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National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 63, 264 and 265

[OAR–2002–0093; FRL–7630–9]

RIN 2060–AG99

National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action promulgates national emission standards for hazardous air pollutants (NESHAP) for automobile and light-duty truck surface coating operations located at major sources of hazardous air pollutants (HAP). The final rule implements 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 final rule will protect air quality and promote the public health by reducing emissions of HAP from facilities in the automobile and light-duty truck surface coating source category. The primary HAP emitted by these operations are toluene, xylene, glycol ethers, methyl ethyl ketone (MEK), methyl isobutyl ketone (MIBK), ethylbenzene, and methanol. The final standards are expected to reduce nationwide organic HAP emissions from major sources in this source category by approximately 60 percent.

This action also amends the Surface Coating of Miscellaneous Metal Parts and Products NESHAP (40 CFR part 63, subpart MMMM) and the Surface Coating of Plastic Parts and Products NESHAP (40 CFR part 63, subpart PPPP) to clarify the interaction between these rules and the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII).

Additionally, this action amends the Resource Conservation and Recovery Act (RCRA) Air Emission Standards for Equipment Leaks at 40 CFR parts 264 and 265, subparts BB, for owners and operators of hazardous waste treatment, storage, and disposal facilities to exempt air emissions from certain activities covered by the final NESHAP from these RCRA standards.

DATES: The final rule is effective June 25, 2004. The incorporation by reference of certain publications listed in the final rule is approved by the Director of the Federal Register as of June 25, 2004.

ADDRESSES: *Docket.* Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22 are located at the EPA Docket Center, EPA West (6102T), 1301 Constitution Avenue, NW., Room B–102, Washington, DC 20460.

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SUPPLEMENTARY INFORMATION: *Regulated Entities.* Categories and entities potentially regulated by this action are listed by North American Industrial Classification System (NAICS) codes listed in Table 1.

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

Category	NAICS	Examples of potentially regulated entities
Industry	336111, 336112, 336211	Automobile and light-duty truck assembly plants, producers of automobile and light-duty truck bodies.

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 § 63.3081 of the final rule.

Docket. The EPA has established an official public docket for this action under Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22. The official public docket consists of the documents specifically referenced in this action, any public comments received, and other information related to this action. All items may not be listed under both docket numbers, so interested parties should inspect both docket numbers to ensure that they have received all materials relevant to the final rule. Although a part of the official docket, the public docket does not include Confidential Business Information or other information whose disclosure is restricted by statute. The official public docket is the collection of materials that is available for public viewing at the EPA Docket Center, EPA West, Room B–102, 1301 Constitution Avenue, NW., Washington, DC 20460. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566–1744, and the telephone number for the Docket is (202) 566–1742. A reasonable fee may be charged for copying docket materials.

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An electronic version of the public docket is available through EPA's electronic public docket and comment system, EPA Dockets. You may use EPA Dockets at *http://www.epa.gov/edocket/* to view public comments, access the index listing of the contents of the official public docket, and to access those documents in the public docket that are available electronically. Although not all docket materials may be available electronically, you may still access any of the publicly available docket materials through the docket facility identified above. Once in the system, select ''search,'' then key in the appropriate docket identification number.

WorldWide Web (WWW). In addition to being available in the docket, an electronic copy of the final rule will be available on the WWW. Following the Administrator's signature, a copy of the final rule will be posted at *http://www.epa.gov/ttn/oarpg* on EPA's Technology Transfer Network (TTN) policy and guidance page for newly proposed or promulgated rules. 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.

Judicial Review. Under section 307(b)(1) of the CAA, judicial review of the final rule is available only by the filing of a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit by June 25, 2004. Under section 307(d)(7)(B) of the CAA, only an objection to the rule that was raised with reasonable specificity during the period for public comment can be raised during judicial review. Under section 307(b)(2) of the CAA, the requirements established by the final rule may not be challenged separately in any civil or criminal proceedings brought by EPA to enforce these requirements.

Outline: The following outline is provided to aid in reading the preamble to the final rule:

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  G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks
  H. Executive Order 13211: Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use
  I. National Technology Transfer and Advancement Act
  J. Congressional Review 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 surface coating of automobiles and light-duty trucks category of major sources was listed on July 16, 1992 (57 FR 31576). 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(c)(2) of the CAA requires that we establish NESHAP for the control of HAP from both new and existing major sources, based upon the criteria set out in section 112(d). The CAA requires the NESHAP to reflect the maximum degree of reduction in emissions of HAP that is achievable, taking into consideration the cost of achieving the emission reduction, any non-air quality health and environmental impacts, and energy requirements. This level of control is commonly referred to as 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 the final NESHAP, we considered control options that are more stringent than the MACT floor, taking into account consideration of the cost of achieving the emission reduction, any non-air quality health and environmental impacts, and energy requirements. In the final rule, EPA is promulgating standards for both existing and new sources consistent with these statutory requirements.

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

HAP emission sources. Emissions from coating application, drying, and curing account for most of the HAP emissions from automobile and light-duty truck surface coating operations. The remaining emissions are primarily from cleaning of booths and application equipment and purging of spray equipment. 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. In most cases, HAP emissions from surface preparation and waste/wastewater operations are relatively small.

Organic HAP. The final NESHAP regulate emissions of organic HAP. Available emission data collected during the development of the NESHAP show that the primary organic HAP emitted from automobile and light-duty truck surface coating operations are toluene, xylene, glycol ethers, MEK, MIBK, ethylbenzene, and methanol. These compounds account for over 95 percent of the nationwide HAP emissions from this source category.

Inorganic HAP. Based on information reported during the development of the NESHAP, lead, manganese, and chromium may be contained in some of the coatings used by this source category but are not likely to be emitted due to the coating application techniques used. No inorganic HAP were reported in thinners or cleaning materials. The only use of lead in coatings in this source category is in electrodeposition primers. None of this lead is emitted because these primers are applied by dip coating. Lead is being phased out of electrodeposition primers. For spray applied coatings, most of the inorganic HAP components remain as solids in the dry coating film on the parts being coated, are collected by the circulating water under the spray booth floor grates, or are deposited on the walls, floor, and grates of the spray booths and other equipment in which they are applied. Therefore, inorganic HAP emission levels are expected to be very low and have not been quantified.

D. What Are the Health Effects Associated With Organic HAP Emissions From the Surface Coating of Automobiles and Light-Duty Trucks?

The HAP to be controlled with the final rule are associated with a variety of adverse health effects. Some of the potential toxic effects include effects to the central nervous system, such as fatigue, nausea, tremors, and lack of coordination; adverse effects on the liver, kidneys, and blood; respiratory effects; and developmental effects.

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

We do not have the type of current detailed data on each of the facilities covered by these emission standards for this source category, and the people living around the facilities, that would be necessary to conduct a detailed analysis to determine the actual population exposures to the organic HAP emitted from these facilities and potential for resultant health effects. We did conduct a rough risk assessment which indicated that both the baseline level of adverse health effects and the effect of the final rule on human health are small. This rough risk assessment is discussed further later in this preamble and is available in the docket.

II. Summary of the Final Rule

A. What Source Categories Are Affected by the Final Rule?

The final rule applies to you if you own or operate a new, reconstructed, or existing affected source, as defined in § 63.3082, that is located at a facility which applies topcoat to new automobile or new light-duty truck bodies or body parts for new automobiles or new light-duty trucks, and that is a major source, is located at a major source, or is part of a major source of emissions of HAP. Body part is defined in the final rule to mean exterior parts such as hoods, fenders, doors, roof, quarter panels, decklids, tail gates, and cargo beds. Body parts were traditionally made of sheet metal, but now are also made of plastic. Bumpers, fascia, and cladding are not body parts. Coating operations included in this source category include, but are not limited to, the application of electrodeposition primer, primer-surfacer, topcoat (including basecoat and clear coat), final repair, glass bonding primer, glass bonding adhesive, sealer, adhesive, and deadener. The application of blackout and anti-chip materials is included in these coating operations, as is the cleaning and purging of equipment associated with the coating operations. If you are subject to the final rule and also coat parts intended for use in new automobiles or new light-duty trucks or as aftermarket repair or replacement parts for automobiles or light-duty trucks which would otherwise be subject to the Surface Coating of Miscellaneous Metal Parts and Products NESHAP (40 CFR part 63, subpart MMMM) or the Surface Coating of Plastic Parts and Products NESHAP (40 CFR part 63, subpart PPPP), you have the option to include these operations under the final rule. Alternately, you may choose to have such collocated coating operations remain subject to either the Surface Coating of Miscellaneous Metal Parts and Products NESHAP (40 CFR part 63, subpart MMMM) or the Surface Coating of Plastic Parts and Products NESHAP (40 CFR part 63, subpart PPPP). You may not include collocated operations that apply surface coatings to parts that are not intended for use in automobiles and light-duty trucks in your affected source under the final rule. We are also amending the Surface Coating of Miscellaneous Metal Parts and Products NESHAP (40 CFR part 63, subpart MMMM) and the Surface Coating of Plastic Parts and Products NESHAP (40 CFR part 63, subpart PPPP) to clarify the interaction between these rules and the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII). Automobile customizers, body shops, and refinishers are excluded from this source category.

You are not subject to the final rule if your coating operation is located at an area source. An area source is any stationary source of HAP that is not a major source.

You may establish area source status prior to the compliance date of the final rule by limiting the source's potential to emit HAP through appropriate mechanisms available through the permitting authority.

This source category does not include research or laboratory operations or janitorial, building, and facility maintenance operations.

We are also amending the RCRA Air Emissions Standards for Equipment Leaks at 40 CFR parts 264 and 265, subparts BB. The amendments exempt air emissions from the collection and transmission of captured purge material which would otherwise be subject to requirements of subparts BB of 40 CFR parts 264 and 265 if they are subject to the requirements of the final NESHAP. Generally, subparts BB of 40 CFR parts 264 and 265 apply to equipment that contains or contacts RCRA hazardous wastes with organic concentrations of at least 10 percent by weight. Subparts BB apply to large quantity generators as well as to RCRA treatment, storage, and disposal facilities. Subparts BB were designed to minimize air emissions from leaks from equipment such as pumps, valves, flanges, and connections.

The work practice standards in § 63.3094 of the final NESHAP address emissions from purging of coating applicators, the collection and transmission of purged paint and solvent in a purge capture system, and the storage of captured purge material. The collection and transmission systems would potentially be subject to the requirements of subparts BB. The potential for air releases once purged materials are captured is relatively small. The HAP emissions from captured purge materials are very small in comparison with the coating application, drying, and curing. Measurements made by industry indicate that emissions of volatile organic compounds (VOC) would be at least one to two orders of magnitude less than concentrations that would meet the definition of a leak under subparts BB of 40 CFR parts 264 and 265. Additionally, the collected mixture is usually shipped off-site to a solvent recycler and the automobile and light-duty truck facility typically receives a credit from the off-site solvent recycler for the solvent recovered from the mixture. This provides an additional incentive for the industry to retain as much of the captured purge material as possible, and therefore to repair any leaks as quickly as possible. For these reasons and to avoid duplication, if such a collection and transmission system is subject to the final NESHAP then it is exempt from the requirements of subparts BB of 40 CFR parts 264 and 265.

If a facility chooses to include under the NESHAP operations which coat parts intended for use in new automobiles or new light-duty trucks or as aftermarket repair or replacement parts for automobiles or light-duty trucks which would otherwise be subject to the NESHAP for surface coating of miscellaneous metal parts and products (40 CFR part 63, subpart MMMM) or surface coating of plastic parts and products (40 CFR part 63, subpart PPPP), then the captured purge material from these operations are also exempt from the requirements of subparts BB of 40 CFR parts 264 and 265. Many of the coatings applied at facilities subject to the final NESHAP to separate, non-body plastic parts and separate, non-body metal parts for automobiles and light-duty trucks are similar in composition to those applied to automobile and light-duty truck bodies and body parts. The captured purge materials are conveyed to waste tanks in the same fashion as the purged materials from automobile and light-duty truck body coating operations.

B. What Is the Relationship to Other Rules?

Affected sources subject to the final rule may also be subject to other rules. Automobile and light-duty truck surface coating operations that began construction, reconstruction, or modification after October 5, 1979 are subject to new source performance standards (NSPS) under 40 CFR part 60, subpart MM. That rule limits emissions of VOC. The EPA has also published control techniques guidelines which establish reasonably available control technologies for limiting VOC emissions from automobile and light-duty truck surface coating operations. Additional VOC emission limitations may also apply to these facilities through conditions incorporated in State operating permits and permits issued under authority of title V of the CAA. Facilities in this subcategory may also be subject to various emission limitations pursuant to State air toxics rules.

An automobile and light-duty truck surface coating facility may be subject to other NESHAP. Subparts MMMM (for surface coating of miscellaneous metal parts and products) and PPPP (for surface coating of plastic parts and products) of 40 CFR part 63, limit emissions from coating operations conducted on separate, non-body parts. To decrease the burden of complying with multiple surface coating emission limits, the final rule provides that collocated operations that apply surface coating to any automobile and light-duty truck part may be optionally included under the final rule. Surface coating of metal and plastic parts not intended for attachment to automobiles and light-duty trucks remain covered under the relevant subpart, 40 CFR part 63, subpart MMMM for metal parts and 40 CFR part 63, subpart PPPP for plastic parts. We are also amending 40 CFR part 63, subparts MMMM and PPPP to clarify the interaction between these rules and the final rule. Facilities may also be subject to other rules relating to collocated equipment such as foundries and boilers.

The transmission and storage of captured purge materials from coating equipment may also be subject to the RCRA tank system requirements under subparts J of 40 CFR parts 264 and 265, and the Air Emission Standards for Equipment Leaks under subparts BB of of 40 CFR parts 264 and 265. The tank system rules under subparts J apply to hazardous waste storage tanks, all ancillary equipment used to convey hazardous waste to such tanks, and secondary containment systems. The requirements of subparts J are designed to prevent releases from hazardous waste tank systems and to detect and respond to releases from hazardous waste tank systems, thereby ensuring minimal risk of hazardous waste reaching ground water, surface waters, or soils.

The air emission standards for equipment leaks under subparts BB of 40 CFR parts 264 and 265 apply to equipment that contains or contacts RCRA hazardous waste with organic concentrations of at least 10 percent by weight. Subparts BB were designed to minimize air emissions from leaks from equipment such as pumps, valves, flanges, and connections. To avoid duplication between subparts BB and the final NESHAP, we are exempting equipment from subparts BB if it is subject to the Surface Coating of Automobiles and Light-Duty Trucks NESHAP.

C. What Is the Affected Source?

We define an affected source as a stationary source, group of stationary sources, or part of a stationary source to which a specific emission standard applies. The final rule defines the affected source as all of the equipment used to apply coating to new automobile or new light-duty truck bodies or body parts for new automobiles or new light-duty trucks and to dry or cure the coating after application; all storage containers and mixing vessels in which vehicle body coatings, thinners, and cleaning materials are stored or mixed; all manual and automated equipment and containers used for conveying vehicle body coatings, thinners, and cleaning materials; and all storage containers and all manual and automated equipment and containers used for conveying waste materials generated by an automobile and light-duty truck surface coating operation. Operations that apply surface coating to other automobile and light-duty truck parts may be optionally included in the affected source.

The affected source does not include research or laboratory operations or janitorial, building, and facility maintenance operations.

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

Emission limits. The final rule limits organic HAP emissions from each new or reconstructed automobile and light-duty truck surface coating facility using the emission limits in Table 2 of this preamble.

TABLE 2.—EMISSION LIMITS FOR NEW OR RECONSTRUCTED AFFECTED SOURCES (MONTHLY AVERAGE)

Operation	Limit
Combined electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operation plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c).	0.036 kilogram (kg) (0.30 pound (lb)) organic HAP/liter (HAP/gallon (gal)) of coating solids deposited).

TABLE 2.—EMISSION LIMITS FOR NEW OR RECONSTRUCTED AFFECTED SOURCES (MONTHLY AVERAGE)—Continued

Operation	Limit
Combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operation plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) (for sources meeting the operating limits of § 63.3092(a) or (b)).	0.060 kg (0.50 lb organic HAP/1iter (HAP/gal) of coating solids deposited).
Adhesives and sealers, other than glass bonding adhesive	0.010 kg/kg (lb/lb) of material used.
Deadener	0.010 kg/kg (lb/lb) of material used.

We are limiting organic HAP emissions from each existing automobile and light-duty truck surface coating facility using the emission limits in Table 3 of this preamble.

TABLE 3.—EMISSION LIMITS FOR EXISTING AFFECTED SOURCES (MONTHLY AVERAGE)

Operation	Limit
Combined electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operation plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c).	0.072 kg (0.60 lb) organic HAP/liter (HAP/gal) of coating solids deposited.
Combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operation plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) (for sources meeting the operating limits of § 63.3092(a) or (b)).	0.132 kg (1.10 lb) organic HAP/liter (HAP/gal) of coating solids deposited.
Adhesives and sealers other than glass bonding adhesive	0.010 kg/kg (lb/lb) of material used.
Deadener	0.010 lb/lb (kg/kg) of material used.

You must calculate emissions from: (1) The combined electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c); or (2) the combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations (electrodeposition primer considered separately per §§ 63.3091(b) and 63.3092(b)) plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) using the procedures in the final rule, which account for the organic HAP contents of the materials applied in each month, as well as transfer efficiency and overall efficiencies of any capture systems and control devices in use. The monthly average emission rate for the combined group of operations (either grouping type (1) or grouping type (2) above) is calculated and compared to the applicable emission limit. Some facilities have multiple paint lines (*e.g.*, a facility with two or more totally distinct paint lines, each serving a distinct assembly line, or a facility with two or more paint lines sharing the same paint kitchen or mix room). The owner or operator may choose to group all of the operations from two or more paint lines together, or to make a separate grouping of the operations from individual paint lines. These options would, for example, allow a facility with two paint lines to use a grouping with electrodeposition primer (grouping type (1) above) for one paint line and a grouping with electrodeposition primer considered separately (grouping type (2) above) for the other paint line. They would also, for example, allow a facility with three paint lines to use one grouping for two of the paint lines and a separate grouping of the same type or of the other type for the third paint line. You must average organic HAP contents of other materials used on a monthly basis to determine separately those emissions from sealers and adhesives (other than glass bonding adhesive), and deadeners.

Operating limits. If you use an emission capture and control system to reduce emissions, the operating limits may apply to you. These operating limits are site-specific parameter limits you determine during the initial performance test of the system. For capture systems that are not capturing emissions from a downdraft spray booth or from a flash-off area or bake oven associated with a downdraft spray booth, you must identify the parameter(s) to monitor and establish the limits and monitoring procedures. For thermal and catalytic oxidizers, you must establish temperature limits. For solvent recovery systems, you must monitor the outlet concentration or carbon bed temperature and the amount of steam or nitrogen used to desorb the bed. All operating limits must reflect operation of the capture and control system during a performance test that demonstrates achievement of the emission limit during representative operating conditions.

Work practice standards. You must develop and implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners, and cleaning materials used in and waste materials generated by all coating operations for which emission limits are established. The plan must specify practices and procedures to ensure that, at a minimum, the following elements are implemented:

- All organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be stored in closed containers. The risk of spills of organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be minimized.
- Organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.
- Mixing vessels, other than day tanks equipped with continuous agitation systems, which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.
- Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.

You must also develop and implement a work practice plan to minimize organic HAP emissions from cleaning and from purging of equipment associated with all coating operations for which emission limits are established. The plan must specify practices and procedures to ensure that emissions of HAP from the following operations are minimized:

- Vehicle body wiping;
- Coating line purging;
- Flushing of coating systems;
- Cleaning of spray booth grates;
- Cleaning of spray booth walls;
- Cleaning of spray booth equipment;
- Cleaning external spray booth areas; and
- Other housekeeping measures (*e.g.*, keeping solvent-laden rags in closed containers.)

General Provisions. The General Provisions (40 CFR part 63, subpart A) also apply to you as outlined in Table 2 of the final rule. The General Provisions codify certain procedures and criteria for all 40 CFR part 63 NESHAP. The General Provisions contain administrative procedures, preconstruction review procedures for new sources, and procedures for conducting compliance-related activities such as notifications, recordkeeping and reporting, performance testing, and monitoring. The final rule refers to individual sections of the General Provisions to emphasize key sections that you should be aware of. However, unless specifically overridden in Table 2 of the final rule, all of the applicable General Provisions requirements would apply to you.

E. What Are the Testing and Initial Compliance Requirements?

Existing affected sources must be in compliance with the final rule no later than April 26, 2007. New and reconstructed sources must be in compliance upon initial startup of the affected source or by June 25, 2004, whichever is later. However, affected sources are not required to demonstrate compliance until the end of the initial compliance period when they will have accumulated the necessary records to document the monthly organic HAP emission rate.

