check for channeling, abrasion, and settling. If problems are found, you must take corrective action consistent with the manufacturer's recommendations and conduct a new performance test to determine destruction efficiency according to § 63.4566.

(c) *Carbon adsorbers.* If your add-on control device is a carbon adsorber, establish the operating limits according to paragraphs (c)(1) and (2) of this section.

(1) You must monitor and record the total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for each regeneration cycle, and the carbon bed temperature after each carbon bed regeneration and cooling cycle for the regeneration cycle either immediately preceding or immediately following the performance test.

(2) The operating limits for your carbon adsorber are the minimum total desorbing gas mass flow recorded during the regeneration cycle and the maximum carbon bed temperature recorded after the cooling cycle.

(d) *Condensers.* If your add-on control device is a condenser, establish the operating limits according to paragraphs (d)(1) and (2) of this section.

(1) During the performance test, you must monitor and record the condenser outlet (product side) gas temperature at least once every 15 minutes during each of the three test runs.

(2) Use the data collected during the performance test to calculate and record the average condenser outlet (product side) gas temperature maintained during the performance test. This average condenser outlet gas temperature is the maximum operating limit for your condenser.

(e) *Concentrator.* If your add-on control device includes a concentrator, you must establish operating limits for the concentrator according to

paragraphs (e)(1) through (4) of this section.

(1) During the performance test, you must monitor and record the desorption concentrate stream gas temperature at least once every 15 minutes during each of the three runs of the performance test.

(2) Use the data collected during the performance test to calculate and record the average temperature. This is the minimum operating limit for the desorption concentrate gas stream temperature.

(3) During the performance test, you must monitor and record the pressure drop of the dilute stream across the concentrator at least once every 15 minutes during each of the three runs of the performance test.

(4) Use the data collected during the performance test to calculate and record the average pressure drop. This is the maximum operating limit for the dilute stream across the concentrator.

(f) *Emission capture system.* For each capture device that is not part of a PTE that meets the criteria of § 63.4565(a), establish an operating limit for either the gas volumetric flow rate or duct static pressure, as specified in paragraphs (f)(1) and (2) of this section. The operating limit for a PTE is specified in Table 1 of this subpart.

(1) During the capture efficiency determination required by § 63.4560 and described in §§ 63.4564 and 63.4565, you must monitor and record either the gas volumetric flow rate or the duct static pressure for each separate capture device in your emission capture system at least once every 15 minutes during each of the three test runs at a point in the duct between the capture device and the add-on control device inlet.

(2) Calculate and record the average gas volumetric flow rate or duct static pressure for the three test runs for each capture device. This average gas volumetric flow rate or duct static pressure is the minimum operating limit for that specific capture device.

§ 63.4568 What are the requirements for continuous parameter monitoring system installation, operation, and maintenance?

(a) *General.* You must install, operate, and maintain each CPMS specified in paragraphs (c), (e), (f), and (g) of this section according to paragraphs (a)(1) through (6) of this section. You must install, operate, and maintain each CPMS specified in paragraphs (b) and (d) of this section according to paragraphs (a)(3) through (5) of this section.

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four equally spaced successive cycles of CPMS operation in 1 hour.

(2) You must determine the average of all recorded readings for each successive 3-hour period of the emission capture system and add-on control device operation.

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

(4) You must maintain the CPMS at all times and have available necessary parts for routine repairs of the monitoring equipment.

(5) You must operate the CPMS and collect emission capture system and add-on control device parameter data at all times that a controlled coating operation is operating, except during monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, if applicable, calibration checks and required zero and span adjustments).

(6) You must not use emission capture system or add-on control device parameter data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities when calculating data averages. You must use all the data collected during all other periods in calculating the data averages for determining compliance with the emission capture system and add-on control device operating limits.

(7) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the CPMS to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations is a deviation from the monitoring requirements.

(b) *Capture system bypass line.* You must meet the requirements of paragraphs (b)(1) and (2) of this section for each emission capture system that contains bypass lines that could divert emissions away from the add-on control device to the atmosphere.

(1) You must monitor or secure the valve or closure mechanism controlling the bypass line in a nondiverting position in such a way that the valve or closure mechanism cannot be opened without creating a record that the valve was opened. The method used to monitor or secure the valve or closure mechanism must meet one of the requirements specified in paragraphs (b)(1)(i) through (iv) of this section.