Compliance with the emission limits is based on a monthly organic HAP emission rate. The initial compliance period, therefore, is the 1-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 month. 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 all the requirements of the final rule to achieve the emission limit(s) and operating limits by the end of the initial compliance period, and that the facility is operated in accordance with the approved work practice plans. At the end of the initial compliance period, the owner or operator must use the data and records generated to determine whether or not the affected source is in compliance for that period. If it does not meet the applicable limit(s), then it is out of compliance for the entire initial compliance period.

Emission limits. Compliance with the emission limit for combined electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c), or the emission limit for combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) is based on mass organic HAP emissions per volume of applied coating solids as calculated monthly using the procedures in the final rule. Compliance with the emission limits for adhesives and sealers (other than glass bonding adhesive) and deadener is based on mass average organic HAP content of materials used each month.

Electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c). Compliance with this emission limit, or if eligible, with the emission limit for combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c), is based on calculations detailed in the final rule. You may also use the guidelines presented in the ‘‘Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations’’ (EPA–450/3–88–018) (Auto Protocol).

To determine the organic HAP content, the volume solids, and the density of the coatings and thinners, you may rely on manufacturer’s data, results from the test methods listed below, or alternative test methods for which you get EPA approval on a case-by-case basis according to the NESHAP General Provisions in 40 CFR 63.7(f). However, if there is any inconsistency between the test results and manufacturer’s data, the test results will prevail for compliance and enforcement purposes unless after consultation, you demonstrate to the satisfaction of the enforcement authority that the manufacturer’s data are correct.

- For organic HAP content, use Method 311 of 40 CFR part 63, appendix A.
- You may use nonaqueous volatile matter as a surrogate for organic HAP. If you choose this option, then use Method 24 of 40 CFR part 60, appendix A.
- For volume fraction of coating solids, use either ASTM Method D2697–86 (1998) or ASTM Method D6093–97.
- For density, use ASTM Method D1475–98 or information from the

supplier or manufacturer of the material.

For each emission capture and control system that you use, you must:

- Conduct an initial performance test to determine the overall control efficiency of the equipment (described below) and to establish operating limits to be achieved on a continuous basis (also described below). The performance test must be completed no later than the compliance date. You also must schedule it in time to obtain the results for use in completing your initial compliance determination for the initial compliance period.

You are not required to conduct an initial performance test to determine capture efficiency or destruction efficiency of a capture system or control device if you receive approval to use the results of a performance test that has been previously conducted on that capture system (either a previous stack test or a previous panel test) or control device. You are not required to conduct an initial test to determine transfer efficiency if you receive approval to use the results of a test that has been previously conducted.

The overall control efficiency for a capture and control system must be demonstrated based on emission capture and reduction efficiency. To determine the capture efficiency, you must either verify the presence of a permanent total enclosure using EPA Method 204 of 40 CFR part 51; measure the capture efficiency using either EPA Method 204A through F of 40 CFR part 51 or appendix A of 40 CFR part 63, subpart KK; or use the panel test procedures in ASTM Method D5087–91 (1994), ASTM Method D6266–00a, or the guidelines presented in the Auto Protocol as described in § 63.3165(e) and (g), and appendix A of the final rule. If you have a permanent total enclosure and you route all exhaust gases from the enclosure to a control device, then you may assume 100 percent capture. For panel testing, the coatings used may be grouped based on similar appearance characteristics (*e.g.*, solid color or metallic), processing sequences, and dry film thicknesses. One coating from each group can be tested to represent all of the coatings in that group.

To determine the emission reduction efficiency of the control device, you must conduct measurements of the inlet and outlet gas streams. The test consists 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, may be used.

You are required to determine the transfer efficiency for primer-surfacer and topcoat materials and for all coatings, except for deadener and for adhesive and sealer that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) using ASTM Method D5066–91 (2001) or the guidelines presented in the Auto Protocol. Transfer efficiency testing may be performed for representative coatings and representative spray booths as described in the Auto Protocol, rather than for every coating and every spray booth. For example, one basecoat may be tested from a group of basecoats that are applied or processed in the same manner and the test result may be used for all of the coatings in the group and one spray booth may be tested from a group of identical parallel spray booths. Typical basecoat groupings are metallic colors and non-metallic colors. You may assume 100 percent transfer efficiency for electrodeposition primer coatings, glass bonding primers, and glass bonding adhesives. For final repair coatings, you may assume 40 percent transfer efficiency for air atomized spray and 55 percent transfer efficiency for electrostatic spray and high volume, low pressure spray.

The monthly emission rate, in terms of mass of organic HAP emitted per volume of coating solids deposited, is determined in accordance with the procedures in the final rule. These procedures incorporate the volume, organic HAP content, and volume solids content of each coating applied, as well as the transfer efficiency for the coatings and spray equipment used, and the overall control efficiency for controlled booths or bake ovens and other controlled emission points.

Adhesives and sealers, and deadener. Compliance with emissions limits for adhesives and sealers (other than windshield materials) is based on the monthly mass average organic HAP content of all materials of this type used during the compliance period. Compliance with emission limits for deadener is based on the monthly mass average organic HAP content of all materials of this type used during the compliance period.

Operating limits. As mentioned above, you must establish the required operating limits during the initial performance test of an emission capture and control system. The operating limit is defined as the minimum or maximum (as applicable) value achieved for a control device or process parameter during the most recent performance test that demonstrated compliance with the emission limit.

The final rule specifies the parameters to monitor for the types of control systems commonly used in the industry. You are 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 § 63.3168 of the final rule. If you use control devices other than those identified in the final rule, you must 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 must continuously monitor temperature and record it at evenly spaced intervals 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 for thermal oxidizers is the average temperature, based on all valid data, measured during the performance test. For each 3-hour period thereafter, the average temperature must be at or above this limit. As an alternative, if the latest operating permit issued before April 26, 2007 for the thermal oxidizer at your facility contains recordkeeping and reporting requirements for the combustion temperature that are consistent with the requirements for thermal oxidizers in 40 CFR 60.395(c), then you may set the minimum operating limit for the combustion temperature for each such thermal oxidizer at your affected source at 28 degrees Celsius (50 degrees Fahrenheit) below the average combustion temperature during the performance test of that thermal oxidizer. If you do not have an operating permit for the thermal oxidizer at your facility and the latest construction permit issued before April 26, 2007 for the thermal oxidizer at your facility contains recordkeeping and reporting requirements for the combustion temperature that are consistent with the requirements for thermal oxidizers in 40 CFR 60.395(c), then you may set the minimum operating limit for the combustion temperature for each such thermal oxidizer at your affected source at 28 degrees Celsius (50 degrees Fahrenheit) below the average combustion temperature during the performance test of that thermal oxidizer. If you use this as the minimum operating limit for a thermal oxidizer, then you must keep the combustion temperature set point on that thermal oxidizer no lower than 14 degrees Celsius (25 degrees Fahrenheit) below the lower of that set point during the performance test for that thermal oxidizer and the average combustion temperature maintained during the performance test for that thermal oxidizer.

For catalytic oxidizers, temperature monitors are placed immediately before and after the catalyst bed. The operating limits for catalytic oxidizers are the average temperature just before the catalyst bed maintained during the performance test and 80 percent of the average temperature difference across the catalyst bed maintained during the performance test, except during periods of low production the latter minimum operating limit is to maintain a positive temperature gradient across the catalyst bed. A low production period is when production is less than 80 percent of production rate during the performance test. As an alternative, if the latest operating permit issued before April 26, 2007 for the catalytic oxidizer at your facility contains recordkeeping and reporting requirements for the temperature before the catalyst bed that are consistent with the requirements for catalytic oxidizers in 40 CFR 60.395(c), then you may set the minimum operating limit for the temperature just before the catalyst bed for each such catalytic oxidizer at your affected source at 28 degrees Celsius (50 degrees Fahrenheit) below the average temperature just before the catalyst bed during the performance test of that catalytic oxidizer. If you do not have an operating permit for the catalytic oxidizer at your facility and the latest construction permit issued before April 26, 2007 for the catalytic oxidizer at your facility contains recordkeeping and reporting requirements for the temperature before the catalyst bed that are consistent with the requirements for catalytic oxidizers in 40 CFR 60.395(c), then you may set the minimum operating limit for the temperature just before the catalyst bed for each such catalytic oxidizer at your affected source at 28 degrees Celsius (50 degrees Fahrenheit) below the average temperature just before the catalyst bed during the performance test of that catalytic oxidizer. If you use this as the minimum operating limit for the temperature just before the catalyst bed for a catalytic oxidizer, then you must keep the set point for the temperature just before the catalyst bed for that catalytic oxidizer no lower than 14 degrees Celsius (25 degrees Fahrenheit) below the lower of that set point during the performance test for that catalytic oxidizer and the average temperature just before the catalyst bed maintained during the performance test for that catalytic oxidizer. Also, as an alternative for catalytic oxidizers, you may monitor the temperature immediately before the catalyst bed and develop and implement an inspection and maintenance plan.

If you use a solvent recovery system, then you must either: (1) Continuously monitor the outlet concentration of organic compounds, and the operating limit is the average organic compound outlet concentration during the performance test (for each 3-hour period, the average concentration would have to be below this limit); or (2) monitor the carbon bed temperature after each regeneration and the total amount of steam or nitrogen used to desorb the bed for each regeneration, in which case the operating limits would be the carbon bed temperature (not to be exceeded) and the amount of steam or nitrogen used for desorption (to be met as a minimum).

If you use a capture system that is not part of a PTE that meets the criteria of 40 CFR 63.3165(a) and is not capturing emissions from a downdraft spray booth or from a flash-off area or bake oven associated with a downdraft spray booth to meet the final standards, you must meet operating limits for each capture device in that capture system. If the emission capture system is a permanent total enclosure, you are required to establish that the direction of flow is into the enclosure at all times. In addition, you must meet an operating limit of either an average facial velocity of at least 3,600 meters per hour (200 feet per minute) through all natural draft openings in the enclosure, or a minimum pressure drop across the enclosure of at least 0.18 millimeter water (0.007 inch water), as established by Method 204 of appendix M to 40 CFR part 51.

If the emission capture system is not a permanent total enclosure, you must establish either the average volumetric flow rate or the duct static pressure in each duct between the capture device and the add-on control device inlet during the performance test. Either the average volumetric flow rate must be maintained above the operating limit for each 3-hour period or the average duct static pressure must be maintained above the operating limit for each 3-hour period.

Work practice standards. You must develop and implement two site-specific work practice plans. One plan must address practices to minimize organic HAP emissions from storage, mixing, and conveying of coatings, thinners, and cleaning materials used in operations for which emission limits are established, as well as the waste materials generated from these operations. A second site-specific work practice plan must address practices to minimize emissions from cleaning operations and purging of coating equipment.

The plans must address specific types of potential organic HAP emission points and are subject to approval of the Administrator. Deviations from approved work practice plans must be reported semiannually.

F. What Are the Continuous Compliance Provisions?

Emission limits. Continuous compliance with the emission limit for combined electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) of the final rule, or if eligible, the emission limit for combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c), is based on monthly calculations following the procedures detailed in the final rule. These procedures take into account the amount of each coating used, the organic HAP and volume solids content of each coating used, the transfer efficiency of each coating application system, and the organic HAP abatement from each capture and control system, and provide for calculating monthly mass organic HAP emissions per volume of coating solids deposited.

Continuous compliance with the emission limits for adhesives and sealers (other than components of the windshield adhesive system), and deadener is based on the monthly average mass organic HAP concentration of all materials applied in each category.

Operating limits. If you use an emission capture and control system, the final rule requires you to achieve on a continuous basis the operating limits you establish during the performance test. If the continuous monitoring shows that the system is operating outside the range of values established during the performance test, then you have deviated from the established operating limits.

If you operate a capture and control system that allows emissions to bypass the control device, you must demonstrate that HAP emissions from each emission point 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:

(1) Flow control position indicator to provide a record of whether the exhaust stream is directed to the control device;

(2) Car-seal or lock-and-key valve closures to secure the bypass line valve in the closed position when the control device is operating;

(3) Valve closure continuous monitoring to ensure any bypass line valve or damper is closed when the control device is operating; or

(4) Automatic shutdown system to stop the coating operation when flow is diverted from the control device.

If the continuous control device bypass monitoring shows that the control device is bypassed, then you have deviated from the established operating limits.

Operations during startup, shutdown, and malfunction. When using an emission capture and control system for compliance, you are required to develop and operate according to a startup, shutdown, and malfunction plan (SSMP) during periods of startup, shutdown, and malfunction of the capture and control system.

Work practice standards. You are required to operate your facility in accordance with your approved site-specific work practice plans at all times.

G. 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 final 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 April 26, 2005. For new and reconstructed sources, you must send the notification within 120 days after the date of initial startup or October 25, 2004, whichever is later. That report notifies us and your State agency that you have an existing affected source that is subject to the final standards or that you have constructed a new affected source. Thus, it allows you and the permitting authority to plan for compliance activities. You also need to send a notification of planned construction or reconstruction of a source that would be subject to the final rule and apply for approval to construct or reconstruct. If you have already submitted a notification in accordance with section 112(j) of the CAA, you are not required to submit another initial notification except to identify and describe all additions to the affected source made pursuant to § 63.3082(c) of the final rule.

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 must conduct a performance test. The performance test is required no later than the compliance date for an existing affected source. For a new or reconstructed affected source, the performance test is required no later than 180 days after startup or 180 days after the effective date of the final rule, whichever is later. You must notify EPA (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 60 days after the end of the initial compliance period. In the notification, you must certify whether the affected source has complied with the final standards; summarize the data and calculations supporting the compliance demonstration; describe how you will determine continuous compliance; and for capture and control systems for which you conduct performance tests, provide the results of the tests. Your notification must also include the measured range of each monitored parameter and the operating limits established during the performance test, and information showing whether you have achieved your operating limits during the initial compliance period.

Recordkeeping Requirements. The final rule requires you to collect and keep records according to certain minimum data requirements for the CPMS. Failure to collect and keep the specified minimum data is a deviation that is separate from any emission limit, operating limit, or work practice requirement. You are required to keep records of reported information and all other information necessary to document compliance with the final 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.

You are required to keep the following records:

- A current copy of information provided by materials suppliers such as manufacturer's formulation data or test data used to determine organic HAP or VOC content, solids content, and quantity of the coatings and thinners applied.
- All documentation supporting initial notifications and notifications of compliance status. This includes a record of all raw data, protocol input data, algorithms, and intermediate calculations. If calculations are computerized, data, calculations, and intermediate and final results must also be maintained in electronic form.
- The occurrence and duration of each startup, shutdown, or malfunction of the emission capture and control system.
- All maintenance performed on the emission capture and control system.
- Actions taken during startup, shutdown, and malfunction that are different from the procedures specified in your SSMP.
- All information necessary to demonstrate conformance with your SSMP when the plan procedures are followed.
- Each period during which a CPMS is malfunctioning or inoperative (including out-of-control periods).
- All required measurements needed to demonstrate compliance with the standards.
- All results of performance tests.

- Data and documentation used to determine and capture system efficiency or to support a determination that the system is a permanent total enclosure.
- Required work practice plans and documentation to support compliance with the provisions of these plans.

Deviations, as determined from these records, must be recorded and also reported. A deviation is any instance when any requirement or obligation established by the final 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 must make your SSMP available for inspection if the Administrator requests to see it. The plan must stay in your records for the life of your affected source or until the source is no longer subject to the final standards. If you revise the plan, you must 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 must submit a semiannual report stating that the affected source has been in continuous compliance. If deviations occur, you must include them in the report as follows:

- Report each deviation from the emission limit.
- Report each deviation from the work practice plan.
- If you are complying by using a thermal oxidizer, report all times when a 3-hour average temperature is below the operating limit.
- If you are complying by using a catalytic oxidizer, report all times when a 3-hour average temperature increase across the catalyst bed is below the operating limit.
- If you are complying by using oxidizers or solvent recovery systems, report all times when the value of the site-specific operating parameter used to monitor the capture system performance was greater than or less than (as appropriate) the operating limit established for the capture system.
- Report other specific information on the periods of time the deviations occurred.

You must also send us explanations in each semiannual report if a change occurs that might affect your compliance status.

Other Reports. You are 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 SSMP, you report those procedures with your semiannual reports in addition to immediate reports required by 40 CFR 63.10(d)(5)(ii).

III. What Are the Significant Changes Since Proposal?

A. Applicability

We have provided an option permitting facilities subject to the final rule to include collocated operations involved in surface coating of parts for automobiles and light-duty trucks that would not otherwise be subject to the rule. Surface coating of these non-body parts, such as bumpers, fascias, and brackets at a time when they are not attached to (or otherwise simultaneously coated with) a new automobile or light-duty truck body or body parts would otherwise be subject to the Surface Coating of Miscellaneous Metal Parts and Products NESHAP, 40 CFR part 63, subpart MMMM, and/or the Surface Coating of Plastic Parts and Products NESHAP, 40 CFR part 63, subpart PPPP. Facilities opting to include operations of this type are responsible for obtaining all of the information necessary to determine compliance with the provisions of the final rule. Cleaning and purging operations associated with optionally included collocated surface coating operations would also be covered by the final rule. Collocated operations involved in surface coating of parts that are not related to automobiles and light-duty trucks may not be included, and continue to be regulated under the Surface Coating of Miscellaneous Metal Parts and Products NESHAP, 40 CFR part 63, subpart MMMM, and/or the Surface Coating of Plastic Parts and Products NESHAP, 40 CFR part 63, subpart PPPP. We are also amending subparts MMMM and PPPP to clarify the interaction between these rules and the surface coating automobiles and light-duty trucks rule. We were unable to include these changes in subparts MMMM and PPPP until the final rule was published since the changes to subparts MMMM and PPPP reference the final rule.

The final rule excludes ‘‘travel waxes’’ and other temporary coatings designed to be removed before vehicles are sold, as well as materials applied from touchup bottles.

B. Compliance Demonstration and Monitoring

As an alternative to the temperature monitoring provisions for thermal and catalytic oxidizers in the proposed rule, the final rule allows certain facilities which have been following the temperature monitoring provisions in 40 CFR 60.395(c) to continue to follow those provisions and to set the minimum operating limit for each such oxidizer at the same level as in 40 CFR 60.395(c).

The proposed rule used the average temperature rise across the catalyst during the performance test as one of the minimum operating limits for catalytic oxidizers. The final rule uses 80 percent of the average temperature rise across the catalyst during the performance test as one of the minimum operating limits for catalytic oxidizers, except during periods of low production this minimum operating limit is to maintain a positive temperature gradient across the catalyst bed.

The proposed rule contained operating parameter requirements for all capture systems. The final rule states that such monitoring is not required for downdraft spray booths or for flash-off areas or bake ovens associated with downdraft spray booths.

The proposed rule stated that if your add-on control system deviates from the operating limit specified in Table 1 to subpart IV of 40 CFR part 63, 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. We have written the final rule to allow the use of other data to indicate the actual efficiency of the emission capture system and add-on control device, as long as the use of these data is approved by the Administrator.

The proposed rule provided the option of using panel testing to determine bake oven capture efficiency. The final rule maintains this option and provides more detail on the calculations necessary to convert the results of such panel tests into the format needed for the final rule. The final rule also provides an option of using panel tests to determine spray booth capture efficiency.

C. Analytical Methods

The specification of analytical procedures to be employed in compliance demonstration is unchanged. A provision has been added to the final rule providing, in the event of a disagreement between the specified methods and the facility’s data, an opportunity for the facility to consult with the enforcement authority and demonstrate to the satisfaction of the enforcement authority that formulation data or data obtained by other means are correct.

D. Notifications and Recordkeeping

In the final rule, we have provided that facilities that have previously submitted initial notifications under section 112(j) of the CAA are not required to submit the initial notifications otherwise required by this subpart except to identify and describe all additions to the affected source made pursuant to § 63.3082(c) of the final rule. In addition, we have extended the deadline for submission of compliance status from 30 days to 60 days following the end of the initial compliance period to allow additional time for data reduction and calculations.

The final rule provides that you must maintain a record of the calculations used to demonstrate compliance with the ''Combined Electrodeposition Primer, Primer-Surfacer, Topcoat, Inline and Final Repair, Glass Bonding Primer, and Glass Bonding Adhesive Emission Rates'' or ''Combined Primer-Surfacer, Topcoat, Inline and Final Repair, Glass Bonding Primer, and Glass Bonding Adhesive Emission Rates.'' This record must include all raw data, algorithms, and intermediate calculations. If the guidelines presented in the Auto Protocol are used, you must keep records of all data input to this Auto Protocol. If these data are maintained as electronic files, the electronic files, as well as any paper copies must be maintained. These data must be provided to the permitting authority on request on paper, and in (if calculations are done electronically) electronic form.

E. Definitions

We have added definitions of bake oven air seal, body part, containers, paint line, sealers, spray booth air seal, and touchup bottles to the final rule. We have revised the definitions of deviation, final repair, in-line repair, and paint shop in the final rule.