(i) *Flow control position indicator.* Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that takes a reading at least once every 15 minutes and provides a record indicating whether the emissions are directed to the add-on control device or diverted from the add-on control device. The time of occurrence and flow control position must be recorded, as well as every time the flow direction is changed. The flow control position indicator must be installed at the entrance to any bypass line that could divert the emissions away from the add-on control device to the atmosphere.

(ii) *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. You must visually inspect the seal or closure mechanism at least once every month to ensure that the valve is maintained in the closed position, and the emissions are not diverted away from the add-on control device to the atmosphere.

(iii) *Valve closure monitoring.* Ensure that any bypass line valve is in the closed (nondiverting) position through monitoring of valve position at least once every 15 minutes. You must inspect the monitoring system at least once every month to verify that the monitor will indicate valve position.

(iv) *Automatic shutdown system.* Use an automatic shutdown system in which the coating operation is stopped when flow is diverted by the bypass line away from the add-on control device to the atmosphere when the coating operation is running. You must inspect the automatic shutdown system at least once every month to verify that it will detect diversions of flow and shut down the coating operation.

(2) If any bypass line is opened, you must include a description of why the bypass line was opened and the length of time it remained open in the semiannual compliance reports required in § 63.4520.

(c) *Thermal oxidizers and catalytic oxidizers.* If you are using a thermal oxidizer or catalytic oxidizer as an add-on control device (including those used with concentrators or with carbon adsorbers to treat desorbed concentrate streams), you must comply with the requirements in paragraphs (c)(1) through (3) of this section:

(1) For a thermal oxidizer, install a gas temperature monitor in the firebox of the thermal oxidizer or in the duct immediately downstream of the firebox before any substantial heat exchange occurs.

(2) For a catalytic oxidizer, install gas temperature monitors both upstream and downstream of the catalyst bed. The temperature monitors must be in the gas stream immediately before and after the

catalyst bed to measure the temperature difference across the bed.

(3) For all thermal oxidizers and catalytic oxidizers, you must meet the requirements in paragraphs (a) and (c)(3)(i) through (vii) of this section for each gas temperature monitoring device.

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

(ii) Use a temperature sensor with a measurement sensitivity of 4 degrees Fahrenheit 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 gas temperature chart recorder is used, it must have a measurement 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 30 degrees Fahrenheit of the process temperature sensor 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 components for integrity and electrical connections for continuity, oxidation, and galvanic corrosion.

(d) *Carbon adsorbers.* If you are using a carbon adsorber as an add-on control device, you must monitor the total regeneration desorbing gas (*e.g.*, steam or nitrogen) mass flow for each regeneration cycle, the carbon bed temperature after each regeneration and cooling cycle, and comply with paragraphs (a)(3) through (5) and (d)(1) and (2) of this section.

(1) The regeneration desorbing gas mass flow monitor must be an integrating device having a measurement sensitivity of plus or minus 10 percent capable of recording the total regeneration desorbing gas mass flow for each regeneration cycle.

(2) The carbon bed temperature monitor must have a measurement sensitivity of 1 percent of the temperature recorded or 1 degree Fahrenheit, whichever is greater, and must be capable of recording the temperature within 15 minutes of completing any carbon bed cooling cycle.

(e) *Condensers.* If you are using a condenser, you must monitor the condenser outlet (product side) gas temperature and comply with paragraphs (a) and (e)(1) and (2) of this section.

(1) The gas temperature monitor must have a measurement sensitivity of 1 percent of the temperature recorded or 1 degree Fahrenheit, whichever is greater.

(2) The temperature monitor must provide a gas temperature record at least once every 15 minutes.

(f) *Concentrator.* If you are using a concentrator, such as a zeolite wheel or rotary carbon bed concentrator, you must comply with the requirements in paragraphs (f)(1) and (2) of this section.

(1) You must install a temperature monitor in the desorption gas stream. The temperature monitor must meet the requirements in paragraphs (a) and (c)(3) of this section.

(2) You must install a device to monitor pressure drop across the zeolite wheel or rotary carbon bed. The pressure monitoring device must meet the requirements in paragraphs (a) and (f)(2)(i) through (vii) of this section.

(i) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure.

(ii) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(iii) Use a gauge with a minimum tolerance of 0.5 inch of water or a transducer with a minimum tolerance of 1 percent of the pressure range.

(iv) Check the pressure tap daily.

(v) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.

(vi) Conduct calibration checks anytime the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.

(vii) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(g) *Emission capture systems.* The capture system monitoring system must comply with the applicable requirements in paragraphs (g)(1) and (2) of this section.

(1) For each flow measurement device, you must meet the requirements in paragraphs (a) and (g)(1)(i) through (iv) of this section.

(i) Locate a flow sensor in a position that provides a representative flow measurement in the duct from each capture device in the emission capture system to the add-on control device.

(ii) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(iii) Conduct a flow sensor calibration check at least semiannually.

(iv) At least monthly, inspect components for integrity, electrical connections for continuity, and mechanical connections for leakage.

(2) For each pressure drop measurement device, you must comply with the requirements in paragraphs (a) and (g)(2)(i) through (vi) of this section.

(i) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure drop across each opening you are monitoring.

(ii) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(iii) Check pressure tap pluggage daily.

(iv) Using an inclined manometer with a measurement sensitivity of 0.0002 inch water, check gauge calibration quarterly and transducer calibration monthly.

(v) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.

(vi) At least monthly, inspect components for integrity, electrical connections for continuity, and mechanical connections for leakage.

Other Requirements and Information

§ 63.4580 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.

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

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

(1) Approval of alternatives to the work practice standards in § 63.4493 under § 63.6(g).

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

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

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

§ 63.4581 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in 40 CFR 63.2, the General Provisions of this part, and in this section as follows:

Additive means a material that is added to a coating after purchase from a supplier (*e.g.*, catalysts, activators, accelerators).

Add-on control means an air pollution control device, such as a thermal oxidizer or carbon adsorber, that reduces pollution in an air stream by destruction or removal before discharge to the atmosphere.

Adhesive, adhesive coating means any chemical substance that is applied for the purpose of bonding two surfaces together.

Assembled on-road vehicle coating means any coating operation in which coating is applied to the surface of some plastic component or plastic surface of a fully assembled motor vehicle or trailer intended for on-road use, including, but not limited to, plastic components or surfaces on: automobiles and light trucks that have been repaired after a collision or otherwise repainted, fleet delivery trucks, and motor homes and other recreational vehicles (including camping trailers and fifth wheels). Assembled on-road vehicle coating does not include the surface coating of plastic parts prior to their attachment to an on-road vehicle on an original equipment manufacturer's (OEM) assembly line. Assembled on-road vehicle coating also does not include the use of adhesives, sealants, and caulks used in assembling on-road vehicles.

Capture device means a hood, enclosure, room, floor sweep, or other means of containing or collecting emissions and directing those emissions into an add-on air pollution control device.

Capture efficiency or capture system efficiency means the portion (expressed as a percentage) of the pollutants from an emission source that is delivered to an add-on control device.

Capture system means one or more capture devices intended to collect emissions generated by a coating operation in the use of coatings or cleaning materials, both at the point of application and at subsequent points where emissions from the coatings and cleaning materials occur, such as flashoff, drying, or curing. As used in this subpart, multiple capture devices that collect emissions generated by a coating operation are considered a single capture system.

Cleaning material means a solvent used to remove contaminants and other materials, such as dirt, grease, oil, and dried or wet coating (*e.g.*, depainting), from a substrate before or after coating application or from equipment associated with a coating operation, such as spray booths, spray guns, racks, tanks, and hangers. Thus, it includes any cleaning material used on substrates or equipment or both.

Coating means a material applied to a substrate for decorative, protective, or functional purposes. Such materials include, but are not limited to, paints, sealants, liquid plastic coatings, caulks, inks, adhesives, and maskants. Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances are not considered coatings for the purposes of this subpart.

Coating operation means equipment used to apply cleaning materials to a substrate to prepare it for coating application (surface preparation) or to remove dried coating; to apply coating to a substrate (coating application) and to dry or cure the coating after application; or to clean coating operation equipment (equipment cleaning). A single coating operation may include any combination of these types of equipment, but always includes at least the point at which a coating or cleaning material is applied and all subsequent points in the affected source where organic HAP emissions from that coating or cleaning material occur. There may be multiple coating operations in an affected source. Coating application with handheld, nonrefillable aerosol containers, touch-up markers, or marking pens is not a coating operation for the purposes of this subpart.

Coatings solids means the nonvolatile portion of the coating that makes up the dry film.

Continuous parameter monitoring system (CPMS) means the total equipment that may be required to meet the data acquisition and availability requirements of this subpart, used to sample, condition (if applicable), analyze, and provide a record of coating operation, or capture system, or add-on control device parameters.

Controlled coating operation means a coating operation from which some or all of the organic HAP emissions are routed through an emission capture system and add-on control device.