IV. What Are the Responses to Significant Comments?

For the full set of comment summaries and responses, refer to the Response to Comment document which contains EPA's responses to each public comment and is available in Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22.

A. Applicability

Comment: A commenter was concerned that complying with the final rule by means of add-on control and equipment changes would trigger other regulatory requirements (new source review (NSR), prevention of significant deterioration (PSD), or NSPS) and requested a ''safe harbor'' be included in the final rule.

Response: We are not including in the final rule an exemption from NSR, PSD, and NSPS for those coating operations that are modified or upgraded in order to comply with the final rule. It would be inappropriate to include language in a NESHAP that could affect the applicability of these other programs since these are better handled on a case-by-case basis by the States and Regions implementing these other rules.

We do not expect compliance with the final rule to require changes to existing coating operations that would trigger major NSR or PSD permitting requirements. The steps taken to reduce organic HAP emissions to comply with the final rule are not expected to result in increased VOC emissions. Facilities that install oxidizers to reduce organic HAP may have a concurrent increase in nitrogen oxide emissions. We expect such facilities will be eligible for the pollution control project exclusion in the NSR regulations (67 FR 80186) since regenerative thermal oxidzers, thermal oxidizers, and catalytic oxidizers are presumed to be environmentally beneficial under the pollution control project exclusion. In addition, in order for the pollution control project exclusion to apply, the emissions increases from the project must not cause or contribute to a violation of any national ambient air quality standard or PSD increment, or adversely impact an air quality related value (such as visibility) that has been identified for a Federal Class I area by a Federal Land Manager and for which information is available to the general public.

Most, if not all, of the current automobile and light-duty truck surface coating facilities are already subject to the NSPS for automobile and light-duty truck surface coating. If there are any current facilities not already subject to the NSPS, we do not expect that the NSPS would be triggered by the changes necessary to comply with the final rule. The steps taken to reduce organic HAP emissions to comply with the final rule are not expected to result in increased VOC emissions. Increases in nitrogen oxide emissions resulting from the installation of oxidizers would not trigger the NSPS because nitrogen oxides are not a regulated pollutant under the NSPS.

Comment: A commenter recommended a broadening of the applicability of the proposed rule to allow those coating operations for metal and plastic parts conducted at facilities subject to the final rule to be considered part of the automobile and light-duty truck surface coating rule. This approach would provide affected sources with the greatest degree of flexibility for future changes in vehicle coating processes, *e.g.*, coating doors separately on another line rather than coating automobiles and light-duty trucks with the doors attached to the frame. This approach would also significantly reduce reporting, recordkeeping, and monitoring requirements, while assuring significant emissions reductions.

Response: We agree that providing this flexibility to operators of automobile assembly plants may reduce the burden associated with complying with multiple rules without increasing HAP emissions. Allowing the specified collocated coatings operations to be included under the final rule may simplify the tracking of coatings inventory and reduce the reporting and recordkeeping requirements associated with complying with multiple rules. The final rule provides operators of automobile assembly plants the option to include all collocated plastic and metal parts coating operations related to automobiles and light-duty trucks under the rule. This includes coating of replacement parts for attachment outside the facility, and coating of non-body parts (such as fascia cladding, brackets, fuel tanks, and radiators) for automobiles or light-duty trucks. Off-line coating of body parts, such as doors, for attachment to automobiles and light-duty trucks coated at the facility remain (as proposed) in the affected source under the final rule. Operators choosing to include such operations are required to obtain the necessary information (including transfer efficiency and capture efficiency) to demonstrate compliance. Coating of non-automotive parts, vehicles other than automobiles and light-duty trucks (such as motorcycles, all-terrain vehicles, or watercraft), or parts for such vehicles, may not be included. We are also amending 40 CFR part 63, subparts MMMM and PPPP, to clarify the interaction between those rules and the surface coating for automobiles and light-duty trucks final rule.

Comment: A commenter noted that the definition of the term ''coating'' excludes certain decorative, protective, or functional coatings that consist only of protective oils. The commenter stated that automobile and light-duty truck assembly plants also apply several different types of temporary coatings, *e.g.*, travel wax and blackout coatings. These coatings serve a cosmetic purpose and are not designed to remain on the vehicle for a long time. The commenter stated that these ''cosmetic coatings'' should not be included in the definition of coating for the purposes of the MACT standards given their temporary nature and the fact that emissions from these coatings are minimal.

Response: We agree that temporary coatings are applied differently and serve a different function than the coatings intended to be regulated. In addition, the data collected and used in the determination of MACT, did not include temporary coatings. The definition of coating operation has been written to exclude the application of temporary materials such as protective oils and ''travel waxes'' that are designed to be removed from the vehicle before the vehicle is delivered to the retail purchaser.

Comment: A commenter recommended a minimum threshold cutoff for purposes of applicability of the final rule and suggested that EPA provide an exemption of 250 gal per year, similar to the usage cutoffs in other MACT standards.

Response: The commenter did not provide any data to support the inclusion of this type of exemption in the final rule. The MACT determination took into account emissions and solids from ''special colors.'' These materials are not exempt from the NSPS, and reporting systems to account for them are presently in place at most, if not all, assembly plants. The definition of coating operation in the final rule has been revised to exclude ''touchup bottles,'' which will exempt some materials used in very small quantities.

Comment: Approximately ten automobile and light-duty truck facilities have received permits with case-by-case MACT determinations under 40 CFR 63.40 and section 112(g) of the CAA. One commenter questioned whether the final NESHAP would apply to such facilities or if these facilities will continue to be subject to limits established in their permits under section 112(g). Another commenter stated that the section 112(g) permit requirements are more stringent than the proposed MACT limits for existing sources. This commenter suggested that EPA state in the final rule that the section 112(g) permits are equivalent to the MACT limits for existing sources and provide these facilities with the choice of keeping their section 112(g) permits or having 8 years to comply with the MACT limits for existing sources.

Response: Based upon the process used for making section 112(g) determinations and a brief review of some of the section 112(g) determinations made for facilities in this industry, we expect that the result of a thorough review would be that most or all of the section 112(g) determinations made for facilities in this industry are equivalent to MACT. These reviews and equivalency determinations are best done on a case-by-case basis by the permitting authority.

In accordance with 40 CFR 63.44(c), if the level of control required by the emission standard issued under section 112(d) is less stringent than the level of control required by a prior case-by-case section 112(g) MACT determination pursuant to 40 CFR 63.43, the permitting authority is not required to incorporate any less stringent terms of the promulgated standard in the title V operating permit applicable to the facility. In such a case, the permitting authority may choose to have the section 112(g) MACT determination remain in effect. Alternatively, the permitting authority may choose to have the NESHAP come into effect for the facility in place of the section 112(g) MACT determination. In this case, the facility may be given up to 8 years from the promulgation date of the NESHAP to comply with the NESHAP. The changes in equipment, materials, monitoring, recordkeeping, and reporting necessary to demonstrate compliance with the NESHAP rather than with the section 112(g) determination and the fact that the NESHAP are less stringent than the section 112(g) determination should be taken into account in determining how much time the facility is given to comply with the NESHAP.

In the less likely event that the level of control required by the emission standard issued under section 112(d) is not found to be less stringent than the level of control required by a prior case-by-case section 112(g) MACT determination, then the facility must comply with the NESHAP. In this case, the facility may be given up to 8 years from the promulgation date of the NESHAP to comply with the NESHAP. The changes in equipment, materials, monitoring, recordkeeping, and reporting necessary to demonstrate compliance with the NESHAP rather than with the section 112(g) determination and the fact that the NESHAP are not less stringent than the section 112(g) determination should be taken into account in determining how much time the facility is given to comply with the NESHAP.

As an alternative, if the level of control required by the emission standard issued under section 112(d) is not found to be less stringent than the level of control required by a prior case-by-case section 112(g) MACT determination and the difference in stringency is small, then the permitting authority could amend the facility's operating permit to make it equivalent to the NESHAP and have the section 112(g) MACT determination remain in effect. This approach may be less burdensome on both the facility and the permitting authority than having the NESHAP come into effect for the facility while achieving the same environmental results.

B. Compliance Demonstration, Monitoring, and Emission Limits

Comment: The commenter stated that the CAA, EPA rules, and EPA policy all authorize adoption of a Compliance Assurance Monitoring (CAM) protocol as MACT monitoring for coating sources at automobile and light-duty truck surface coating facilities. The commenter noted that the proposed rule allows the use of the CAM protocol as an option for compliance with certain aspects of the rule, but not for others, such as control equipment effectiveness and monitoring. The commenter stated that it is critical that the compliance provisions for the separate coating MACT standards that are applicable be harmonized, not only with each other, but also with the other coating standards that apply under State Implementation Plan requirements (including reasonably available control technology and best available control technology/lowest achievable emission rate).

Response: The proposed rule referred to the Auto Protocol as an option for compliance demonstration. This Auto Protocol does not include CAM provisions and does not include any guidance for control device efficiency monitoring. A CAM guidance document for automobile and light-duty truck coating is under development, but has not been completed. As described earlier in this preamble, we have provided an option for certain facilities to continue using the thermal and catalytic oxidizer temperature monitoring operating limits in 40 CFR 60.395(c). We have also removed the operating parameter requirements for capture systems which capture emissions from downdraft spray booths or from flash-off areas or bake ovens associated with downdraft spray booths.

Comment: The commenter stated that, for the performance tests required in proposed § 63.3160(a) and (b), EPA should allow prior performance tests, *e.g.*, transfer efficiency, removal efficiency, capture efficiency, destruction efficiency, oven solvent loading, to satisfy the performance tests required by the standards. Since EPA has agreed that HAP emitted from these operations behave in the same way as VOC, there is no reason for redundant testing. The commenter recommended that the scope and frequency of testing for transfer efficiency, oven solvent loading, and spraybooth capture efficiency be determined by the Auto Protocol.

According to the Auto Protocol, retesting of transfer efficiency is required if there are significant product, processing, material, or application equipment changes. Where parallel spraybooths are used, testing is required for only one booth. Oven solvent loading is determined with an initial compliance test followed by annual review of system operating conditions. The most recent test result remains valid as long as no significant changes have occurred in the coating technology or processing. The commenter feels that annual variations in color pallette or routine solvent blend adjustments are not significant changes, and that a similar trigger should apply for spraybooth capture efficiency testing. The affected source would maintain records documenting the annual reevaluation and the basis for the decision on whether retesting was required.

Response: We agree that the most recent test data can be used to demonstrate compliance and to establish the operating limits required by the final rule, provided that (1) the test was conducted using the same methods and conditions specified in this subpart, (2) no equipment changes have been made since the previous test (or you can demonstrate the results are reliable despite the changes), and (3) the required operating parameters were determined or sufficient data were collected to establish them. The Auto Protocol includes guidance for scope and frequency of testing for transfer efficiency and oven solvent loading panel testing.

Comment: The commenter noted that proposed § 63.3161(j), covering the calculation of HAP emissions reduction for controlled coating operations not using a liquid-liquid material balance, assumes zero efficiency for the emission capture system and add-on control device for periods of operating parameter or bypass line deviations, including startup, shutdown, or malfunction. The commenter claims that this approach is unrealistic and unduly penalizes facilities that may have a minor parameter reporting problem, *e.g.*, an automatic temperature readout malfunction. The commenter requested that § 63.3161 be written so that there is a generic way to calculate a facility's destruction credit when a deviation has occurred. The commenter suggested that facilities have the option to calculate an appropriate destruction credit for the hours of the excursion based on other available information.

Response: If a source has manually collected parameter data indicating that an emission capture system or control device was operating normally during a parameter monitoring system malfunction, these data could be used to support and document that the source was achieving the same overall control efficiency and the source would not have to assume zero-percent efficiency. If a source has data indicating the actual performance of an add-on emission capture system and control device (*e.g.*, percent capture measured at a reduced flow rate or percent destruction efficiency measured at reduced thermal oxidizer temperatures) during a deviation from operating limits or during a malfunction of the monitoring system, then the source may use the actual performance in determining compliance, provided the use of these data are approved by the Administrator. The final rule has been written to clarify that such data may be used rather than assuming that the efficiency is zero.

Comment: A commenter asserted that establishing a MACT floor (and monthly emission limits) based on the highest monthly average emission rates at the best (as determined on an annual basis) performing facilities would result in higher annual HAP emissions than the annual average emissions of the best performing plants. The commenter cited as an example the proposed MACT floor (and monthly emission limit) for the combined electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive application operations of 0.60 lbs/gal of applied coating solids, which the commenter asserted is substantially higher (reflective of a less stringent limit) than the annual average of the eight lowest emitting plants (0.48 lbs/gal of applied coating solids).

The commenter asserted that the same deficiencies affect EPA's proposed MACT floor for new and reconstructed sources, and noted that EPA used the peak monthly emissions of the lowest annual emitting source to establish a monthly average that is well above the actual annual emission level of the lowest emitting source. The commenter urged EPA to establish a MACT floor for new and existing sources that has both monthly and annual emission limits.

Response: The automobiles and light-duty trucks coated at each facility are coated in a variety of colors. This color variety is present not only among the topcoats, but also among the primer-surfacers. The make-up and content of each color varies. Each color, for example, has its own unique organic HAP content, VOC content, and volume solids content. The coating application system, and therefore transfer efficiency, may also vary among the families of coatings (*e.g.*, solid color basecoats and metallic color basecoats) used at a facility. The specific color mix produced varies from month-to-month. As a result of this variation in color mix, the organic HAP emission rate at a facility also varies from month-to-month.

We had monthly emission data upon which to base the standards. A monthly emission limit is appropriate and has been promulgated. Establishing a monthly emission limit based on annual emission rates would result in the best performing plants being out of compliance approximately 6 months per year. Such an emission limit would not appropriately account for monthly variation in color mix. The final standards reflect what is consistently achievable considering the typical variation in demand for particular colors of vehicles. Having both a monthly and an annual emission limit would be redundant and burdensome (on both facilities and enforcement agencies), and would not lead to additional emissions reductions. Actual annual emission rates associated with consistent achievement of the final monthly standards will be substantially lower than the monthly emission limits. Establishing a standard of 0.48 lb/gal of applied coating solids and requiring it to be met on an annual basis would not result in lower emissions than a standard of 0.60 lb/gal of applied coating solids which must be met each and every month.

Comment: A commenter noted the proposed NESHAP set limits of 0.01 lb of HAP per lb of material used for adhesive and sealer application and 0.01 lb of HAP per lb of material used for deadener. Based on the review of three permits, the commenter has determined the CAA section 112(g) value for adhesives and sealer application and the deadener operations is that none of the materials used shall contain any volatile HAP as defined by the suppliers' material safety data sheets (MSDS). It does not appear to the commenter that these facilities were included in the floor analysis.

The commenter encouraged EPA to ensure that these facilities were included in the database if they were operating 18 months prior to the proposal and they were operating during the base year for the floor database.

Response: The base year of the database used to determine the MACT floors for new and existing sources was 1997. These limits are based, in part, on the detection limits (and the precision and accuracy achievable at low concentrations) of available approved chemical analytical methods. The MSDS typically report concentrations of less than 0.01 lb noncarcinogenic HAP per lb material (less than 0.001 lb carcinogenic HAP per lb material) as zero, indicating that the limits suggested by the commenter are equivalent to those of the final rule. The final rule provides that Method 311 is presumed (subject to rebuttal) to take precedence over MSDS or other formulation data. Facilities may be unable to reliably demonstrate that coatings contain ''no volatile HAP'' by this method.

Comment: A commenter stated that regulations under section 112 of the CAA must include emission standards for each HAP that a category emits and that the proposed regulations failed to comply with that mandate. The commenter stated that even though the EPA states that automobile coating sources emit many different HAP, including metals such as lead, manganese, and chromium compounds, the Agency has proposed standards for only organic HAP.

Response: Most of the coatings used in this subcategory do not contain inorganic HAP. The only use of lead in coatings in this source category is in electrodeposition primers. None of this lead is emitted because these primers are applied by dip coating. Lead is being phased out of electrodeposition primers. For spray applied coatings, most of the inorganic HAP components of these coatings remain as solids in the dry coating film on the parts being coated, are collected by the circulating water under the spray booth floor grates, or are deposited on the walls, floor, and grates of the spray booths and other equipment in which they are applied. The waterwash systems which are present in all primer-surfacer and topcoat spraybooths reduce the amount of coating droplets, and thus inorganic HAP, emitted to the air. These controls have been in place for many years. Facilities cannot operate without these controls. Therefore, inorganic HAP emission levels are expected to be very low and have not been quantified. The EPA has no basis upon which to establish MACT for inorganic HAP, and the commenter has supplied no data in support of an emission limit. Including control requirements for waterwash systems in the final rule would not be expected to result in additional emission reductions and would only add to the regulatory burden on the industry.

Comment: A commenter claimed that the requirement to document that a source is in continuous compliance with work practices is confusing and should be modified and streamlined. Continuous documentation of compliance with the work practice plan could be difficult, at best, and appears to be unnecessary. Under the commenter's recommended language, continuous compliance with the work practices would be confirmed by the presence of the work practice plan and the documents used to verify performance of the work practice activities, (*i.e.*, operational or maintenance records, documented inspections or internal audits, third party certifications or similar practices).

Response: Continuous documentation is not required, rather the recordkeeping requirements of § 63.3130(n) call for documentation that you are implementing the plan on a continuous basis. The records cited by the commenter (*i.e.*, operational or maintenance records, documented inspections or internal audits) have been added to § 63.3130(n) of the final rule as examples of documentation that demonstrate you are implementing the plan on a continuous basis.

Comment: A commenter noted that the proposed NESHAP covered fewer operations within the source category than the CAA section 112(g) determinations completed to date. Additional operations covered by section 112(g) determinations include purge and cleanup operations for three facilities, foam and maintenance painting for two facilities, and sound dampening application. The commenter encouraged EPA to include these facilities in the database if they were operating 18 months prior to proposal and were operating during the base year for the floor database. The commenter feels that purge and cleanup operations, foam, and maintenance painting operations should be identified individually in the final rule or identified as part of a grouping of operations with an overall emission limit.

Response: While facilities provided extensive data on purge material usage to EPA in response to information collection requests (ICR), estimates of recovery of these materials were extremely variable, with facilities of similar operation estimating very different recoveries. These data were not reliable enough to establish MACT on a numerical basis. The EPA chose to limit emissions from these operations through work practices. Cleaning material usage data were also provided, however since (a) emissions from these materials are rarely controlled, (b) EPA has no reliable data on the controllability of cleaning operations, and (c) cleaning material usage is not well correlated with vehicle production, EPA chose to limit emissions from these operations through work practices. Foam is injected into body panel cavities primarily for sound deadening and is subject to the emission limit for deadeners. Industry representatives have indicated in recent discussions that, as far as they know there are no HAP emissions associated with foam. Deadener application (for sound control) is subject to a standard based on the reliably demonstratable composition of very low-HAP material. One facility reported the use of cavity wax (no HAP content data were available and the facility assumed that it resulted in essentially zero HAP emissions). We have excluded maintenance coating from the final rule. No data were available upon which to base a MACT floor for this operation.

Comment: A commenter stated that waterwash controls for paint spray booths that are designed for particulate control are being evaluated for VOC control. The commenter also stated that HAP are typically found in large quantities in water-based coatings. With the increased use of water-based coatings, and the requirement for site-specific parameter limits, facilities may want to use the waterwash control as the primary control for HAP. The commenter stated that no EPA test protocol has been designed to address field testing of a waterwash control system and requested that EPA provide industry and the regulatory agencies with either an approved testing protocol or a technical guidance document.

The commenter also stated that if this will be addressed as an ''alternate test method,'' it should be explicitly stated in the final rule and asked what parameter limits EPA envisions for a facility to monitor HAP removed by waterwash systems if capture credit is claimed.

Response: No facilities are presently using the spray booth waterwash as a VOC or organic HAP control device and no specific method for testing has been developed. If a facility wanted to use a device of this type to control HAP, the same methods in 40 CFR part 60, appendix A, presently used for oxidizers and adsorbers might be adapted for this purpose. Alternately, the test methods and operating parameter monitoring applicable to wet scrubbers or wastewater treatment might be adapted for this purpose. A source would be required to obtain approval of an alternate test procedure and monitoring approach of their choice under the General Provisions, if these data were to be used to demonstrate compliance.

Comment: A commenter stated that in the ''Rationale for Selecting the Proposed Standards'' portion of the preamble, EPA stated that five formats were considered for the allowable organic HAP emission limits from the affected sources. A limit of organic HAP emissions per unit of surface area was rejected based on the inconsistent basis of the surface area coated estimates by the different manufacturers. The commenter noted that EPA further stated that ''The data that we received were incomplete, and the methods of estimating vehicle surface areas varied widely.'' The commenter noted that all United States automobile manufacturers currently demonstrate compliance with their lbs of VOC per gal of applied coating solids limits by using the Auto Protocol. One of the essential components of the Auto Protocol is the surface area coated. The commenter submitted that, if EPA feels that the data are inconsistent and incomplete, then the Auto Protocol should be revised to correct this deficiency or disregarded altogether. Otherwise, the commenter recommends that the limits be re-evaluated using the most current, statistically acceptable data for surface area where appropriate.

Response: The Auto Protocol requires that surface areas of different vehicle types be determined in a manner that is consistent within the facility (so that material usage may be allocated to specific days and specific spray booths). A consistent approach has not been required from facility to facility, and it was not possible to reliably compare reported surface area data between different facilities.

C. Analytical Methods

Comment: A commenter noted that §§ 63.3151 and 63.3171(e) rely on Method 311 as one of the ways to determine the mass fraction of HAP for demonstrating initial compliance. The proposed rule also stipulated that if there is a ''disagreement'' between supplier or manufacturer information and the results from test methods, then the test method results take precedence. The commenter disagrees with the presumption that the test results are correct, and pointed out that there is considerable variability in the analytical test results even when Method 311 is run carefully. The commenter cited technical causes of variability including thermal stability, sample handling, reactivity of some coatings, gas chromatograph (GC) column selection, and the oven/column temperature profile. The commenter recommended that EPA establish a ''confidence limit'' of ±50 percent for analyses conducted in accordance with Method 311.

The commenter noted that in past MACT standards, such as the MACT for wood furniture, EPA has permitted sources to rebut test results. The commenter also recommended that EPA allow the use of formulation data for methanol, because in a coating with melamine resins, methanol may be generated by the temperature in the injection column of the GC. This methanol by-product would be recorded even though it is not present in the coating.

Response: We agree that a variety of analytical techniques (different columns, detectors, temperature programming, etc.) allowable within the broad framework of Method 311 may lead to inconsistent results if not optimized for the specific target analyte and background interferences specific to a particular coating. The final rule provides that in the event of any inconsistency between the Method 311 data obtained by the permitting agency and the formulation data used by the facility, or, between the Method 311 data obtained by the permitting agency and analytical data obtained by the facility, the Method 311 data obtained by the permitting agency shall govern (excluding HAP produced by chemical reaction in the analytical process), unless, after consultation, the facility demonstrates to the satisfaction of the enforcement authority that the facility's data are correct. Analyses of known formulations by Method 311 have been demonstrated to be far less variable than a ±50 percent confidence interval would imply. We have not set a specific tolerance level for this analysis. Facilities that experience problems with specific applications of Method 311 may choose to obtain statistical variance data to support an explanation of a discrepancy between Method 311 data and compositions obtained from formulation data or other sources.

Comment: The commenter recommended additional procedures to assure consistency when using Method 311 for purposes of complying with the final rule. The commenter suggested the following procedures to help assure that the testing performed by the enforcement agency is consistent with those tests run by the source (or coatings manufacturer): (1) The facility would provide to the applicable agency the determination of the proper test parameters to be used and the temperature at which the analysis should be performed, (2) the facility should have the option to divide any sample collected by the agency that implements and enforces the MACT standards, and (3) both the applicable control agency and the facility should be authorized to be present while sampling and/or testing under Method 311 is being conducted.

Response: The facility has the opportunity to provide any guidance to the permitting agency to assist in the chemical analysis of the coating, however, the final rule does not require the permitting agency to follow the guidance of the facility in cases where it disagrees. The facility has the opportunity to conduct parallel sampling of any coating material that the permitting agency samples; no change to the rule is necessary to permit this. It is not feasible to guarantee that a representative of the facility may witness the chemical analysis. Permitting agencies may use testing laboratories where scheduling is uncertain and samples may be split for different analyses which may take place in different labs (perhaps simultaneously).

D. Notifications, Reports, and Recordkeeping

Comment: A commenter noted that according to proposed § 63.3110(c), notification of compliance status is due within 30 days following the end of the initial compliance period. The commenter requested the 60-day time period specified in the General Provisions, § 63.9(h) for submittal of the compliance notification.

Response: The final rule has been written to allow 60 days from the end of the initial compliance period for submission of the notification of compliance status. We recognize that additional time may be necessary to confirm the accuracy of the methodology for calculating the emission rate in the initial compliance period.

Comment: A commenter noted that EPA has historically differentiated exceedences or excursions (now called deviations) from startup, shutdown, and malfunction events and has used this terminology in other MACT standards. Also, the recognition that they are different events is further evidenced by requiring two separate reports in previous standards: The periodic compliance report and the periodic startup, shutdown, malfunction report. The commenter acknowledged that filing a combined report saves time and resources and agrees with this as long as the deviation reporting section is distinct from the startup, shutdown, malfunction reporting section. The commenter recommended that EPA write the final rule to reflect that operations in accordance with SSMP are not deviations and are not reported as such.

Response: Proposed § 63.3163(h) provided that 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 SSMP. 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). According to § 63.6(e), any affected source must at all times meet the emission standard or comply with the SSMP.

E. Definitions

Comment: Commenter submits that the definition of ''initial startup'' does not accurately describe what constitutes the startup of a new source and recommended that the phrase ''the first time equipment is brought online in a facility'' in the proposed definition be written to ''the first time a salable product is produced.'' Otherwise the term would include periods that are not representative of normal operation.

Response: We agree with the commenter that periods of equipment testing and calibration prior to the time that production is commenced may not be representative of the emissions reductions and control device performance achievable in normal operation. The definition of ''initial startup'' in the final rule has been written to refer to the first time a salable product is coated.

Comment: The commenter stated that the term ''container'' is used repeatedly throughout the proposed rule and that the rule covers ''all storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored and mixed.'' It is not clear whether the term container would include tanks used to store certain solvents and coatings.

Response: A definition of container has been added to the final rule, covering coatings, solvents, and cleaning materials.

F. Amendment of RCRA Rule

Comment: A commenter noted that EPA states that currently air emissions from the collection, transmission, and storage of purged paint and solvent at these sources are regulated under RCRA. However, in its proposed rule, EPA exempts these wastes from RCRA and transfers the regulation under the CAA. The EPA further explains that ''this exemption is considered to be less stringent than existing RCRA regulations.'' The EPA also proposes to establish work practice standards to control these emissions rather than numeric emission standards.

The commenter submits that the CAA mandates floors that reflect ''the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emissions information). ''Also, EPA may only propose a work practice standard MACT if the Agency demonstrates that it is ''not feasible to prescribe or enforce an emission standard.'' The commenter asserts that EPA does not demonstrate it is infeasible to prescribe or enforce an emissions standard for the collection, transmission, and storage of purged paint and solvent and thus, the proposed rule is unlawful. Also, EPA fails to explain whether existing sources subject to RCRA are reducing their HAP emissions and, if so, whether the existing RCRA requirements could serve as the basis for establishing a MACT floor. Finally, the commenter claims the Agency's proposal is arbitrary and capricious because it fails to explain the consequences of transferring regulatory authority from RCRA to CAA, how the shift in regulatory authority results in less stringency, or identify the Agency's legal authority to exempt HAP emissions from RCRA.

The commenter urges EPA to establish a MACT floor that considers the emissions reductions at those sources currently subject to RCRA and properly determine whether an emission standard, instead of work practice standard, is appropriate for these sources.

Response: The NESHAP address both the capture of purged materials and the transport and storage of purged materials after they have been captured. This is more comprehensive than the existing RCRA rule being amended which only addresses the transport and storage of purged materials after they have been captured. The requirements of the final NESHAP are, therefore, at least as effective as the requirements of the existing RCRA rule. The language in the preamble to the proposed rule cited by the commenter was not an assessment of the effect of the proposed NESHAP on activities covered by the existing RCRA rule, nor was it a comparison of the proposed NESHAP and the existing RCRA rule.

The language cited by the commenter was characterizing the proposed revision to the RCRA rule as less stringent than the existing RCRA rule. This comparison was made in the context of discussing whether States would be required to adopt the revised RCRA rule. We consider an exemption from RCRA rules to be less stringent than the retention of those rules. Since it would be less stringent, States would not be required to adopt the revised rule in their RCRA programs (RCRA section 3009). If we had considered the revision to be more stringent, States then would be required to adopt and seek authorization for those provisions (section 3006 of RCRA).

G. Risk Based Approaches

The preamble to the proposed rule requested comment on whether there might be further ways to structure the final rule to focus on the facilities which pose significant risks and avoid the imposition of high costs on facilities that pose little risk to public health and the environment. Specifically, we requested comment on the technical and legal viability of two risk-based approaches: (1) an applicability cutoff for threshold pollutants under the authority of CAA section 112(d)(4); and (2) subcategorization and delisting under the authority of CAA sections 112(c)(1) and 112(c)(9). We indicated that we would evaluate all comments before determining whether either approach would be included in the final rule. Numerous commenters submitted detailed comments on these risk-based approaches. These comments are summarized in the Response-to-Comments document.

Based on our consideration of the comments received and other factors, we have decided not to include the risk-based approaches in today's final rule. The risk-based approaches described in the proposed rule and addressed in the comments we received raise a number of complex issues. In addition, we are under time pressure to complete the final rule, because the statutory deadline for promulgation has passed and a deadline suit has been filed against EPA. (See Sierra Club v. Whitman, Civil Action No. 1:01CV01537 (D.D.C.).) Given the range of issues raised by the risk-based approaches and the need to promulgate a final rule expeditiously, we feel that it is appropriate not to include any risk-based approaches in today's final rule. Nonetheless, we expect to continue to consider risk-based approaches in connection with other NESHAP where we have described and solicited comment on such approaches. This determination does not preclude future consideration of similar or other risk-based approaches for this source category in the future.

V. Summary of Environmental, Energy, and Economic Impacts

A. What Are the Air Impacts?

The final rule will decrease HAP emissions from automobile and light-duty truck surface coating facilities from an estimated 10,000 tpy to 4,000 tpy. This represents a decrease of 6,000 tpy or 60 percent. The final rule will also decrease VOC by approximately 12,000 tpy to 18,000 tpy. These values were calculated in comparison to baseline emissions reported to EPA by individual facilities for 1996 or 1997.

B. What Are the Cost Impacts?

The estimated total capital costs of compliance, including the costs of monitors, is $670 million. This will result in an additional annualized capital cost of $75 million.

The projected total annual costs, including capital recovery, operating costs, monitoring, recordkeeping, and reporting is $154 million per year.

The cost analysis assumed that each existing facility will use, in the order presented, as many of the following four steps as necessary to meet the emission limit. First, if needed, facilities that do not already control their electrodeposition primer bake oven exhaust will install and operate such control at an average cost of $8,200 per ton of HAP controlled. Next, if needed, facilities will reduce the HAP-to-VOC ratio of their primer-surfacer and topcoat materials to 0.3 from 1.0 at an average cost of $540 per ton of HAP controlled. Finally, if needed, facilities will control the necessary volume of primer-surfacer and topcoat spray booth exhaust gas at an average cost of $40,000 per ton of HAP controlled. For all four steps combined, the average cost is about $25,000 per ton of HAP controlled.

New facilities and new paint shops will incur little additional cost to meet the emission limit. These facilities will already include bake oven controls and partial spray booth exhaust controls for VOC control purposes. New facilities may need to make some downward adjustment in the HAP content of their materials to meet the emission limit.

We received no detailed information on these cost elements in the public comments. Therefore, we have not changed the cost estimates since proposal.

C. What Are the Economic Impacts?

We prepared an economic impact analysis (EIA) to evaluate the primary and secondary impacts the proposed rule would have on the producers and consumers of automobiles and light-duty trucks, and society as a whole. The analysis was conducted to determine the economic impacts associated with the proposed rule at both the market and industry levels. Overall, the analysis indicated a minimal change in vehicle prices and production quantities. None of the changes made since proposal have resulted in changes in costs, so the EIA prepared for the proposed rule has not been updated for the final rule.

Based on the estimated compliance costs associated with the final rule and the predicted changes in prices and production in the affected industry, the estimated annual social cost of the rule is projected to be $161 million (1999 dollars). The social costs take into account changes in behavior by producers and consumers due to the imposition of compliance costs. For this reason the estimated annual social costs differ from the estimated annual engineering costs of $154 million. Producers, in aggregate, are expected to bear $152 million annually in costs while the consumers are expected to incur the remaining $10 million in social costs associated with the final rule.

The economic model projects an aggregate price increase for the modeled vehicle classes of automobiles and light-duty trucks to be less than 1/100th of 1 percent as a result of the final standards. This represents at most an increase in price of $3.00 per vehicle. The model also projects that directly affected producers will reduce total production by approximately 1,400 vehicles per year. This represents approximately 0.01 percent of the 12.7 million vehicles produced by the potentially affected plants in 1999, the baseline year of analysis.

In terms of industry impacts, the automobile and light-duty truck manufacturers are projected to experience a decrease in pre-tax earnings of about 1 percent or $152 million. In comparison, total pre-tax earnings for the affected plants included in the analysis exceeded $14 billion in 1999. The reduction in pre-tax earnings of 1 percent reflects an increase in production costs and a decline in revenues earned from a reduction in the quantity of vehicles sold. Through the market and industry impacts described above, the final rule will lead to a redistribution of profits within the industry. Some facilities (28 percent) are projected to experience a profit increase under the final rule; however, the majority (72 percent) that continue operating are projected to lose profits. No facilities are projected to close due to the final rule.

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

Solid waste and water impacts of the final rule are expected to be negligible. Capture of additional organic HAP-laden streams and control of these streams with regenerative thermal oxidizers is expected to require an additional 180 million kilowatt hours per year and an additional 4.9 billion standard cubic feet per year of natural gas.

VI. How Will the Amendments to 40 CFR Parts 264 and 265, Subparts BB, of the Hazardous Waste Regulations Be Implemented in the States?

A. Applicability of Federal Rules in Authorized States

Under section 3006 of the RCRA, EPA may authorize a qualified State to administer and enforce a hazardous waste program within the State in lieu of the Federal program and to issue and enforce permits in the State. A State may receive authorization by following the approval process described under 40 CFR 271.21. See 40 CFR part 271 for the overall standards and requirements for authorization. The EPA continues to have independent authority to bring enforcement actions under RCRA sections 3007, 3008, 3013, and 7003. An authorized State also continues to have independent authority to bring enforcement actions under State law.

After a State receives initial authorization, new Federal requirements promulgated under RCRA authority existing prior to the 1984 Hazardous and Solid Waste Amendments (HSWA) do not apply in that State until the State adopts and receives authorization for equivalent State requirements. In contrast, under RCRA section 3006(g) (42 U.S.C. 6926(g)), new Federal requirements and prohibitions promulgated pursuant to HSWA provisions take effect in authorized States at the same time that they take effect in unauthorized States. As such, EPA carries out HSWA requirements and prohibitions in authorized States, including the issuance of new permits implementing those requirements, until EPA authorizes the State to do so.

Authorized States are required to modify their programs when EPA promulgates Federal requirements that are more stringent or broader in scope than existing Federal requirements. The RCRA section 3009 allows the States to impose standards more stringent than those in the Federal program. (See also 40 CFR 271.1(i)). Therefore, authorized States are not required to adopt Federal regulations, both HSWA and non-HSWA, that are considered less stringent than existing Federal requirements.

B. Authorization of States for Today's Amendments

Currently, the air emissions from the collection, transmission, and storage of captured purged paint and solvent at automobile and light-duty truck assembly plants are regulated under the authority of RCRA (see 40 CFR parts 264 and 265, subparts BB). Today's amendments will exempt these wastes from regulation under RCRA and defer regulation to the final NESHAP. This exemption is considered to be less stringent than the existing RCRA regulations and, therefore, States are not required to adopt and seek authorization for today's exemption. However, EPA strongly encourages States to adopt today's amended RCRA provisions and seek authorization for them to prevent duplication with the NESHAP.

VII. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

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

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

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

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

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

Pursuant to the terms of Executive Order 12866, it has been determined that the final rule is a ''significant regulatory action,'' because it could have an annual impact on the economy of over $100 million. As such, this action was submitted to OMB for review. Changes made in response to OMB suggestions or recommendations will be documented in the public record.

B. Paperwork Reduction Act

The information collection requirements in the final rule have been submitted for approval to OMB under the Paperwork Reduction Act, 44 U.S.C. 3501, *et seq.* The information collection requirements are not enforceable until OMB approves them.

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

The final standards do not require any notifications or reports beyond those required by the General Provisions. The recordkeeping requirements require only the specific information needed to determine compliance.

The annual monitoring, reporting, and recordkeeping burden for this collection (averaged over the first 3 years after the effective date of the final rule) is estimated to be 33,436 labor hours per year at a total annual cost of $982,742. This estimate includes a one-time performance test and report (with repeat tests where needed) for those affected sources that choose to comply through the installation of new capture systems and control devices; one-time purchase and installation of CPMS for those affected sources that choose to comply through the installation of new capture systems and control devices; preparation and submission of work practice plans; one-time submission of a SSMP with semiannual reports for any event when the procedures in the plan were not followed; semiannual excess emission reports; maintenance inspections; notifications; and recordkeeping. There are no additional capital/startup costs associated with the monitoring requirements over the 3-year period of the ICR. The monitoring related operation and maintenance costs over this same period are estimated at $7,000.

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. When this ICR is approved by OMB, the Agency will publish a technical amendment to 40 CFR part 9 in the **Federal Register** to display the OMB control number for the approved information collection requirements contained in the final rule.

C. Regulatory Flexibility Act

The EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with the final rule. For purposes of assessing the impacts of today's rule on small entities for the automobile and light-duty truck surface coating industry, a small entity is defined as: (1) A small business according to Small Business Administration size standards for companies identified by NAICS codes 33611 (automobile manufacturing) and 33621 (light-duty truck and utility vehicle manufacturing) with 1,000 or fewer employees; (2) a small governmental jurisdiction that is a government of a city, county, town, school district, or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field. Based on the above definition, there are no small entities presently engaged in automobile and light-duty truck surface coating.

After considering the economic impacts of the final rule on small entities, EPA has concluded that this action will not have a significant economic impact on a substantial number of small entities. This is based on the observation that the final rule affects no small entities since none are engaged in the surface coating of automobiles and light-duty trucks.

D. Unfunded Mandates Reform Act

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 the aggregate, or to the private sector, of $100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires 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 the final rule contains 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. Specifically, the final rule may result in such expenditures by the private sector. Accordingly, EPA has prepared under section 202 of the UMRA a written statement (titled Unfunded Mandates Reform Act Analysis for the Automobiles and Light-Duty Trucks Coating NESHAP) which is summarized below.

Statutory Authority

The statutory authority for the final rule is section 112 of the CAA, enacted to reduce nationwide air toxics emissions. In compliance with UMRA section 205(a), we identified and considered a reasonable number of regulatory alternatives. Additional information on the costs and environmental impacts of these regulatory alternatives is presented in the docket. The regulatory alternative upon which the final rule is based represents the MACT floor for automobile and light-duty truck coating operations and, as a result, is the least costly and least burdensome alternative.

Social Costs and Benefits

The regulatory impact analysis prepared for the final rule, including EPA's assessment of costs and benefits, is detailed in the ''Regulatory Impact Analysis for the Automobiles and Light-Duty Trucks Coating NESHAP'' in the docket. Based on the estimated compliance costs associated with the rule and the predicted changes in prices and production in the affected industry, the estimated annual social costs of the final rule is projected to be $161 million (1999 dollars).

It is estimated that 5 years after implementation of the final rule, HAP will be reduced from 10,000 tpy to 4,000 tpy. This represents a 60 percent reduction (6,000 tpy) of toluene, xylene, glycol ethers, MEK, MIBK, ethylbenzene, and methanol. Exposure to HAP can result in the incidence of respiratory irritation, chest constriction, gastric irritation, eye, nose, and throat irritation, as well as neurological and blood effects, including fatigue, nausea, tremor, and anemia. Based on scientific studies conducted over the past 20 years, EPA has classified EGBE as a ''possible human carcinogen,'' while ethylbenzene, MEK, toluene, and xylenes are considered by the Agency as ''not classifiable as to human carcinogenicity.'' The studies upon which these classifications are based have worked toward the determination of a relationship between exposure to these HAP and the onset of cancer.

Monetization of the benefits of reductions in cancer incidences requires several important inputs, including central estimates of cancer risks, estimates of exposure to carcinogenic HAP, and estimates of the value of an avoided case of cancer (fatal and non-fatal). Currently, EPA relies on unit risk factors (URF) developed through risk assessment procedures. The unit risk factor is a quantitative estimate of the carcinogenic potency of a pollutant, often expressed as the probability of contracting cancer from a 70-year lifetime continuous exposure to a concentration of one $\mu g/m^3$ of a pollutant. These URF are designed to be conservative, and as such, are more likely to represent the high end of the distribution of risk rather than a best or most likely estimate of risk.