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 limit or 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 limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Emission limitation means an emission limit, operating limit, or work practice standard.

Enclosure means a structure that surrounds a source of emissions and captures and directs the emissions to an add-on control device.

Exempt compound means a specific compound that is not considered a VOC due to negligible photochemical reactivity. The exempt compounds are listed in 40 CFR 51.100(s).

Facility maintenance means the routine repair or renovation (including the surface coating) of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity.

General-use coating means any coating operation that is not a headlamp, TPO, or assembled on-road vehicle coating operation.

Headlamp coating means any coating operation in which coating is applied to the surface of some component of the body of an automotive headlamp, including the application of reflective argent coatings and clear topcoats. Headlamp coating does not include any coating operation performed on an assembled on-road vehicle.

Hobby shop means any surface coating operation, located at an affected source, that is used exclusively for personal, noncommercial purposes by the affected source's employees or assigned personnel.

Liquid plastic coating means a coating made from fine, particle-size polyvinyl chloride (PVC) in solution (also referred to as plastisol).

Manufacturer's formulation data means data on a material (such as a

coating) that are supplied by the material manufacturer based on knowledge of the ingredients used to manufacture that material, rather than based on testing of the material with the test methods specified in § 63.4541. Manufacturer's formulation data may include, but are not limited to, information on density, organic HAP content, volatile organic matter content, and coating solids content.

Mass fraction of coating solids means the ratio of the mass of solids (also known as the mass of nonvolatiles) to the mass of a coating in which it is contained; lb of coating solids per lb of coating.

Mass fraction of organic HAP means the ratio of the mass of organic HAP to the mass of a material in which it is contained, expressed as lb of organic HAP per lb of material.

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.

Organic HAP content means the mass of organic HAP per mass of coating solids for a coating calculated using Equation 1 of § 63.4541. The organic HAP content is determined for the coating in the condition it is in when received from its manufacturer or supplier and does not account for any alteration after receipt.

Permanent total enclosure (PTE) means a permanently installed enclosure that meets the criteria of Method 204 of appendix M, 40 CFR part 51 for a PTE and that directs all the exhaust gases from the enclosure to an add-on control device.

Personal Watercraft means a vessel (boat) which uses an inboard motor powering a water jet pump as its primary source of motive power and which is designed to be operated by a person or persons sitting, standing, or kneeling on the vessel, rather than in the conventional manner of sitting or standing inside the vessel.

Plastic part and product means any piece or combination of pieces of which at least one has been formed from one or more resins. Such pieces may be solid, porous, flexible or rigid.

Protective oil means an organic material that is applied to metal for the purpose of providing lubrication or protection from corrosion without forming a solid film. This definition of protective oil includes, but is not limited to, lubricating oils, evaporative oils (including those that evaporate completely), and extrusion oils.

Research or laboratory facility means a facility whose primary purpose is for research and development of new processes and products, that is conducted under the close supervision of technically trained personnel, and is not engaged in the manufacture of final or intermediate products for commercial purposes, except in a *de minimis* manner.

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

Startup, initial means the first time equipment is brought online in a facility.

Surface preparation means use of a cleaning material on a portion of or all of a substrate. This includes use of a cleaning material to remove dried coating, which is sometimes called ''depainting.''

Temporary total enclosure means an enclosure constructed for the purpose of measuring the capture efficiency of pollutants emitted from a given source as defined in Method 204 of appendix M, 40 CFR part 51.

Thermoplastic olefin (TPO) coating means any coating operation in which the coatings are components of a system of coatings applied to a TPO substrate, including adhesion promoters, primers, color coatings, clear coatings and topcoats. Thermoplastic olefin coating does not include the coating of TPO substrates on assembled on-road vehicles.

Thinner means an organic solvent that is added to a coating after the coating is received from the supplier.

Total volatile hydrocarbon (TVH) means the total amount of nonaqueous volatile organic matter determined according to Methods 204 and 204A through 204F of appendix M to 40 CFR part 51 and substituting the term TVH each place in the methods where the term VOC is used. The TVH includes both VOC and non-VOC.

Uncontrolled coating operation means a coating operation from which none of the organic HAP emissions are routed through an emission capture system and add-on control device.

Volatile organic compound (VOC) means any compound defined as VOC in 40 CFR 51.100(s).

Wastewater means water that is generated in a coating operation and is collected, stored, or treated prior to being discarded or discharged.

If you are required to comply with operating limits by § 63.4491(c), you must comply with the applicable operating limits in the following table:

TABLE 1.—TO SUBPART PPPP OF PART 63—OPERATING LIMITS IF USING THE EMISSION RATE WITH ADD-ON CONTROLS OPTION

For the following device	you must meet the following operating limit . . .	and you must demonstrate continuous compliance with the operating limit by . . .
1. thermal oxidizer	a. the average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to § 63.4567(a).	i. collecting the combustion temperature data according to § 63.4568(c); ii. reducing the data to 3-hour block averages; and iii. maintaining the 3-hour average combustion temperature at or above the temperature limit.
2. catalytic oxidizer	a. the average temperature measured just before the catalyst bed in any 3-hour period must not fall below the limit established according to § 63.4567(b); and either.	i. collecting the temperature data according to § 63.4568(c); ii. reducing the data to 3-hour block averages; and iii. maintaining the 3-hour average temperature before the catalyst bed at or above the temperature limit.
	b. ensure that the average temperature difference across the catalyst bed in any 3-hour period does not fall below the temperature difference limit established according to § 63.4567(b)(2); or	i. collecting the temperature data according to § 63.4568(c), reducing the data to 3-hour block averages, and maintaining the 3-hour average temperature difference at or above the temperature difference limit; or

TABLE 1.—TO SUBPART PPPP OF PART 63—OPERATING LIMITS IF USING THE EMISSION RATE WITH ADD-ON CONTROLS OPTION—Continued

For the following device	you must meet the following operating limit . . .	and you must demonstrate continuous compliance with the operating limit by . . .
	c. develop and implement an inspection and maintenance plan according to § 63.4567(b)(4).	i. maintaining an up-to-date inspection and maintenance plan, records of annual catalyst activity checks, records of monthly inspections of the oxidizer system, and records of the annual internal inspections of the catalyst bed. If a problem is discovered during a monthly or annual inspection required by § 63.4567(b)(4), you must take corrective action as soon as practicable consistent with the manufacturer's recommendations.
3. carbon adsorber	a. the total regeneration desorbing gas (*e.g.*, steam or nitrogen) mass flow for each carbon bed regeneration cycle must not fall below the total regeneration desorbing gas mass flow limit established according to § 63.4567(c).	i. measuring the total regeneration desorbing gas (*e.g.*, steam or nitrogen) mass flow for each regeneration cycle according to § 63.4568(d); and ii. maintaining the total regeneration desorbing gas mass flow at or above the mass flow limit.
	b. the temperature of the carbon bed, after completing each regeneration and any cooling cycle, must not exceed the carbon bed temperature limit established according to § 63.4567(c).	i. measuring the temperature of the carbon bed after completing each regeneration and any cooling cycle according to § 63.4568(d); and ii. operating the carbon beds such that each carbon bed is not returned to service until completing each regeneration and any cooling cycle until the recorded temperature of the carbon bed is at or below the temperature limit.
4. condenser	a. the average condenser outlet (product side) gas temperature in any 3-hour period must not exceed the temperature limit established according to § 63.4567(d).	i. collecting the condenser outlet (product side) gas temperature according to § 63.4568(e); ii. reducing the data to 3-hour block averages; and iii. maintaining the 3-hour average gas temperature at the outlet at or below the temperature limit.
5. concentrators, including zeolite wheels and rotary carbon adsorbers.	a. the average gas temperature of the desorption concentrate stream in any 3-hour period must not fall below the limit established according to § 63.4567(e).	i. collecting the temperature data according to 63.4568(f); ii. reducing the data to 3-hour block averages; and iii. maintaining the 3-hour average temperature at or above the temperature limit.
	b. the average pressure drop of the dilute stream across the concentrator in any 3-hour period must not fall below the limit established according to § 63.4567(e).	i. collecting the pressure drop data according to 63.4568(f); and ii. reducing the pressure drop data to 3-hour block averages; and iii. maintaining the 3-hour average pressure drop at or above the pressure drop limit.
6. emission capture system that is a PTE according to § 63.4565(a).	a. the direction of the air flow at all times must be into the enclosure; and either b. the average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or. c. the pressure drop across the enclosure must be at least 0.007 inch H_2O, as established in Method 204 of appendix M to 40 CFR part 51.	i. collecting the direction of air flow, and either the facial velocity of air through all natural draft openings according to § 63.4568(g)(1) or the pressure drop across the enclosure according to § 63.4568(g)(2); and ii. maintaining the facial velocity of air flow through all natural draft or the pressure drop openings at or above the facial velocity limit or pressure drop limit, and maintaining the direction of air flow into the enclosure at all times.
7. emission capture system that is not a PTE according to § 63.4565(a).	a. the average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according to § 63.4567(f).	i. collecting the gas volumetric flow rate or duct static pressure for each capture device according to § 63.4568(g); ii. reducing the data to 3-hour block averages; and iii. maintaining the 3-hour average gas volumetric flow rate or duct static pressure for each capture device at or above the gas volumetric flow rate or duct static pressure limit.