In a typical analysis of the expected health benefits of a regulation (*e.g.*, ''Regulatory Impact Analysis: Heavy-Duty Engine and Highway Diesel Fuel Sulfur Control Requirements'', December 2000, EPA420–R–00–026), health effects are estimated by applying changes in pollutant concentrations to best estimates of risk obtained from epidemiological studies. As the purpose of a benefit analysis is to describe the benefits most likely to occur from a reduction in pollution, use of high-end, conservative risk estimates will lead to a biased estimate of the expected benefits of the final rule. While we used high-end risk estimates in past analyses, recent advice from the EPA Science Advisory Board (SAB) and internal methods reviews have suggested that we avoid using high-end estimates in current analyses. For these reasons, we will not attempt to quantify the health benefits of reductions in HAP unless best estimates of risks are available. Also, limited input data on noncancer effects associated with exposure to these HAP do not allow us to quantify the benefits from risk reductions of these effects. Thus, we are unable to provide a monetized estimate of the benefits of HAP reduced by the final rule at this time. The EPA is working with the SAB to develop better methods for analyzing the benefits of reductions in HAP.

We conducted a rough risk assessment which indicated that both the baseline level of adverse health effects and the effects of the final rule on human health are small. This rough risk assessment is available in the docket. The risk estimates from this rough assessment were based on typical facility configurations (*i.e.*, model plants) and are subject to significant uncertainties.

The rough risk assessment indicated that currently there may be up to 100 people exposed to HAP above reference concentration (RfC) levels as a result of emissions from these facilities. The emission reductions required by the final rule would bring all, or almost all, of these people to exposures below the RfC. The rough risk assessment also indicated that currently no one would be exposed to a lifetime cancer risk above 10 in a million and perhaps 6,000 people are exposed to a lifetime cancer risk above 1 in a million as a result of emissions from these facilities. The final rule is not expected to have any significant impact on cancer risk. A more refined risk assessment will be performed as part of the residual risk analysis which is required to occur within 8 years after promulgation of the final rule.

The control technology to reduce the level of HAP emitted from automobile and light-duty truck coating operations is also expected to reduce emissions of criteria pollutants, particularly VOC. Specifically, the final rule achieves a 12,000 to 18,000 tpy reduction in VOC. This represents a significant reduction of VOC emissions from these sources, but less than 1 percent of national VOC emissions. The VOC is a precursor to tropospheric (ground-level) ozone and a small percentage also precipitate in the atmosphere to form particulate matter (PM).

Although we were not able to estimate the monetary value associated with VOC reductions, the health and welfare effects from exposure to ground-level ozone are well documented. Elevated concentrations of ground-level ozone primarily may result in acute respiratory-related impacts such as coughing and difficulty breathing. Chronic exposure to ground-level ozone may lead to structural damage to the lungs, alterations in lung capacity and breathing frequency, increased sensitivity of airways, eye, nose, and throat irritation, malaise, and nausea. Adverse ozone welfare effects include damage to agricultural crops, ornamental plants, and materials damage. Though only a small fraction of VOC forms PM, exposure to PM can result in human health and welfare effects, including excess deaths, morbidity, soiling and materials damage, as well as reduced visibility.

To the extent that reduced exposure to HAP and VOC reduces the instances of the above described health effects, benefits from the final rule will be realized by society through an improvement in environmental quality.

Future and Disproportionate Costs

The UMRA requires that we estimate, where accurate estimation is reasonably feasible, future compliance costs imposed by the final rule and any disproportionate budgetary effects. We do not feel that there will be any disproportionate budgetary effects of the final rule on any particular areas of the country, State, or local governments, types of communities (*e.g.*, urban, rural), or particular industry segments.

Effects on the National Economy

The UMRA requires that we estimate the effect of the rule on the national economy. To the extent feasible, we must estimate the effect on productivity, economic growth, full employment, creation of productive jobs, and international competitiveness of United States goods and services if we determine that accurate estimates are reasonably feasible and that such effect is relevant and material.

The nationwide economic impact of the final rule is presented in the EIA. That analysis provides estimates of the effect of the rule on some of the categories mentioned above.

The estimated direct cost to the automobile and light-duty truck manufacturing industry of compliance with the final rule is approximately $154 million (1999 dollars) annually. Indirect costs of the final rule to industries other than the automobile and light-duty truck manufacturing industry, governments, tribes, and other affected entities are expected to be minor. The final rule is expected to have little impact on domestic productivity, economic growth, full employment, energy markets, creation of productive jobs, and the international competitiveness of United States goods and services.

Consultation With Government Officials

Although the final rule does not affect any State, local, or tribal governments, we have consulted with State and local air pollution control officials. The EPA has held meetings on the final rule with many of the stakeholders from numerous individual companies, environmental groups, consultants and vendors, and other interested parties. The EPA has added materials to the docket to document these meetings.

E. Executive Order 13132: Federalism

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

The final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. Pursuant to the terms of Executive Order 13132, it has been determined that the final rule does not have ‘‘federalism implications’’ because it does not meet the necessary criteria. Thus, Executive Order 13132 does not apply to the final rule.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

Executive Order 13175 (65 FR 67249, November 9, 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.’’ The final rule does not have tribal implications, as specified in Executive Order 13175. The EPA is not aware of tribal governments that own or operate automobile and light-duty truck surface coating facilities. Thus, Executive Order 13175 does not apply to the final rule.

G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

Executive Order 13045 (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. The final rule is not subject to Executive Order 13045 because it is based on technology performance and not on health or safety risks.

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

The final rule is not a ‘‘significant energy action’’ as defined in Executive Order 13211 (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.

The final rule affects the automobile and light-duty truck manufacturing industries. There is no crude oil, fuel, or coal production from these industries, therefore there is no direct effect on such energy production related to implementation of the final rule. In addition, the cost of energy distribution will not be affected by the final rule since the rule does not affect energy distribution facilities.

The final rule is projected to trigger an increase in energy use due to the installation and operation of additional pollution control equipment. The estimated increase in energy consumption is 4.9 billion standard cubic feet per year of natural gas and 180 million kilowatt hours per year of electricity nationwide. The nationwide cost of this increased energy consumption is estimated at $26 million per year.

The increase in energy costs does not reflect changes in energy prices, but rather an increase in the quantity of electricity and natural gas demanded. Given that the existing electricity generation capacity in the United States was 785,990 megawatts in 1999[1] and that 23,755 billion cubic feet of natural gas was produced domestically in the same year,[2] the final rule is not likely to have any significant adverse impact on energy prices, distribution, availability, or use.

I. National Technology Transfer and Advancement Act

As noted in the proposed rule, 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 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) that are developed or adopted by VCS bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable VCS.

The final rule involves technical standards. The EPA cites the following standards in the final rule: 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 through 204F and 311. The search and review results have been documented and are placed in Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22).

The eight VCS described below were identified as acceptable alternatives to EPA test methods for the purposes of the final rule.

The VCS ANSI/ASME PTC 19.10–1981, ''Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus],'' is cited in the final rule for its manual method for measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas. This part of ANSI/ASME PTC 19.10–1981, Part 10, is an acceptable alternative to Method 3B.

The two VCS, ASTM D2697–86 (Reapproved 1998), ''Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings,'' and ASTM D6093–97 (Reapproved 2003), ''Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer,'' are cited in the final rule as acceptable alternatives to EPA Method 24 to determine the volume solids content of coatings. Currently, EPA Method 24 does not have a procedure for determining the volume of solids in coatings. The two VCS augment the procedures in Method 24, which currently states that volume solids content be calculated from the coating manufacturer's formulation. In addition, we are separately specifying the use of ASTM D1475–98 (Reapproved 2003) for measuring the density of each coating, thinner and/or additive, and cleaning material.

The VCS, ASTM D5066–91 (Reapproved 2001), ''Standard Test Method for Determination of the Transfer Efficiency Under Production Conditions for Spray Application of Automotive Paints-Weight Basis,'' is cited in the final rule as an acceptable procedure to measure transfer efficiency of spray coatings. Currently, no EPA method is available to measure transfer efficiency.

The two VCS, ASTM D6266–00a, ''Test Method for Determining the Amount of Volatile Organic Compound (VOC) Released from Waterborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement),'' and ASTM D5087–02 (Reapproved 1994), ''Standard Test Method for Determining Amount of Volatile Organic Compound (VOC) Released from Solventborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement),'' are cited in the final rule as acceptable procedures to measure solvent loading (related to capture efficiency) for the heated flash zone for waterborne basecoats and for bake ovens. Currently, no EPA method is available to measure solvent loading for automobile and light-duty truck coatings. In addition, ASTM D5965–02, ''Standard Test Methods for Specific Gravity of Coating Powders,'' is specified in the rule as a method to determine the volume solids of powder coatings.

Six VCS: ASTM D1475–90, ASTM D2369–95, ASTM D3792–91, ASTM D4017–96a, ASTM D4457–85 (Reapproved 1991), and ASTM D5403–93 are already incorporated by reference (IBR) in EPA Method 24. Five VCS: ASTM D1979–91, ASTM D3432–89, ASTM D4747–87, ASTM D4827–93, and ASTM PS9–94 are IBR in EPA Method 311.

In addition to the VCS included in the final rule, the search for emissions measurement procedures identified 14 other VCS. The EPA determined that 11 of these 14 standards identified for measuring emissions of the HAP or surrogates subject to emission standards in the final rule were impractical alternatives to EPA test methods. Therefore, EPA did not adopt these standards for this purpose. (See Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22 for further information on the methods.)

Sections 63.3161 and 63.3166 of the final rule list the EPA testing methods included in the final rule. Under § 63.7(f) of subpart A 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.

J. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801, *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing the final rule and other required information to the United States Senate, the United States House of Representatives, and the Comptroller General of the United States prior to publication of the final

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[1] U.S. Department of Energy. 1999. Electric Power Annual, Volume I. Table A2: Industry Capability by Fuel Source and Industry Sector, 1999 and 1998 (Megawatts).

[2] U.S. Department of Energy. 1999. Natural Gas Annual. Table 1: Summary Statistics for Natural Gas in the United States, 1995–1999.

rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is a major rule as defined by 5 U.S.C. 804(2). The final rule will be effective 60 days after April 26, 2004.

List of Subjects in 40 CFR Part 63

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

Dated: February 26, 2004.

Michael O. Leavitt,

Administrator.

■ For the reasons stated in the preamble, title 40, chapter I, parts 63, 264, and 265 of the Code of Federal Regulations is amended as follows:

PART 63—[AMENDED]

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

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

Subpart A—[Amended]

■ 2. Section 63.14 is amended by adding and reserving new paragraph (b)(35), adding new paragraphs (b)(36), (37), and (38), and revising paragraphs (b)(24), (25), (26), and (32), and (i)(3) to read as follows:

§ 63.14 Incorporations by reference

* * * * *

(b) * * *

(24) ASTM D2697–86 (Reapproved 1998), ‘‘Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings,’’ IBR approved for §§ 63.3161(f)(1), 63.3521(b)(1), 63.3941(b)(1), 63.4141(b)(1), 63.4741(b)(1), 63.4941(b)(1), and 63.5160(c).

(25) ASTM D6093–97 (Reapproved 2003), ‘‘Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer,’’ IBR approved for §§ 63.3161(f)(1), 63.3521(b)(1), 63.3941(b)(1), 63.4141(b)(1), 63.4741(b)(1), 63.4941(b)(1), and 63.5160(c).

(26) ASTM D1475–98 (Reapproved 2003), ‘‘Standard Test Method for Density of Liquid Coatings, Inks, and Related Products,’’ IBR approved for §§ 63.3151(b), 63.3941(b)(4), 63.3941(c), 63.3951(c), 63.4141(b)(3), 63.4141(c), and 63.4551(c).

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(32) ASTM D5965–02, ‘‘Standard Test Methods for Specific Gravity of Coating Powders,’’ IBR approved for §§ 63.3151(b) and 63.3951(c).

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(35) [Reserved]

(36) ASTM D5066–91 (Reapproved 2001), ‘‘Standard Test Method for Determination of the Transfer Efficiency Under Production Conditions for Spray Application of Automotive Paints-Weight Basis,’’ IBR approved for § 63.3161(g).

(37) ASTM D5087–02, ‘‘Standard Test Method for Determining Amount of Volatile Organic Compound (VOC) Released from Solventborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement),’’ IBR approved for §§ 63.3165(e) and 63.3176, appendix A.

(38) ASTM D6266–00a, ‘‘Test Method for Determining the Amount of Volatile Organic Compound (VOC) Released from Waterborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement),’’ IBR approved for § 63.3165(e).

* * * * *

(i) * * *

(3) ANSI/ASME PTC 19.10–1981, ‘‘Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus],’’ IBR approved for §§ 63.865(b), 63.3166(a)(3), 63.3360(e)(1)(iii), 63.3545(a)(3), 63.3555(a)(3), 63.4166(a)(3), 63.4362(a)(3), 63.4766(a)(3), 63.4965(a)(3), 63.5160(d)(1)(iii), 63.9307(c)(2), and 63.9323(a)(3).

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■ 3. Part 63 is amended by adding subpart IIII to read as follows:

Subpart IIII—National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks

Sec.

What This Subpart Covers

63.3080 What is the purpose of this subpart?
63.3081 Am I subject to this subpart?
63.3082 What parts of my plant does this subpart cover?
63.3083 When do I have to comply with this subpart?

Emission Limitations

63.3090 What emission limits must I meet for a new or reconstructed affected source?
63.3091 What emission limits must I meet for an existing affected source?
63.3092 How must I control emissions from my electrodeposition primer system if I want to comply with the combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive emission limit?
63.3093 What operating limits must I meet?
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General Compliance Requirements

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Subpart IIII—National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks

What This Subpart Covers

§ 63.3080 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for facilities which surface coat new automobile or new light-duty truck bodies or body parts for new automobiles or new light-duty trucks. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

§ 63.3081 Am I subject to this subpart?

(a) Except as provided in paragraph (c) of this section, the source category to which this subpart applies is automobile and light-duty truck surface coating.

(b) You are subject to this subpart if you own or operate a new, reconstructed, or existing affected source, as defined in § 63.3082, that is located at a facility which applies topcoat to new automobile or new light-duty truck bodies or body parts for new automobiles or new light-duty trucks, 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, surface preparation, or cleaning activities that meet the criteria of paragraph (c)(1) or (2) of this section.

(1) Surface coating subject to any other NESHAP in this part as of June 25, 2004 except as provided in § 63.3082(c).

(2) Surface coating that occurs during research or laboratory activities or that is part of janitorial, building, and facility maintenance operations, including maintenance spray booths used for painting production equipment, furniture, signage, etc., for use within the plant.

§ 63.3082 What parts of my plant does this subpart cover?

(a) This subpart applies to each new, reconstructed, and existing affected source.

(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 new automobile or new light-duty truck bodies, or body parts for new automobiles or new light-duty trucks:

(1) All coating operations as defined in § 63.3176.

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

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

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

(c) In addition, you may choose to include in your affected source, and thereby make subject to the requirements of this subpart, any coating operations, as defined in § 63.3176, which would otherwise be subject to the NESHAP for surface coating of miscellaneous metal parts and products (subpart MMMM of this part) or surface coating of plastic parts and products (subpart PPPP of this part) which apply coatings to parts intended for use in new automobiles or new light-duty trucks or as aftermarket repair or replacement parts for automobiles or light-duty trucks.

(d) For all coating operations which you choose to add to your affected source pursuant to paragraph (c) of this section:

(1) All associated storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored or mixed; manual and automated equipment and containers used for conveying coatings, thinners, and cleaning materials; and storage containers and manual and automated equipment and containers used for conveying waste materials are also included in your affected source and are subject to the requirements of this subpart.

(2) All cleaning and purging of equipment associated with the added surface coating operations is subject to the requirements of this subpart.

(3) You must identify and describe all additions to the affected source made pursuant to paragraph (c) of this section in the initial notification required in § 63.3110(b).

(e) An affected source is a new affected source if you commenced its construction after December 24, 2002, and the construction is of a completely new automobile and light-duty truck assembly plant where previously no automobile and light-duty truck assembly plant had existed, a completely new automobile and light-duty truck paint shop where previously no automobile and light-duty truck paint shop had existed, or a new automobile and light-duty truck topcoat operation where previously no automobile and light-duty truck topcoat operation had existed.

(f) An affected source is reconstructed if its paint shop undergoes replacement of components to such an extent that:

(1) The fixed capital cost of the new components exceeded 50 percent of the fixed capital cost that would be required to construct a new paint shop; and

(2) It was technologically and economically feasible for the reconstructed source to meet the relevant standards established by the Administrator pursuant to section 112 of the Clean Air Act (CAA).

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

§ 63.3083 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 demonstrations described in §§ 63.3150, 63.3160, and 63.3170.

(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 June 25, 2004, the compliance date is June 25, 2004.

(2) If the initial startup of your new or reconstructed affected source occurs after June 25, 2004, the compliance date is the date of initial startup of your affected source.

(b) For an existing affected source, the compliance date is April 26, 2007.

(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 compliance date is the date of initial startup of the affected source or June 25, 2004, 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 April 26, 2007, whichever is later.

(d) You must meet the notification requirements in § 63.3110 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

§ 63.3090 What emission limits must I meet for a new or reconstructed affected source?

(a) Except as provided in paragraph (b) of this section, you must limit combined organic HAP emissions to the atmosphere from electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) to no more than 0.036 kilogram (kg)/liter (0.30 pound (lb)/gallon (gal)) of coating solids deposited during each month, determined according to the requirements in § 63.3161.

(b) If you meet the operating limits of § 63.3092(a) or (b), you must either meet the emission limits of paragraph (a) of this section or limit combined organic HAP emissions to the atmosphere from primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) to no more than 0.060 kg/liter (0.50 lb/gal) of applied coating solids used during each month, determined according to the requirements in § 63.3171. If you do not have an electrodeposition primer system, you must limit combined organic HAP emissions to the atmosphere from primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) to no more than 0.060 kg/liter (0.50 lb/gal) of applied coating solids used during each month, determined according to the requirements in § 63.3171.

(c) You must limit average organic HAP emissions from all adhesive and sealer materials other than materials used as components of glass bonding systems to no more than 0.010 kg/kg (lb/lb) of adhesive and sealer material used during each month.

(d) You must limit average organic HAP emissions from all deadener materials to no more than 0.010 kg/kg (lb/lb) of deadener material used during each month.

(e) For coatings and thinners used in coating operations added to the affected source pursuant to § 63.3082(c):

(1) Adhesive and sealer materials that are not components of glass bonding systems are subject to and must be included in your demonstration of compliance for paragraph (c) of this section.

(2) Deadener materials are subject to and must be included in your demonstration of compliance for paragraph (d) of this section.

(3) All other coatings and thinners are subject to and must be included in your demonstration of compliance for paragraphs (a) or (b) of this section.

(f) If your facility has multiple paint lines (*e.g.*, two or more totally distinct paint lines each serving a distinct assembly line, or a facility with two or more paint lines sharing the same paint kitchen or mix room), then for the operations addressed in paragraphs (a) and (b) of this section:

(1) You may choose to use a single grouping under paragraph (a) of this section for all of your electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations.

(2) You may choose to use a single grouping under paragraph (b) of this section for all of your primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations as long as each of your electrodeposition primer systems meets the operating limits of § 63.3092(a) or (b).

(3) You may choose to use one or more groupings under paragraph (a) of this section for the electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations from one or more of your paint lines; and one or more groupings under paragraph (b) of this section for the primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations from the remainder of your paint lines, as long as each electrodeposition primer system associated with each paint line you include in a grouping under paragraph (b) of this section meets the operating limits of § 63.3092(a) or (b). For example, if your facility has three paint lines, you may choose to use one grouping under paragraph (a) of this section for two of the paint lines; and a separate grouping under paragraph (b) of this section for the third paint line, as long as the electrodeposition primer system associated with the paint line you include in the grouping under paragraph (b) of this section meets the operating limits of § 63.3092(a) or (b). Alternatively, you may choose to use one grouping for two of the paint lines and a separate grouping of the same type for the third paint line. Again, each electrodeposition primer system associated with each paint line you include in a grouping under paragraph (b) of this section must meet the operating limits of § 63.3092(a) or (b).

(4) You may choose to consider the electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations from each of your paint lines as a separate grouping under either paragraph (a) or paragraph (b) of this section. The electrodeposition primer system associated with each paint line you choose to consider in a grouping under paragraph (b) of this section must meet the operating limits of § 63.3092(a) or (b). For example, if your facility has two paint lines, you may choose to use the grouping under paragraph (a) of this section for one paint line and the grouping under paragraph (b) of this section for the other paint line.

§ 63.3091 What emission limits must I meet for an existing affected source?

(a) Except as provided in paragraph (b) of this section, you must limit combined organic HAP emissions to the atmosphere from electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) to no more than 0.072 kg/liter (0.60 lb/gal) of coating solids deposited during each month, determined according to the requirements in § 63.3161.