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

TABLE 2 TO SUBPART PPPP OF PART 63.— APPLICABILITY OF GENERAL PROVISIONS TO SUBPART PPPP OF PART 63

Citation	Subject	Applicable to subpart PPPP	Explanation
§ 63.1(a)(1)–(14)	General Applicability	Yes.	
§ 63.1(b)(1)–(3)	Initial Applicability Determination	Yes	Applicability to subpart PPPP is also specified in § 63.4481.
§ 63.1(c)(1)	Applicability After Standard Established	Yes.	
§ 63.1(c)(2)–(3)	Applicability of Permit Program for Area Sources.	No	Area sources are not subject to subpart PPPP.
§ 63.1(c)(4)–(5)	Extensions and Notifications	Yes.	
§ 63.1(e)	Applicability of Permit Program Before Relevant Standard is Set.	Yes.	
§ 63.2	Definitions	Yes	Additional definitions are specified in § 63.4581.
§ 63.3(a)–(c)	Units and Abbreviations	Yes.	
§ 63.4(a)(1)–(5)	Prohibited Activities	Yes.	
§ 63.4(b)–(c)	Circumvention/Severability	Yes.	
§ 63.5(a)	Construction/Reconstruction	Yes.	
§ 63.5(b)(1)–(6)	Requirements for Existing, Newly Constructed, and Reconstructed Sources.	Yes.	
§ 63.5(d)	Application for Approval of Construction/Reconstruction.	Yes.	
§ 63.5(e)	Approval of Construction/Reconstruction	Yes.	
§ 63.5(f)	Approval of Construction/Reconstruction Based on Prior State Review.	Yes.	
§ 63.6(a)	Compliance With Standards and Maintenance Requirements—Applicability.	Yes.	
§ 63.6(b)(1)–(7)	Compliance Dates for New and Reconstructed Sources.	Yes	§ 63.4483 specifies the compliance dates.
§ 63.6(c)(1)–(5)	Compliance Dates for Existing Sources	Yes	§ 63.4483 specifies the compliance dates.
§ 63.6(e)(1)–(2)	Operation and Maintenance	Yes.	
§ 63.6(e)(3)	Startup, Shutdown, and Malfunction Plan.	Yes	Only sources using an add-on control device to comply with the standard must complete startup, shutdown, and malfunction plans.
§ 63.6(f)(1)	Compliance Except During Startup, Shutdown, and Malfunction.	Yes	Applies only to sources using an add-on control device to comply with the standard.
§ 63.6(f)(2)–(3)	Methods for Determining Compliance	Yes.	
§ 63.6(g)(1)–(3)	Use of an Alternative Standard	Yes.	
§ 63.6(h)	Compliance With Opacity/Visible Emission Standards.	No	Subpart PPPP does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).
§ 63.6(i)(1)–(16)	Extension of Compliance	Yes.	
§ 63.6(j)	Presidential Compliance Exemption	Yes.	
§ 63.7(a)(1)	Performance Test Requirements—Applicability.	Yes	Applies to all affected sources. Additional requirements for performance testing are specified in §§ 63.4564, 63.4565, and 63.4566.
§ 63.7(a)(2)	Performance Test Requirements—Dates	Yes	Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standard. Section 63.4560 specifies the schedule for performance test requirements that are earlier than those specified in § 63.7(a)(2).
§ 63.7(a)(3)	Performance Tests Required By the Administrator.	Yes.	
§ 63.7(b)–(e)	Performance Test Requirements—Notification, Quality Assurance, Facilities Necessary for Safe Testing, Conditions During Test.	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.
§ 63.7(f)	Performance Test Requirements—Use of Alternative Test Method.	Yes	Applies to all test methods except those used to determine capture system efficiency.

TABLE 2 TO SUBPART PPPP OF PART 63.— APPLICABILITY OF GENERAL PROVISIONS TO SUBPART PPPP OF PART 63—Continued

Citation	Subject	Applicable to subpart PPPP	Explanation
§ 63.7(g)–(h)	Performance Test Requirements—Data Analysis, Recordkeeping, Reporting, Waiver of Test.	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.
§ 63.8(a)(1)–(3)	Monitoring Requirements—Applicability	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for monitoring are specified in § 63.4568.
§ 63.8(a)(4)	Additional Monitoring Requirements	No	Subpart PPPP does not have monitoring requirements for flares.
§ 63.8(b)	Conduct of Monitoring	Yes.	
§ 63.8(c)(1)–(3)	Continuous Monitoring Sysem (CMS) Operation and Maintenance.	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for CMS operations and maintenance are specified in § 63.4568.
§ 63.8(c)(4)	CMS	No	§ 63.4568 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(5)	COMS	No	Subpart PPPP does not have opacity or visible emission standards.
§ 63.8(c)(6)	CMS Requirements	No	§ 63.4568 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(7)	CMS Out-of-Control Periods	Yes.	
§ 63.8(c)(8)	CMS Out-of-Control Periods and Reporting.	No	§ 63.4520 requires reporting of CMS out of control periods.
§ 63.8(d)–(e)	Quality Control Program and CMS Performance Evaluation.	No	Subpart PPPP does not require the use of continuous emissions monitoring systems.
§ 63.8(f)(1)–(5)	Use of an Alternative Monitoring Method	Yes.	
§ 63.8(f)(6)	Alternative to Relative Accuracy Test	No	Subpart PPPP does not require the use of continuous emissions monitoring systems.
§ 63.8(g)(1)–(5)	Data Reduction	No	§§ 63.4567 and 63.4568 specify monitoring data reduction.
§ 63.9(a)–(d)	Notification Requirements	Yes.	
§ 63.9(e)	Notification of Performance Test	Yes	Applies only to capture system and add-on control device performance tests at sources using these to comply with the standard.
§ 63.9(f)	Notification of Visible Emissions/Opacity Test.	No	Subpart PPPP does not have opacity or visible emission standards.
§ 63.9(g)(1)–(3)	Additional Notifications When Using CMS.	No	Subpart PPPP does not require the use of continuous emissions monitoring systems.
§ 63.9(h)	Notification of Compliance Status	Yes	§ 63.4510 specifies the dates for submitting the notification of compliance status.
§ 63.9(i)	Adjustment of Submittal Deadlines	Yes.	
§ 63.9(j)	Change in Previous Information	Yes.	
§ 63.10(a)	Recordkeeping/Reporting—Applicability and General Information.	Yes.	
§ 63.10(b)(1)	General Recordkeeping Requirements	Yes	Additional requirements are specified in §§ 63.4530 and 63.4531.

TABLE 2 TO SUBPART PPPP OF PART 63.— APPLICABILITY OF GENERAL PROVISIONS TO SUBPART PPPP OF PART 63—Continued

Citation	Subject	Applicable to subpart PPPP	Explanation
§ 63.10(b)(2)(i)–(v)	Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods and CMS.	Yes	Requirements for Startup, Shutdown, and Malfunction records only apply to add-on control devices used to comply with the standard.
§ 63.10(b)(2)(vi)–(xi)		Yes.	
§ 63.10(b)(2)(xii)	Records	Yes.	
§ 63.10(b)(2)(xiii)		No	Subpart PPPP does not require the use of continuous emissions monitoring systems.
§ 63.10(b)(2)(xiv)		Yes.	
§ 63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations.	Yes.	
§ 63.10(c)(1)–(6)	Additional Recordkeeping Requirements for Sources with CMS.	Yes.	
§ 63.10(c)(7)–(8)		No	The same records are required in § 63.4520(a)(7).
§ 63.10(c)(9)–(15)		Yes.	
§ 63.10(d)(1)	General Reporting Requirements	Yes	Additional requirements are specified in § 63.4520.
§ 63.10(d)(2)	Report of Performance Test Results	Yes	Additional requirements are specified in § 63.4520(b).
§ 63.10(d)(3)	Reporting Opacity or Visible Emissions Observations.	No	Subpart PPPP or does not require opacity or visible emissions observations.
§ 63.10(d)(4)	Progress Reports for Sources With Compliance Extensions.	Yes.	
§ 63.10(d)(5)	Startup, Shutdown, and Malfunction Reports.	Yes	Applies only to add-on control devices at sources using these to comply withthe standard.
§ 63.10(e)(1)–(2)	Additional CMS Reports	No	Subpart PPPP does not require the use of continuous emissions monitoring systems.
§ 63.10(e)(3)	Excess Emissinos/CMS Performance Reports.	No	§ 63.4520(b) specifies the contents of periodic compliance reports.
§ 63.10(e)(4)	COMS Data Reports	No	Subpart PPPP does not specify requirements for opacity or COMS.
§ 63.10(f)	Recordkeeping/Reporting Waiver	Yes.	
§ 63.11	Control Device Requirements/Flares	No	Subpart PPPP does not specify use of flares for compliance.
§ 63.12	State Authority and Delegations	Yes.	
§ 63.13	Addresses	Yes.	
§ 63.14	Incorporation by Reference	Yes.	
§ 63.15	Availability of Information/Confidentiality	Yes.	