(b) If you meet the operating limits of § 63.3092(a) or (b), you must either meet the emission limits of paragraph (a) of this section or limit combined organic HAP emissions to the atmosphere from primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) to no more than 0.132 kg/liter (1.10 lb/gal) of coating solids deposited during each month, determined according to the requirements in § 63.3171. If you do not have an electrodeposition primer system, you must limit combined organic HAP emissions to the atmosphere from primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) to no more than 0.132 kg/liter (1.10 lb/gal) of coating solids deposited during each month, determined according to the requirements in § 63.3171.

(c) You must limit average organic HAP emissions from all adhesive and sealer materials other than materials used as components of glass bonding systems to no more than 0.010 kg/kg (lb/lb) of adhesive and sealer material used during each month.

(d) You must limit average organic HAP emissions from all deadener materials to no more than 0.010 kg/kg (lb/lb) of deadener material used during each month.

(e) For coatings and thinners used in coating operations added to the affected source pursuant to § 63.3082(c):

(1) Adhesive and sealer materials that are not components of glass bonding systems are subject to and must be included in your demonstration of compliance for paragraph (c) of this section.

(2) Deadener materials are subject to and must be included in your demonstration of compliance for paragraph (d) of this section.

(3) All other coatings and thinners are subject to and must be included in your demonstration of compliance for paragraphs (a) or (b) of this section.

(f) If your facility has multiple paint lines (*e.g.*, two or more totally distinct paint lines each serving a distinct assembly line, or a facility with two or more paint lines sharing the same paint kitchen or mix room), then for the operations addressed in paragraphs (a) and (b) of this section:

(1) You may choose to use a single grouping under paragraph (a) of this section for all of your electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations.

(2) You may choose to use a single grouping under paragraph (b) of this section for all of your primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations, as long as each of your electrodeposition primer systems meets the operating limits of § 63.3092(a) or (b).

(3) You may choose to use one or more groupings under paragraph (a) of this section for the electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations from one or more of your paint lines; and one or more groupings under paragraph (b) of this section for the primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations from the remainder of your paint lines, as long as each electrodeposition primer system associated with each paint line you include in a grouping under paragraph (b) of this section meets the operating limits of § 63.3092(a) or (b). For example, if your facility has three paint lines, you may choose to use one grouping under paragraph (a) of this section for two of the paint lines and a separate grouping under paragraph (b) of this section for the third paint line, as long as the electrodeposition primer system associated with the paint line you include in the grouping under paragraph (b) of this section meets the operating limits of § 63.3092(a) or (b). Alternatively, you may choose to use one grouping for two of the paint lines and a separate grouping of the same type for the third paint line. Again, each electrodeposition primer system associated with each paint line you include in a grouping under paragraph (b) of this section must meet the operating limits of § 63.3092(a) or (b).

(4) You may choose to consider the electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations from each of your paint lines as a separate grouping under either paragraph (a) or paragraph (b) of this section. The electrodeposition primer system associated with each paint line you choose to consider in a grouping under paragraph (b) of this section must meet the operating limits of § 63.3092(a) or (b). For example, if your facility has two paint lines, you may choose to use the grouping under paragraph (a) of this section for one paint line and the grouping under paragraph (b) of this section for the other paint line.

§ 63.3092 How must I control emissions from my electrodeposition primer system if I want to comply with the combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive emission limit?

If your electrodeposition primer system meets the requirements of either paragraph (a) or (b) of this section, you may choose to comply with the emission limits of § 63.3090(b) or § 63.3091(b) instead of the emission limits of § 63.3090(a) or § 63.3091(a).

(a) Each individual material added to the electrodeposition primer system contains no more than:

(1) 1.0 percent by weight of any organic HAP; and

(2) 0.10 percent by weight of any organic HAP which is an Occupational Safety and Health Administration (OSHA)-defined carcinogen as specified in 29 CFR 1910.1200(d)(4).

(b) Emissions from all bake ovens used to cure electrodeposition primers must be captured and ducted to a control device having a destruction or removal efficiency of at least 95 percent.

§ 63.3093 What operating limits must I meet?

(a) You are not required to meet any operating limits for any coating operation(s) without add-on controls.

(b) Except as provided in paragraph (d) of this section, for any controlled coating operation(s), you must meet the operating limits specified in Table 1 to this subpart. These operating limits apply to the emission capture and add-on 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 § 63.3167. You must meet the operating limits at all times after you establish them.

(c) If you choose to meet the emission limitations of § 63.3092(b) and the emission limits of § 63.3090(b) or § 63.3091(b), then except as provided in paragraph (d) of this section, you must operate the capture system and add-on control device used to capture and control emissions from your electrodeposition primer bake oven(s) so that they meet the operating limits specified in Table 1 to this subpart.

(d) If you use an add-on control device other than those listed in Table 1 to 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).

§ 63.3094 What work practice standards must I meet?

(a) [Reserved]

(b) You must develop and implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners, and cleaning materials used in, and waste materials generated by, all coating operations for which emission limits are established under § 63.3090(a) through (d) or § 63.3091(a) through (d). 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, cleaning materials, and waste materials must be stored in closed containers.

(2) The risk of spills of organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be minimized.

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

(4) Mixing vessels, other than day tanks equipped with continuous agitation systems, 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) You must develop and implement a work practice plan to minimize organic HAP emissions from cleaning and from purging of equipment associated with all coating operations for which emission limits are established under § 63.3090(a) through (d) or § 63.3091(a) through (d).

(1) The plan shall, at a minimum, address each of the operations listed in paragraphs (c)(1)(i) through (viii) of this section in which you use organic-HAP-containing materials or in which there is a potential for emission of organic HAP.

(i) The plan must address vehicle body wipe emissions through one or more of the techniques listed in paragraphs (c)(1)(i)(A) through (E) of this section, or an approved alternative.

(A) Use of solvent-moistened wipes.

(B) Keeping solvent containers closed when not in use.

(C) Keeping wipe disposal/recovery containers closed when not in use.

(D) Use of tack-wipes.

(E) Use of solvents containing less than 1 percent organic HAP by weight.

(ii) The plan must address coating line purging emissions through one or more of the techniques listed in paragraphs (c)(1)(ii)(A) through (D) of this section, or an approved alternative.

(A) Air/solvent push-out.

(B) Capture and reclaim or recovery of purge materials (excluding applicator nozzles/tips).

(C) Block painting to the maximum extent feasible.

(D) Use of low-HAP or no-HAP solvents for purge.

(iii) The plan must address emissions from flushing of coating systems through one or more of the techniques listed in paragraphs (c)(1)(iii)(A) through (D) of this section, or an approved alternative.

(A) Keeping solvent tanks closed.

(B) Recovering and recycling solvents.

(C) Keeping recovered/recycled solvent tanks closed.

(D) Use of low-HAP or no-HAP solvents.

(iv) The plan must address emissions from cleaning of spray booth grates through one or more of the techniques listed in paragraphs (c)(1)(iv)(A) through (E) of this section, or an approved alternative.

(A) Controlled burn-off.

(B) Rinsing with high-pressure water (in place).

(C) Rinsing with high-pressure water (off line).

(D) Use of spray-on masking or other type of liquid masking.

(E) Use of low-HAP or no-HAP content cleaners.

(v) The plan must address emissions from cleaning of spray booth walls through one or more of the techniques listed in paragraphs (c)(1)(v)(A) through (E) of this section, or an approved alternative.

(A) Use of masking materials (contact paper, plastic sheet, or other similar type of material).

(B) Use of spray-on masking.

(C) Use of rags and manual wipes instead of spray application when cleaning walls.

(D) Use of low-HAP or no-HAP content cleaners.

(E) Controlled access to cleaning solvents.

(vi) The plan must address emissions from cleaning of spray booth equipment through one or more of the techniques listed in paragraphs (c)(1)(vi)(A) through (E) of this section, or an approved alternative.

(A) Use of covers on equipment (disposable or reusable).

(B) Use of parts cleaners (off-line submersion cleaning).

(C) Use of spray-on masking or other protective coatings.

(D) Use of low-HAP or no-HAP content cleaners.

(E) Controlled access to cleaning solvents.

(vii) The plan must address emissions from cleaning of external spray booth areas through one or more of the techniques listed in paragraphs (c)(1)(vii)(A) through (F) of this section, or an approved alternative.

(A) Use of removable floor coverings (paper, foil, plastic, or similar type of material).

(B) Use of manual and/or mechanical scrubbers, rags, or wipes instead of spray application.

(C) Use of shoe cleaners to eliminate coating track-out from spray booths.

(D) Use of booties or shoe wraps.

(E) Use of low-HAP or no-HAP content cleaners.

(F) Controlled access to cleaning solvents.

(viii) The plan must address emissions from housekeeping measures not addressed in paragraphs (c)(1)(i) through (vii) of this section through one or more of the techniques listed in paragraphs (c)(1)(viii)(A) through (C) of this section, or an approved alternative.

(A) Keeping solvent-laden articles (cloths, paper, plastic, rags, wipes, and similar items) in covered containers when not in use.

(B) Storing new and used solvents in closed containers.

(C) Transferring of solvents in a manner to minimize the risk of spills.

(2) Notwithstanding the requirements of paragraphs (c)(1)(i) through (viii) of this section, if the type of coatings used in any facility with surface coating operations subject to the requirements of this section are of such a nature that the need for one or more of the practices specified under paragraphs (c)(1)(i) through (viii) is eliminated, then the plan may include approved alternative or equivalent measures that are applicable or necessary during cleaning of storage, conveying, and application equipment.

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

(e) The work practice plans developed in accordance with paragraphs (b) and

(c) of this section are not required to be incorporated in your title V permit. Any revisions to the work practice plans developed in accordance with paragraphs (b) and (c) of this section do not constitute revisions to your title V permit.

(f) Copies of the current work practice plans developed in accordance with paragraphs (b) and (c) of this section, as well as plans developed within the preceding 5 years must be available on-site for inspection and copying by the permitting authority.

General Compliance Requirements

§ 63.3100 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations in §§ 63.3090 and 63.3091 at all times, as determined on a monthly basis.

(b) The coating operations must be in compliance with the operating limits for emission capture systems and add-on control devices required by § 63.3093 at all times except during periods of startup, shutdown, and malfunction.

(c) You must be in compliance with the work practice standards in § 63.3094 at all times.

(d) 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).

(e) You must maintain a log detailing the operation and maintenance of the emission capture systems, add-on control devices, and continuous parameter monitoring systems (CPMS) during the period between the compliance date specified for your affected source in § 63.3083 and the date when the initial emission capture system and add-on control device performance tests have been completed, as specified in § 63.3160.

(f) If your affected source uses emission capture systems and add-on control devices, you must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in § 63.6(e)(3). The SSMP must address startup, shutdown, and corrective actions in the event of a malfunction of the emission capture system or the add-on control devices.

§ 63.3101 What parts of the General Provisions apply to me?

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

Notifications, Reports, and Records

§ 63.3110 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 June 25, 2004, whichever is later. For an existing affected source, you must submit the Initial Notification no later than 1 year after April 26, 2004. Existing sources that have previously submitted notifications of applicability of this rule pursuant to § 112(j) of the CAA are not required to submit an initial notification under § 63.9(b) except to identify and describe all additions to the affected source made pursuant to § 63.3082(c).

(c) *Notification of compliance status.* If you have an existing source, you must submit the Notification of Compliance Status required by § 63.9(h) no later than 30 days following the end of the initial compliance period described in § 63.3160. If you have a new source, you must submit the Notification of Compliance Status required by § 63.9(h) no later than 60 days after the first day of the first full month following completion of all applicable performance tests. The Notification of Compliance Status must contain the information specified in paragraphs (c)(1) through (12) 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 § 63.3160 that applies to your affected source.

(4) Identification of the compliance option specified in § 63.3090(a) or (b) or § 63.3091(a) or (b) that you used for electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) 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 any of the applicable emission limits in § 63.3090 or § 63.3091, include all the calculations you used to determine the applicable emission rate or applicable average organic HAP content for the emission limit(s) that you failed to meet. You do not need to submit information provided by the materials suppliers or manufacturers, or test reports.

(7) All data and calculations used to determine the monthly average mass of organic HAP emitted per volume of applied coating solids from:

(i) The combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) if you were eligible for and chose to comply with the emission limits of § 63.3090(b) or § 63.3091(b); or

(ii) The combined electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c).

(8) All data and calculations used to determine compliance with the separate limits for electrodeposition primer in § 63.3092(a) or (b) if you were eligible for and chose to comply with the emission limits of § 63.3090(b) or § 63.3091(b).

(9) All data and calculations used to determine the monthly mass average HAP content of materials subject to the emission limits of § 63.3090(c) or (d) or the emission limits of § 63.3091(c) or (d).

(10) All data and calculations used to determine the transfer efficiency for primer-surfacer and topcoat coatings, and for all coatings, except for deadener and for adhesive and sealer that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c).

(11) You must include the information specified in paragraphs (c)(11)(i) through (iii) of this section.

(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 procedure 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 unless requested.

(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.

(12) A statement of whether or not you developed and implemented the work practice plans required by § 63.3094(b) and (c).

§ 63.3120 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 (9) of this section. The semiannual compliance reporting requirements may be satisfied by reports required under other parts of the 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.

(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 § 63.3160 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.* If you have obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit 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 limit, operating limit, or work practice in this subpart, its submission shall 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 you 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 (iv) of this section, and the information specified in paragraphs (a)(4) through (9) and (c)(1) of this section that are 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.

(iv) Identification of the compliance option specified in § 63.3090(b) or § 63.3091(b) that you used for electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) in the affected source during the initial compliance period.

(4) *No deviations.* If there were no deviations from the emission limitations, operating limits, or work practices in §§ 63.3090, 63.3091, 63.3092, 63.3093, and 63.3094 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 control devices to comply with the emission limits, and there were no periods during which the 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: adhesive, sealer, and deadener.* If there was a deviation from the applicable emission limits in § 63.3090(c) and (d) or § 63.3091(c) and (d), the semiannual compliance report must contain the information in paragraphs (a)(5)(i) through (iv) of this section.

(i) The beginning and ending dates of each month during which the monthly average organic HAP content exceeded the applicable emission limit in § 63.3090(c) and (d) or § 63.3091(c) and (d).

(ii) The volume and organic HAP content of each material used that is subject to the applicable organic HAP content limit.

(iii) The calculation used to determine the average monthly organic HAP content for the month in which the deviation occurred.

(iv) The reason for the deviation.

(6) *Deviations: combined electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer and glass bonding adhesive, or combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c).* If there was a deviation from the applicable emission limits in § 63.3090(a) or (b) or § 63.3091(a) or (b),

the semiannual compliance report must contain the information in paragraphs (a)(6)(i) through (xiv) of this section.

(i) The beginning and ending dates of each month during which the monthly organic HAP emission rate from combined electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) exceeded the applicable emission limit in § 63.3090(a) or § 63.3091(a); or the monthly organic HAP emission rate from combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) exceeded the applicable emission limit in § 63.3090(b) or § 63.3091(b).

(ii) The calculation used to determine the monthly organic HAP emission rate in accordance with § 63.3161 or § 63.3171. You do not need to submit the background data supporting these calculations, for example information provided by materials suppliers or manufacturers, or test reports.

(iii) The date and time that any malfunctions of the capture system or add-on control devices used to control emissions from these operations 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 and time period 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 to this subpart; date and time period of each bypass of an 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 and the percent of the total source operating time of the deviations from each operating limit in Table 1 to this subpart and the bypass of each add-on control device during the semiannual reporting period.

(x) A breakdown of the total duration of the deviations from each operating limit in Table 1 to this subpart and bypasses of each 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 and the percent of the total source operating time of the downtime for each CPMS during the semiannual reporting period.

(xii) A description of any changes in the CPMS, coating operation, emission capture system, or add-on control devices 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.

(7) *Deviations: separate electrodeposition primer organic HAP content limit.* If you used the separate electrodeposition primer organic HAP content limits in § 63.3092(a), and there was a deviation from these limits, the semiannual compliance report must contain the information in paragraphs (a)(7)(i) through (iii) of this section.

(i) Identification of each material used that deviated from the emission limit, and the dates and time periods each was used.

(ii) The determination of mass fraction of each organic HAP for each material identified in paragraph (a)(7)(i) of this section. You do not need to submit background data supporting this calculation, for example, information provided by material suppliers or manufacturers, or test reports.

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

(8) *Deviations: separate electrodeposition primer bake oven capture and control limitations.* If you used the separate electrodeposition primer bake oven capture and control limitations in § 63.3092(b), and there was a deviation from these limitations, the semiannual compliance report must contain the information in paragraphs (a)(8)(i) through (xii) of this section.

(i) The beginning and ending dates of each month during which there was a deviation from the separate electrodeposition primer bake oven capture and control limitations in § 63.3092(b).

(ii) The date and time that any malfunctions of the capture systems or control devices used to control emissions from the electrodeposition primer bake oven started and stopped.

(iii) A brief description of the CPMS.

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

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

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

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

(viii) A summary of the total duration and the percent of the total source operating time of the deviations from each operating limit in Table 1 to this subpart and the bypasses of each add-on control device during the semiannual reporting period.

(ix) A breakdown of the total duration of the deviations from each operating limit in Table 1 to this subpart and bypasses of each 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.

(x) A summary of the total duration and the percent of the total source operating time of the downtime for each CPMS during the semiannual reporting period.

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

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

(9) *Deviations: work practice plans.* If there was a deviation from an applicable work practice plan developed in accordance with § 63.3094(b) or (c), the semiannual compliance report must contain the information in paragraphs (a)(9)(i) through (iii) of this section.

(i) The time period during which each deviation occurred.

(ii) The nature of each deviation.

(iii) The corrective action(s) taken to bring the applicable work practices into compliance with the work practice plan.

(b) *Performance test reports.* If you use add-on control devices, 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). You must submit reports of transfer efficiency tests no later than 60 days after completing the tests as specified in § 63.10(d)(2).

(c) *Startup, shutdown, and malfunction reports.* If you used add-on control devices 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 SSMP, 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 SSMP, you must submit an immediate startup, shutdown, and malfunction report as described in paragraphs (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).

§ 63.3130 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, the density and the volume fraction of coating solids for each coating, the mass fraction of organic HAP and the density for each thinner, and the mass fraction of organic HAP for each cleaning material. If you conducted testing to determine mass fraction of organic HAP, density, or volume 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. If you use the results of an analysis conducted by an outside testing lab, you must keep a copy of the test report. You are not required to obtain the test report or other supporting documentation from the manufacturer or supplier.

(c) For each month, the records specified in paragraphs (c)(1) through (6) of this section.

(1) For each coating used for electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations and for each coating, except for deadener and for adhesive and sealer that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c), a record of the volume used in each month, the mass fraction organic HAP content, the density, and the volume fraction of solids.

(2) For each thinner used for electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations and for each thinner, except for thinner used for deadener and for adhesive and sealer that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c), a record of the volume used in each month, the mass fraction organic HAP content, and the density.

(3) For each deadener material and for each adhesive and sealer material, a record of the mass used in each month and the mass organic HAP content.

(4) A record of the calculation of the organic HAP emission rate for electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) for each month if subject to the emission limit of § 63.3090(a) or § 63.3091(a). This record must include all raw data, algorithms, and intermediate calculations. If the guidelines presented in the ''Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,'' EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22), are used, you must keep records of all data input to this protocol. If these data are maintained as electronic files, the electronic files, as well as any paper copies must be maintained. These data must be provided to the permitting authority on request on paper, and in (if calculations are done electronically) electronic form.

(5) A record of the calculation of the organic HAP emission rate for primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) for each month if subject to the emission limit of § 63.3090(b) or § 63.3091(b), and a record of the weight fraction of each organic HAP in each material added to the electrodeposition primer system if subject to the limitations of § 63.3092(a). This record must include all raw data, algorithms, and intermediate calculations. If the guidelines presented in the ''Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,'' EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22), are used, you must keep records of all data input to this protocol. If these data are maintained as electronic files, the electronic files, as well as any paper copies must be maintained. These data must be provided to the permitting authority on request on paper, and in (if calculations are done electronically) electronic form.

(6) A record, for each month, of the calculation of the average monthly mass organic HAP content of:

(i) Sealers and adhesives; and

(ii) Deadeners.

(d) A record of the name and volume of each cleaning material used during each month.

(e) A record of the mass fraction of organic HAP for each cleaning material used during each month.

(f) A record of the density for each cleaning material used during each month.

(g) A record of the date, time, and duration of each deviation, and for each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction.

(h) The records required by § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(i) 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 § 63.3165(a).

(j) 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 §§ 63.3164 and 63.3165(b) through (g), including the records specified in paragraphs (j)(1) through (4) of this section that apply to you.

(1) *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.

(2) *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.

(3) *Records for panel tests.* Records needed to document a capture efficiency determination using a panel test as described in § 63.3165(e) and (g), including a copy of the test report and calculations performed to convert the panel test results to percent capture efficiency values.

(4) *Records for an alternative protocol.* Records needed to document a capture efficiency determination using an alternative method or protocol, as specified in § 63.3165(f), if applicable.

(k) The records specified in paragraphs (k)(1) and (2) of this section for each add-on control device organic HAP destruction or removal efficiency determination as specified in § 63.3166.

(1) Records of each add-on control device performance test conducted according to §§ 63.3164 and 63.3166.

(2) 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.

(l) Records of the data and calculations you used to establish the emission capture and add-on control device operating limits as specified in § 63.3167 and to document compliance with the operating limits as specified in Table 1 to this subpart.

(m) Records of the data and calculations you used to determine the transfer efficiency for primer-surfacer and topcoat coatings and for all coatings, except for deadener and for adhesive and sealer that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c).

(n) A record of the work practice plans required by § 63.3094(b) and (c) and documentation that you are implementing the plans on a continuous basis. Appropriate documentation may include operational and maintenance records, records of documented inspections, and records of internal audits.

(o) Records pertaining to the design and operation of control and monitoring systems must be maintained on-site for the life of the equipment in a location readily available to plant operators and inspectors.

§ 63.3131 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) Except as provided in § 63.3130(o), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record, as specified in § 63.10(b)(1).

(c) Except as provided in § 63.3130(o), 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 Adhesive, Sealer, and Deadener

§ 63.3150 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 § 63.3151. The initial compliance period begins on the applicable compliance date specified in § 63.3083 and ends on the last day of the 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 month. You must determine the mass average organic HAP content of the materials used each month for each group of materials for which an emission limitation is established in § 63.3090(c) and (d) or § 63.3091(c) and (d). The initial compliance demonstration includes the calculations according to § 63.3151 and supporting documentation showing that during the initial compliance period, the mass average organic HAP content for each group of materials was equal to or less than the applicable emission limits in § 63.3090(c) and (d) or § 63.3091(c) and (d).

§ 63.3151 How do I demonstrate initial compliance with the emission limitations?

You must separately calculate the mass average organic HAP content of the materials used during the initial compliance period for each group of materials for which an emission limit is established in § 63.3090(c) and (d) or § 63.3091(c) and (d). If every individual material used within a group of materials meets the emission limit for that group of materials, you may demonstrate compliance with that emission limit by documenting the name and the organic HAP content of each material used during the initial compliance period. If any individual material used within a group of materials exceeds the emission limit for that group of materials, you must determine the mass average organic HAP content according to the procedures of paragraph (d) of this section.

(a) *Determine the mass fraction of organic HAP for each material used.* You must determine the mass fraction of organic HAP for each 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 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.,* 0.7638 truncates to 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, unless after consultation, the facility demonstrates to the satisfaction of the enforcement authority that the facility's data are correct.

(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 neither test data nor manufacturer's data for solvent blends are available, you may use the default values for the mass fraction of organic HAP in the solvent blends listed in Table 3 or 4 to 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 to this subpart, the Method 311 results will take precedence, unless after consultation, the facility demonstrates to the satisfaction of the enforcement authority that the data from Table 3 or 4 are correct.

(b) *Determine the density of each material used.* Determine the density of each material used during the compliance period from test results using ASTM Method D1475–98 (Reapproved 2003), ''Standard Test Method for Density of Liquid Coatings, Inks, and Related Products'' (incorporated by reference, see § 63.14), or for powder coatings, test method A or test method B of ASTM Method D5965–02, ''Standard Test Methods for Specific Gravity of Coating Powders,'' (incorporated by reference, see § 63.14), or information from the supplier or manufacturer of the material. If there is disagreement between ASTM Method D1475–98 (Reapproved 2003) test results or ASTM Method D5965–02, test method A or test method B test results and the supplier's or manufacturer's information, the test results will take precedence unless after consultation, the facility demonstrates to the satisfaction of the enforcement authority that the facility's data are correct.

(c) *Determine the volume of each material used.* Determine the volume (liters) of each material used during each month by measurement or usage records.

(d) *Determine the mass average organic HAP content for each group of materials.* Determine the mass average organic HAP content of the materials used during the initial compliance period for each group of materials for which an emission limit is established in § 63.3090(c) and (d) or § 63.3091(c) and (d), using Equations 1 and 2 of this section.

(1) Calculate the mass average organic HAP content of adhesive and sealer materials other than components of the glass bonding system used in the initial compliance period using Equation 1 of this section:

$$C_{avg,\,as} = \frac{\sum_{j=1}^{r} \left(Vol_{as,\,j}\right)\left(D_{as,\,j}\right)\left(W_{as,\,j}\right)}{\sum_{j=1}^{r} \left(Vol_{as,\,j}\right)\left(D_{as,\,j}\right)} \qquad \text{(Eq. 1)}$$

Where:

$C_{avg,as}$ = Mass average organic HAP content of adhesives and sealer materials used, kg/kg.

$Vol_{as,j}$ = Volume of adhesive or sealer material, j, used, liters.

$D_{as,j}$ = Density of adhesive or sealer material, j, used, kg per liter.

$W_{as,j}$ = Mass fraction of organic HAP in adhesive or sealer material, j, kg/kg.

r = Number of adhesive and sealer materials used.

(2) Calculate the mass average organic HAP content of deadener materials used in the initial compliance period using Equation 2 of this section:

$$C_{avg,d} = \frac{\sum_{m=1}^{s} \left(Vol_{d,m}\right)\left(D_{d,m}\right)\left(W_{d,m}\right)}{\sum_{m=1}^{s} \left(Vol_{d,m}\right)\left(D_{d,m}\right)} \quad \text{(Eq. 2)}$$

Where:

$C_{avg,d}$ = Mass average organic HAP content of deadener material used, kg/kg.

$Vol_{d,m}$ = Volume of deadener material, m, used, liters.

$D_{d,m}$ = Density of deadener material, m, used, kg per liter.

$W_{d,m}$ = Mass fraction of organic HAP in deadener material, m, kg/kg.

s = Number of deadener materials used.

(e) *Compliance demonstration.* The mass average organic HAP content for the compliance period must be less than or equal to the applicable emission limit in § 63.3090(c) and (d) or § 63.3091(c) and (d). You must keep all records as required by §§ 63.3130 and 63.3131. As part of the Notification of Compliance Status required by § 63.3110, you must submit a statement that the coating operations were in compliance with the emission limitations during the initial compliance period because the mass average organic HAP content was less than or equal to the applicable emission limits in § 63.3090(c) and (d) or § 63.3091(c) and (d), determined according to this section.

§ 63.3152 How do I demonstrate continuous compliance with the emission limitations?

(a) To demonstrate continuous compliance, the mass average organic HAP content for each compliance period, determined according to § 63.3151(a) through (d), must be less than or equal to the applicable emission limit in § 63.3090(c) and (d) or § 63.3091(c) and (d). A compliance period consists of 1 month. Each month after the end of the initial compliance period described in § 63.3150 is a compliance period consisting of that month.

(b) If the mass average organic HAP emission content for any compliance period exceeds the applicable emission limit in § 63.3090(c) and (d) or § 63.3091(c) and (d), this is a deviation from the emission limitations for that compliance period and must be reported as specified in §§ 63.3110(c)(6) and 63.3120(a)(5).

(c) You must maintain records as specified in §§ 63.3130 and 63.3131.

Compliance Requirements for the Combined Electrodeposition Primer, Primer-Surfacer, Topcoat, Final Repair, Glass Bonding Primer, and Glass Bonding Adhesive Emission Limitations

§ 63.3160 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 § 63.3083. You must conduct a performance test of each capture system and add-on control device according to §§ 63.3164 through 63.3166 and establish the operating limits required by § 63.3093 no later than 180 days after the applicable compliance date specified in § 63.3083.

(2) You must develop and begin implementing the work practice plans required by § 63.3094(b) and (c) no later than the compliance date specified in § 63.3083.

(3) You must complete the initial compliance demonstration for the initial compliance period according to the requirements of § 63.3161. The initial compliance period begins on the applicable compliance date specified in § 63.3083 and ends on the last day of the 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 month. You must determine the mass of organic HAP emissions and volume of coating solids deposited in the initial compliance period. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to §§ 63.3164 through 63.3166; supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the emission limit in § 63.3090(a); the operating limits established during the performance tests and the results of the continuous parameter monitoring required by § 63.3168; and documentation of whether you developed and implemented the work practice plans required by § 63.3094(b) and (c).

(4) You do not need to comply with the operating limits for the emission capture system and add-on control device required by § 63.3093 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 CPMS 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.

(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 § 63.3083. You must conduct a performance test of each capture system and add-on control device according to the procedures in §§ 63.3164 through 63.3166 and establish the operating limits required by § 63.3093 no later than the compliance date specified in § 63.3083.

(2) You must develop and begin implementing the work practice plans required by § 63.3094(b) and (c) no later than the compliance date specified in § 63.3083.

(3) You must complete the initial compliance demonstration for the initial compliance period according to the requirements of § 63.3161. The initial compliance period begins on the applicable compliance date specified in § 63.3083 and ends on the last day of the 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 month. You must determine the mass of organic HAP emissions and volume of coating solids deposited during the initial compliance period. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to §§ 63.3164 through 63.3166;

supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the emission limits in § 63.3091(a); the operating limits established during the performance tests and the results of the continuous parameter monitoring required by § 63.3168; and documentation of whether you developed and implemented the work practice plans required by § 63.3094(b) and (c).

(c) You are not required to conduct an initial performance test to determine capture efficiency or destruction efficiency of a capture system or control device if you receive approval to use the results of a performance test that has been previously conducted on that capture system (either a previous stack test or a previous panel test) or control device. You are not required to conduct an initial test to determine transfer efficiency if you receive approval to use the results of a test that has been previously conducted. Any such previous tests must meet the conditions described in paragraphs (c)(1) through (3) of this section.

(1) The previous test must have been conducted using the methods and conditions specified in this subpart.

(2) Either no process or equipment changes have been made since the previous test was performed or the owner or operator must be able to demonstrate that the results of the performance test reliably demonstrate compliance despite process or equipment changes.

(3) Either the required operating parameters were established in the previous test or sufficient data were collected in the previous test to establish the required operating parameters.

§ 63.3161 How do I demonstrate initial compliance?

(a) You must meet all of the requirements of this section to demonstrate initial compliance. To demonstrate initial compliance, the organic HAP emissions from the combined electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) must meet the applicable emission limitation in § 63.3090(a) or § 63.3091(a).

(b) *Compliance with operating limits.* Except as provided in § 63.3160(a)(4), you must establish and demonstrate continuous compliance during the initial compliance period with the operating limits required by § 63.3093, using the procedures specified in §§ 63.3167 and 63.3168.

(c) *Compliance with work practice requirements.* You must develop, implement, and document your implementation of the work practice plans required by § 63.3094(b) and (c) during the initial compliance period, as specified in § 63.3130.

(d) *Compliance with emission limits.* You must follow the procedures in paragraphs (e) through (o) of this section to demonstrate compliance with the applicable emission limit in § 63.3090(a) or § 63.3091(a). You may also use the guidelines presented in ''Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,'' EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22) in making this demonstration.

(e) *Determine the mass fraction of organic HAP, density and volume used.* Follow the procedures specified in § 63.3151(a) through (c) to determine the mass fraction of organic HAP and the density and volume of each coating and thinner used during each month.

(f) *Determine the volume fraction of coating solids for each coating.* You must determine the volume fraction of coating solids (liter of coating solids per liter 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 (f)(1) and (2) of this section. If test results obtained according to paragraph (f)(1) of this section do not agree with the information obtained under paragraph (f)(2) of this section, the test results will take precedence unless after consultation, the facility demonstrates to the satisfaction of the enforcement authority that the facility's data are correct.

(1) *ASTM Method D2697–86 (Reapproved 1998) or ASTM Method D6093–97 (Reapproved 2003).* You may use ASTM Method D2697–86 (Reapproved 1998), ''Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings'' (incorporated by reference, see § 63.14), or ASTM Method D6093–97 (Reapproved 2003), ''Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer'' (incorporated by reference, see § 63.14), to determine the volume fraction of coating solids for each coating. Divide the nonvolatile volume percent obtained with the methods by 100 to calculate volume fraction of coating solids.

(2) *Information from the supplier or manufacturer of the material.* You may obtain the volume fraction of coating solids for each coating from the supplier or manufacturer.

(g) *Determine the transfer efficiency for each coating.* You must determine the transfer efficiency for each primer-surfacer and topcoat coating, and for all coatings, except for deadener and for adhesive and sealer that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) using ASTM Method D5066–91 (Reapproved 2001), ''Standard Test Method for Determination of the Transfer Efficiency Under Production Conditions for Spray Application of Automotive Paints-Weight Basis'' (incorporated by reference, see § 63.14), or the guidelines presented in ''Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,'' EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22). You may conduct transfer efficiency testing on representative coatings and for representative spray booths as described in ''Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,'' EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22). You may assume 100 percent transfer efficiency for electrodeposition primer coatings, glass bonding primers, and glass bonding adhesives. For final repair coatings, you may assume 40 percent transfer efficiency for air atomized spray and 55 percent transfer efficiency for electrostatic spray and high volume, low pressure spray.

(h) *Calculate the total mass of organic HAP emissions before add-on controls.* Calculate the total mass of organic HAP emissions before consideration of add-on controls from all coatings and thinners used during each month in the combined electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) using Equation 1 of this section:

$$H_{BC} = A + B \qquad \text{(Eq. 1)}$$

Where:

H_{BC} = Total mass of organic HAP emissions before consideration of add-on controls during the month, kg.
A = Total mass of organic HAP in the coatings used during the month, kg, as calculated in Equation 1A of this section.
B = Total mass of organic HAP in the thinners used during the month, kg, as calculated in Equation 1B of this section.

(1) Calculate the kg 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, kg.
$Vol_{c,i}$ = Total volume of coating, i, used during the month, liters.
$D_{c,i}$ = Density of coating, i, kg coating per liter coating.
$W_{c,i}$ = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating.
m = Number of different coatings used during the month.

(2) Calculate the kg of organic HAP in the thinners 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 used during the month, kg.
$Vol_{t,j}$ = Total volume of thinner, j, used during the month, liters.
$D_{t,j}$ = Density of thinner, j, kg per liter.
$W_{t,j}$ = Mass fraction of organic HAP in thinner, j, kg organic HAP per kg thinner.
n = Number of different thinners used during the month.

(i) *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 captured by the emission capture system and destroyed or removed by the add-on control device. Use the procedures in paragraph (j) 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 (k) of this section to calculate the organic HAP emission reduction.

(j) *Calculate the organic HAP emission reduction for each controlled coating operation not using liquid-liquid material balances.* 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 mass of organic HAP emission reduction for the controlled coating operation, excluding all periods of time in which a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement for the capture system or control device serving the controlled coating operation occurred, during the month using Equation 2 of this section. The calculation of mass of organic HAP emission reduction for the controlled coating operation during the month applies the emission capture system efficiency and add-on control device efficiency to the mass of organic HAP contained in the coatings and thinners that are used in the coating operation served by the emission capture system and add-on control device during each month. Except as provided in paragraph (p) of this section, for any period of time in which a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement of the capture system or control device serving the controlled coating operation occurred, you must assume zero efficiency for the emission capture system and add-on control device. Equation 2 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.

$$H_{Cn} = \left(A_C + B_C - A_{unc} - B_{unc}\right)\left(\frac{CE}{100} \times \frac{DRE}{100}\right) \qquad \text{(Eq. 2)}$$

Where:
H_{Cn} = Mass of organic HAP emission reduction, excluding all periods of time in which a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement for the capture system or control device serving the controlled coating operation occurred, for the controlled coating operation during the month, kg.
A_C = Total mass of organic HAP in the coatings used in the controlled coating operation during the month, kg, as calculated in Equation 2A of this section.
B_C = Total mass of organic HAP in the thinners used in the controlled coating operation during the month, kg, as calculated in Equation 2B of this section.
A_{unc} = Total mass of organic HAP in the coatings used during all periods of time in which a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement for the capture system or control device serving the controlled coating operation occurred for the controlled coating operation during the month, kg, as calculated in Equation 2C of this section.
B_{unc} = Total mass of organic HAP in the thinners used during all periods of time in which a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement for the capture system or control device serving the controlled coating operation occurred for the controlled coating operation during the month, kg, as calculated in Equation 2D 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 §§ 63.3164 and 63.3165 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 §§ 63.3164 and 63.3166 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, kg, using Equation 2A of this section.

$$A_c = \sum_{i=1}^{m} \left(Vol_{c,i}\right)\left(D_{c,i}\right)\left(W_{c,i}\right) \qquad \text{(Eq. 2A)}$$

Where:

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

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

$D_{c,i}$ = Density of coating, i, kg per liter.

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

m = Number of different coatings used.

(2) Calculate the mass of organic HAP in the thinners used in the controlled coating operation, kg, using Equation 2B of this section.

$$B_c = \sum_{j=1}^{n} \left(Vol_{t,j}\right)\left(D_{t,j}\right)\left(W_{t,j}\right) \qquad \text{(Eq. 2B)}$$

Where:

B_C = Total mass of organic HAP in the thinners used in the controlled coating operation during the month, kg.

$Vol_{t,j}$ = Total volume of thinner, j, used during the month, liters.

$D_{t,j}$ = Density of thinner, j, kg per liter.

$W_{t,j}$ = Mass fraction of organic HAP in thinner, j, kg per kg.

n = Number of different thinners used.

(3) Calculate the mass of organic HAP in the coatings used in the controlled coating operation during deviations specified in § 63.3163(c) and (d), using Equation 2C of this section:

$$A_{unc} = \sum_{i=1}^{m} \left(VOLD_i\right)\left(D_i\right)\left(W_i\right) \qquad \text{(Eq. 2C)}$$

Where:

A_{unc} = Total mass of organic HAP in the coatings used during all periods of time in which a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement for the capture system or control device serving the controlled coating operation occurred for the controlled coating operation during the month, kg.

$VOLD_i$ = Total volume of coating, i, used in the controlled coating operation during deviations, liters.

D_i = Density of coating, i, kg per liter.

W_i = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating.

m = Number of different coatings.

(4) Calculate the mass of organic HAP in the thinners used in the controlled coating operation during deviations specified in § 63.3163(c) and (d), using Equation 2D of this section:

$$B_{unc} = \sum_{j=1}^{n} \left(VOLD_j\right)\left(D_j\right)\left(W_j\right) \qquad \text{(Eq. 2D)}$$

Where:

B_{unc} = Total mass of organic HAP in the thinners used during all periods of time in which a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement for the capture system or control device serving the controlled coating operation occurred for the controlled coating operation during the month, kg.

$VOLD_j$ = Total volume of thinner, j, used in the controlled coating operation during deviations, liters.

D_j = Density of thinner, j, kg per liter.

W_h = Mass fraction of organic HAP in thinner, j, kg organic HAP per kg coating.

n = Number of different thinners.

(k) *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 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 by applying the volatile organic matter collection and recovery efficiency to the mass of organic HAP contained in the coatings and thinners 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 (k)(1) through (6) of this section. Calculate the mass of organic HAP emission reduction by the solvent recovery system as specified in paragraph (k)(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, kg, based on measurement with the device required in paragraph (k)(1) of this section.

(3) Determine the mass fraction of volatile organic matter for each coating and thinner used in the coating operation controlled by the solvent recovery system during the month, kg volatile organic matter per kg 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 unless after consultation, the facility demonstrates to the satisfaction of the enforcement authority that the facility's data are correct.

(4) Determine the density of each coating and thinner used in the coating operation controlled by the solvent recovery system during the month, kg per liter, according to § 63.3151(b).

(5) Measure the volume of each coating and thinner used in the coating operation controlled by the solvent recovery system during the month, liters.

(6) Each month, calculate the solvent recovery system's volatile organic matter collection and recovery efficiency, using Equation 3 of this section:

$$R_v = 100 \frac{M_{VR}}{\sum_{i=1}^{m} Vol_i D_i WV_{c,i} + \sum_{j=1}^{n} Vol_j D_j WV_{t,j}} \qquad \text{(Eq. 3)}$$

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, kg.

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

D_i = Density of coating, i, kg per liter.

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

Vol_j = Volume of thinner, j, used in the coating operation controlled by the solvent recovery system during the month, liters.

D_j = Density of thinner, j, kg per liter.

$WV_{t,j}$ = Mass fraction of volatile organic matter for thinner, j, kg volatile organic matter per kg thinner.

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

n = Number of different thinners 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 4 of this section:

$$H_{CSR} = \left(A_{CSR} + B_{CSR}\right)\left(\frac{R_V}{100}\right) \qquad \text{(Eq. 4)}$$

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, kg.

A_{CSR} = Total mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 4A of this section.

B_{CSR} = Total mass of organic HAP in the thinners used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 4B of this section.

R_V = Volatile organic matter collection and recovery efficiency of the solvent recovery system, percent, from Equation 3 of this section.