You may use the mass fraction values in the following table for solvent blends for which you do not have test data or manufacturer's formulation data.

TABLE 3 TO SUBPART PPPP OF PART 63.—DEFAULT ORGANIC HAP MASS FRACTION FOR SOLVENTS AND SOLVENT BLENDS

Solvent/solvent blend	CAS No.	Average organic HAP mass fraction	Typical organic HAP, percent by mass
1. Toluene	108–88–3	1.0	Toluene
2. Xylene(s)	1330–20–7	1.0	Xylenes, ethylbenzene
3. Hexane	110–54–3	0.5	n-hexane
4. n-Hexane	110–54–3	1.0	n-hexane
5. Ethylbenzene	100–41–4	1.0	Ethylbenzene
6. Aliphatic 140		0	None
7. Aromatic 100		0.02	1% xylene, 1% cumene
8. Aromatic 150		0.09	Naphthalene
9. Aromatic naphtha	64742–95–6	0.02	1% xylene, 1% cumene
10. Aromatic solvent	64742–94–5	0.1	Naphthalene
11. Exempt mineral spirits	8032–32–4	0	None

TABLE 3 TO SUBPART PPPP OF PART 63.—DEFAULT ORGANIC HAP MASS FRACTION FOR SOLVENTS AND SOLVENT BLENDS—Continued

Solvent/solvent blend	CAS No.	Average organic HAP mass fraction	Typical organic HAP, percent by mass
12. Ligroines (VM & P)	8032–32–4	0	None
13. Lactol spirits	64742–89–6	0.15	Toluene
14. Low aromatic white spirit	64742–82–1	0	None
15. Mineral spirits	64742–88–7	0.01	Xylenes
16. Hydrotreated naphtha	64742–48–9	0	None
17. Hydrotreated light distillate	64742–47–8	0.001	Toluene
18. Stoddard solvent	8052–41–3	0.01	Xylenes
19. Super high-flash naphtha	64742–95–6	0.05	Xylenes
20. Varsol® solvent	8052–49–3	0.01	0.5% xylenes, 0.5% ethylbenzene
21. VM & P naphtha	64742–89–8	0.06	3% toluene, 3% xylene
22. Petroleum distillate mixture	68477–31–6	0.08	4% naphthalene, 4% biphenyl

You may use the mass fraction values in the following table for solvent blends for which you do not have test data or manufacturer's formulation data:

TABLE 4 TO SUBPART PPPP OF PART 63.—DEFAULT ORGANIC HAP MASS FRACTION FOR PETROLEUM SOLVENT GROUPS [a]

Solvent type	Average organic HAP mass fraction	Typical organic HAP percent by mass
Aliphatic [b]	0.03	1% Xylene, 1% Toluene, and 1% Ethylbenzene
Aromatic [c]	0.06	4% Xylene, 1% Toluene, and 1% Ethylbenzene

[a] Use this table only if the solvent blend does not match any of the solvent blends in Table 3 to this subpart and you only know whether the blend is aliphatic or aromatic.

[b] Mineral Spirits 135, Mineral Spirits 150 EC, Naphtha, Mixed Hydrocarbon, Aliphatic Hydrocarbon, Aliphatic Naphtha, Naphthol Spirits, Petroleum Spirits, Petroleum Oil, Petroleum Naphtha, Solvent Naphtha, Solvent Blend.

[c] Medium-flash Naphtha, High-flash Naphtha, Aromatic Naphtha, Light Aromatic Naphtha, Light Aromatic Hydrocarbons, Aromatic Hydrocarbons, Light Aromatic Solvent.

[FR Doc. 02–29073 Filed 12–3–02; 8:45 am]

BILLING CODE 6560–50–P