(i) Calculate the mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system, kg, using Equation 4A of this section.

$$A_{CSR} = \sum_{i=1}^{m} \left(Vol_{c,i}\right)\left(D_{c,i}\right)\left(W_{c,i}\right) \qquad \text{(Eq. 4A)}$$

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, kg.

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

$D_{c,i}$ = Density of coating, i, kg per liter.

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

m = Number of different coatings used.

(ii) Calculate the mass of organic HAP in the thinners used in the coating operation controlled by the solvent recovery system, kg, using Equation 4B of this section.

$$B_{CSR} = \sum_{j=1}^{n} \left(Vol_{t,j}\right)\left(D_{t,j}\right)\left(W_{t,j}\right) \qquad \text{(Eq. 4B)}$$

Where:

B_{CSR} = Total mass of organic HAP in the thinners used in the coating operation controlled by the solvent recovery system during the month, kg.

$Vol_{t,j}$ = Total volume of thinner, j, used during the month in the coating operation controlled by the solvent recovery system, liters.

$D_{t,j}$ = Density of thinner, j, kg per liter.

$W_{t,j}$ = Mass fraction of organic HAP in thinner, j, kg per kg.

n = Number of different thinners used.

(l) *Calculate the total volume of coating solids deposited.* Determine the total volume of coating solids deposited, liters, in the combined electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) using Equation 5 of this section:

$$V_{sdep} = \sum_{i=1}^{m} \left(Vol_{c,i}\right)\left(V_{s,i}\right)\left(TE_{c,i}\right)/100 \qquad \text{(Eq. 5)}$$

Where:

V_{sdep} = Total volume of coating solids deposited during the month, liters.

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

$V_{s,i}$ = Volume fraction of coating solids for coating, i, liter solids per liter coating, determined according to § 63.3161(f).

$TE_{c,i}$ = Transfer efficiency of coating, i, determined according to § 63.3161(g), expressed as a decimal, for example 60 percent must be expressed as 0.60.

m = Number of coatings used during the month.

(m) *Calculate the mass of organic HAP emissions for each month.* Determine the mass of organic HAP emissions, kg, during each month, using Equation 6 of this section.

$$H_{HAP} = H_{BC} - \sum_{i=1}^{q} \left(H_{Cn,i}\right) - \sum_{j=1}^{r} \left(H_{CSR,j}\right) - \sum_{k=1}^{q} \sum_{m=1}^{Sk} \left(H_{DEV,k,m}\right) \qquad \text{(Eq. 6)}$$

Where:

H_{HAP} = Total mass of organic HAP emissions for the month, kg.

H_{BC} = Total mass of organic HAP emissions before add-on controls from all the coatings and thinners used during the month, kg, determined according to paragraph (h) of this section.

$H_{Cn,i}$ = Total mass of organic HAP emission reduction for controlled coating operation, i, not using a liquid-liquid material balance, excluding all periods of time in which a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement for the capture system or control device serving the controlled coating operation occurred, for the controlled coating operation during the month, from Equation 2 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, kg, from Equation 4 of this section.

$H_{DEV,k,m}$ = Mass of organic HAP emission reduction, based on the capture system and control device efficiency approved under paragraph (p) of this section for period of deviation, m, for controlled coating operation, k, kg, as determined using Equation 8 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.

S_k = Number of periods of deviation in the month for which non-zero capture and control device efficiencies have been approved for controlled coating operation, k.

(n) *Calculate the organic HAP emission rate for the month.* Determine the organic HAP emission rate for the month, kg organic HAP per liter coating solids deposited, using Equation 7 of this section:

$$H_{rate} = \left(H_{HAP}\right) / \left(V_{sdep}\right) \qquad \text{(Eq. 7)}$$

Where:

H_{rate} = Organic HAP emission rate for the month compliance period, kg organic HAP per liter coating solids deposited.

H_{HAP} = Mass of organic HAP emissions for the month, kg, determined according to Equation 6 of this section.

V_{sdep} = Total volume of coating solids deposited during the month, liters, from Equation 5 of this section.

(o) *Compliance demonstration.* To demonstrate initial compliance, the organic HAP emissions from the combined electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) must be less than or equal to the applicable emission limitation in § 63.3090(a) or § 63.3091(a). You must keep all records as required by §§ 63.3130 and 63.3131. As part of the Notification of Compliance Status required by § 63.3110, you must 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 § 63.3090(a) or § 63.3091(a) and you achieved the operating limits required by § 63.3093 and the work practice standards required by § 63.3094.

(p) You may request approval from the Administrator to use non-zero capture efficiencies and add-on control device efficiencies for any period of time in which a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement for the capture system or add-on control device serving a controlled coating operation occurred.

(1) If you have manually collected parameter data indicating that a capture system or add-on control device was operating normally during a CPMS malfunction, a CPMS out-of-control period, or associated repair, then these data may be used to support and document your request to use the normal capture efficiency or add-on control device efficiency for that period of deviation.

(2) If you have data indicating the actual performance of a capture system or add-on control device (*e.g.*, capture efficiency measured at a reduced flow rate or add-on control device efficiency measured at a reduced thermal oxidizer temperature) during a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement for the capture system or add-on control device serving a controlled coating operation, then these data may be used to support and document your request to use these values for that period of deviation.

(3) The organic HAP emission reduction achieved during each period of deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement for the capture system or add-on control device serving a controlled coating operation for which the Administrator has approved the use of non-zero capture efficiency and add-on control device efficiency values is calculated using Equation 8 of this section.

$$H_{DEV} = \left(A_{DEV} + B_{DEV}\right)\left(\frac{CE_{DEV}}{100}\right)\left(\frac{DRE_{DEV}}{100}\right) \qquad \text{(Eq. 8)}$$

Where:

H_{DEV} = Mass of organic HAP emission reduction achieved during a period of deviation for the controlled coating operation, kg.
A_{DEV} = Total mass of organic HAP in the coatings used in the controlled coating operation during the period of deviation, kg, as calculated in Equation 8A of this section.
B_{DEV} = Total mass of organic HAP in the thinners used in the controlled coating operation during the period of deviation, kg, as calculated in Equation 8B of this section.
CE_{DEV} = Capture efficiency of the emission capture system vented to the add-on control device, approved for the period of deviation, percent.
DRE_{DEV} = Organic HAP destruction or removal efficiency of the add-on control device approved for the period of deviation, percent.

(4) Calculate the total mass of organic HAP in the coatings used in the controlled coating operation during the period of deviation using equation 8A of this section:

$$A_{DEV} = \sum_{i=i}^{m}\left(VOL_{CDEV,i}\right)\left(D_{c,i}\right)\left(W_{c,i}\right) \qquad \text{(Eq. 8A)}$$

Where:

A_{DEV} = Total mass of organic HAP in the coatings used in the controlled coating operation during the period of deviation, kg.
$VOL_{CDEV,i}$ = total volume of coating, i, used in the controlled coating operation during the period of deviation, liters.
$D_{c,i}$ = Density of coating, i, kg per liter.
$W_{c,i}$ = Mass fraction of organic HAP in coating, i, kg per kg.
m = Number of different coatings used.

(5) Calculate the total mass of organic HAP in the thinners used in the controlled coating operation during the period of deviation using equation 8B of this section:

$$BDEV = \sum_{j=i}^{n}\left(VOL_{TDEV,j}\right)\left(D_{t,j}\right)\left(W_{t,j}\right) \qquad \text{(Eq. 8B)}$$

Where:

B_{DEV} = Total mass of organic HAP in the thinners used in the controlled coating operation during the period of deviation, kg.
$VOL_{TDEV,j}$ = Total volume of thinner, j, used in the controlled coating operation during the period of deviation, liters.
$D_{t,j}$ = Density of thinner, j, kg per liter.
$W_{t,j}$ = Mass fraction of organic HAP in thinner, j, kg per kg.
n = Number of different thinners used.

§ 63.3162 [Reserved]

§ 63.3163 How do I demonstrate continuous compliance with the emission limitations?

(a) To demonstrate continuous compliance with the applicable emission limit in § 63.3090(a) or § 63.3091(a), the organic HAP emission rate for each compliance period, determined according to the procedures in § 63.3161, must be equal to or less than the applicable emission limit in § 63.3090(a) or § 63.3091(a). A compliance period consists of 1 month. Each month after the end of the initial compliance period described in § 63.3160 is a compliance period consisting of that month. You must perform the calculations in § 63.3161 on a monthly basis.

(b) If the organic HAP emission rate for any 1 month compliance period exceeded the applicable emission limit in § 63.3090(a) or § 63.3091(a), this is a deviation from the emission limitation for that compliance period and must be reported as specified in §§ 63.3110(c)(6) and 63.3120(a)(6).

(c) You must demonstrate continuous compliance with each operating limit required by § 63.3093 that applies to you, as specified in Table 1 to this subpart.

(1) If an operating parameter is out of the allowed range specified in Table 1 to this subpart, this is a deviation from the operating limit that must be reported as specified in §§ 63.3110(c)(6) and 63.3120(a)(6).

(2) If an operating parameter deviates from the operating limit specified in Table 1 to 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 except as provided in § 63.3161(p).

(d) You must meet the requirements for bypass lines in § 63.3168(b) for control devices other than solvent recovery systems for which you 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 § 63.3110(c)(6) and 63.3120(a)(6). For the purposes of completing the compliance calculations specified in § 63.3161(k), you must assume that the emission capture system and add-on control device were achieving zero efficiency during the time period of the deviation.

(e) You must demonstrate continuous compliance with the work practice standards in § 63.3094. If you did not develop a work practice plan, if you did not implement the plan, or if you did not keep the records required by § 63.3130(n), this is a deviation from the work practice standards that must be reported as specified in §§ 63.3110(c)(6) and 63.3120(a)(6).

(f) If there were no deviations from the emission limitations, submit a statement as part of the semiannual compliance report 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 § 63.3090(a) or § 63.3091(a), and you achieved the operating limits required by § 63.3093 and the work practice standards required by § 63.3094 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 SSMP required by § 63.3100(f).

(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 SSMP. 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 §§ 63.3130 and 63.3131.

§ 63.3164 What are the general requirements for performance tests?

(a) You must conduct each performance test required by § 63.3160 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 § 63.3165. You must conduct each performance test of an add-on control device according to the requirements in § 63.3166.

§ 63.3165 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 § 63.3160. For purposes of this subpart, a spray booth air seal is not considered a natural draft opening in a PTE or a temporary total enclosure provided you demonstrate that the direction of air movement across the interface between the spray booth air seal and the spray booth is into the spray booth. For purposes of this subpart, a bake oven air seal is not considered a natural draft opening in a PTE or a temporary total enclosure provided you demonstrate that the direction of air movement across the interface between the bake oven air seal and the bake oven is into the bake oven. You may use lightweight strips of fabric or paper, or smoke tubes to make such demonstrations as part of showing that your capture system is a PTE or conducting a capture efficiency test using a temporary total enclosure. You cannot count air flowing from a spray booth air seal into a spray booth as air flowing through a natural draft opening into a PTE or into a temporary total enclosure unless you elect to treat that spray booth air seal as a natural draft opening. You cannot count air flowing from a bake oven air seal into a bake oven as air flowing through a natural draft opening into a PTE or into a temporary total enclosure unless you elect to treat that bake oven air seal as a natural draft opening.

(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 and thinners used in the coating operation are applied within the capture system, and coating solvent flash-off and coating curing and drying 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 five procedures described in paragraphs (c) through (g) 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 production, which includes surface preparation activities and drying or 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 and thinners are applied, and all areas where emissions from these applied coatings and thinners 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 F of appendix M to 40 CFR part 51 to determine the mass fraction of TVH liquid input from each coating and thinner 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 and thinners used in the coating operation during each capture efficiency test run.

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

Where:

TVH_i = Mass fraction of TVH in coating or thinner, i, used in the coating operation during the capture efficiency test run, kg TVH per kg material.

Vol_i = Total volume of coating or thinner, i, used in the coating operation during the capture efficiency test run, liters.

D_i = Density of coating or thinner, i, kg material per liter material.

n = Number of different coatings and thinners 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, kg, 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:

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

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, kg.

$TVH_{uncaptured}$ = 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, kg.

(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 and thinners are applied, and all areas where emissions from these applied coatings and thinners 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 C of appendix M to 40 CFR part 51 to measure the total mass, kg, 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 C 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 or sequentially measured in each duct, and the total emissions entering the add-on control device must be determined.

(3) Use Method 204D or E of appendix M to 40 CFR part 51 to measure the total mass, kg, 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:

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

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, kg.

$TVH_{uncaptured}$ = 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, kg.

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

(e) *Panel testing to determine the capture efficiency of flash-off or bake oven emissions.* You may conduct panel testing to determine the capture efficiency of flash-off or bake oven emissions using ASTM Method D5087–02, ''Standard Test Method for Determining Amount of Volatile Organic Compound (VOC) Released from Solventborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement)'' (incorporated by reference, see § 63.14), ASTM Method D6266–00a, ''Test Method for Determining the Amount of Volatile Organic Compound (VOC) Released from Waterborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement)'' (incorporated by reference, see § 63.14), or the guidelines presented in ''Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,'' EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22). You may conduct panel testing on representative coatings as described in ''Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,'' EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22). The results of these panel testing procedures are in units of mass of VOC per volume of coating solids deposited and must be converted to a percent value for use in this subpart. If you panel test representative coatings, then you may convert the panel test result for each representative coating either to a unique percent capture efficiency for each coating grouped with that representative coating by using coating specific values for the volume of coating solids deposited per volume of coating used, mass of VOC per volume of coating, volume fraction solids, transfer efficiency, density and mass fraction VOC in Equations 4 through 6 of this section; or to a composite percent capture efficiency for the group of coatings by using composite values for the group of coatings for the volume of coating solids deposited per volume of coating used and for the mass of VOC per volume of coating, and average values for the group of coatings for volume fraction solids, transfer efficiency, density and mass fraction VOC in Equations 4 through 6 of this section. If you panel test each coating, then you must convert the panel test result for each coating to a unique percent capture efficiency for that coating by using coating specific values for the volume of coating solids deposited per volume of coating used, mass of VOC per volume of coating, volume fraction solids, transfer efficiency, density, and mass fraction VOC in Equations 4 through 6 of this section. Panel test results expressed in units of mass of VOC per volume of coating solids deposited must be converted to percent capture efficiency using Equation 4 of this section. (An alternative for using panel test results expressed in units of mass of VOC per mass of coating solids deposited is presented in paragraph (e)(3) of this section.)

$$CE_i = (P_i)(V_{sdep,i})(100)/(VOC_i) \qquad \text{(Eq. 4)}$$

Where:

CE_i = Capture efficiency for coating, i, or for the group of coatings including coating, i, for the flash-off area or bake oven for which the panel test is conducted, percent.

P_i = Panel test result for coating, i, or for the coating representing coating, i, in the panel test, kg of VOC per liter of coating solids deposited.

$V_{sdep,i}$ = Volume of coating solids deposited per volume of coating used for coating, i, or composite volume of coating solids deposited per volume of coating used for the group of coatings including coating, i, in the spray booth(s) preceding the flash-off area or bake oven for which the panel test is conducted, liter of coating solids deposited per liter of coating used, from Equation 5 of this section.

VOC_i = Mass of VOC per volume of coating for coating, i, or composite mass of VOC per volume of coating for the group of coatings including coating, i, kg per liter, from Equation 6 of this section.

(1) Calculate the volume of coating solids deposited per volume of coating used for coating, i, or the composite volume of coating solids deposited per volume of coating used for the group of coatings including coating, i, used during the month in the spray booth(s) preceding the flash-off area or bake oven for which the panel test is conducted using Equation 5 of this section:

$$V_{sdep,i} = (V_{s,i})(TE_{c,i}) \qquad \text{(Eq. 5)}$$

Where:

$V_{sdep,i}$ = Volume of coating solids deposited per volume of coating used for coating, i, or composite volume of coating solids deposited per volume of coating used for the group of coatings including coating, i, in the spray booth(s) preceding the flash-off area or bake oven for which the panel test is conducted, liter of coating solids deposited per liter of coating used.

$V_{s,i}$ = Volume fraction of coating solids for coating, i, or average volume fraction of coating solids for the group of coatings including coating, i, liter coating solids per liter coating, determined according to § 63.3161(f).

$TE_{c,i}$ = Transfer efficiency of coating, i, or average transfer efficiency for the group of coatings including coating, i, in the spray booth(s) for the flash-off area or bake oven for which the panel test is conducted determined according to § 63.3161(g), expressed as a decimal, for example 60 percent must be expressed as 0.60. (Transfer efficiency also may be determined by testing representative coatings. The same coating groupings may be appropriate for both transfer efficiency testing and panel testing. In this case, all of the coatings in a panel test grouping would have the same transfer efficiency.)

(2) Calculate the mass of VOC per volume of coating for coating, i, or the composite mass of VOC per volume of coating for the group of coatings including coating, i, used during the month in the spray booth(s) preceding

the flash-off area or bake oven for which the panel test is conducted, kg, using Equation 6 of this section:

$$VOC_i = (D_{c,i})(Wvoc_{c,i}) \qquad \text{(Eq. 6)}$$

Where:

VOC_i = Mass of VOC per volume of coating for coating, i, or composite mass of VOC per volume of coating for the group of coatings including coating, i, used during the month in the spray booth(s) preceding the flash-off area or bake oven for which the panel test is conducted, kg VOC per liter coating.

$D_{c,i}$ = Density of coating, i, or average density of the group of coatings including coating, i, kg coating per liter coating, density determined according to § 63.3151(b).

$Wvoc_{c,i}$ = Mass fraction of VOC in coating, i, or average mass fraction of VOC for the group of coatings including coating, i, kg VOC per kg coating, determined by Method 24 (appendix A to 40 CFR part 60) or the guidelines for combining analytical VOC content and formulation solvent content presented in ''Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,'' EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22).

(3) As an alternative, you may choose to express the results of your panel tests in units of mass of VOC per mass of coating solids deposited and convert such results to a percent using Equation 7 of this section. If you panel test representative coatings, then you may convert the panel test result for each representative coating either to a unique percent capture efficiency for each coating grouped with that representative coating by using coating specific values for the mass of coating solids deposited per mass of coating used, mass fraction VOC, transfer efficiency, and mass fraction solids in Equations 7 and 8 of this section; or to a composite percent capture efficiency for the group of coatings by using composite values for the group of coatings for the mass of coating solids deposited per mass of coating used and average values for the mass of VOC per volume of coating, average values for the group of coatings for mass fraction VOC, transfer efficiency, and mass fraction solids in Equations 7 and 8 of this section. If you panel test each coating, then you must convert the panel test result for each coating to a unique percent capture efficiency for that coating by using coating specific values for the mass of coating solids deposited per mass of coating used, mass fraction VOC, transfer efficiency, and mass fraction solids in Equations 7 and 8 of this section. Panel test results expressed in units of mass of VOC per volume of coating solids deposited must be converted to percent capture efficiency using Equation 7 of this section:

$$CE_i = (P_{m,i})(W_{sdep,i})/(Wvoc_{c,i}) \qquad \text{(Eq. 7)}$$

Where:

CE_i = Capture efficiency for coating, i, or for the group of coatings including coating, i, for the flash-off area or bake oven for which the panel test is conducted, percent.

$P_{m,i}$ = Panel test result for coating, i, or for the coating representing coating, i, in the panel test, kg of VOC per kg of coating solids deposited.

$W_{sdep,i}$ = Mass of coating solids deposited per mass of coating used for coating i, or composite mass of coating solids deposited per mass of coating used for the group of coatings including coating, i, in the spray booth(s) preceding the flash-off area or bake oven for which the panel test is conducted, kg of solids deposited per kg of coating used, from Equation 8 of this section.

$Wvoc_{c,i}$ = Mass fraction of VOC in coating, i, or average mass fraction of VOC for the group of coatings including coating, i, kg VOC per kg coating, determined by Method 24 (appendix A to 40 CFR part 60) or the guidelines for combining analytical VOC content and formulation solvent content presented in ''Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,'' EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22).

(4) Calculate the mass of coating solids deposited per mass of coating used for each coating or the composite mass of coating solids deposited per mass of coating used for each group of coatings used during the month in the spray booth(s) preceding the flash-off area or bake oven for which the panel test is conducted using Equation 8 of this section:

$$W_{sdep,i} = (W_{s,i})(TE_{c,i}) \qquad \text{(Eq. 8)}$$

Where:

$W_{sdep,i}$ = Mass of coating solids deposited per mass of coating used for coating, i, or composite mass of coating solids deposited per mass of coating used for the group of coatings including coating, i, in the spray booth(s) preceding the flash-off area or bake oven for which the panel test is conducted, kg coating solids deposited per kg coating used.

$W_{s,i}$ = Mass fraction of coating solids for coating, i, or average mass fraction of coating solids for the group of coatings including coating, i, kg coating solids per kg coating, determined by Method 24 (appendix A to 40 CFR part 60) or the guidelines for combining analytical VOC content and formulation solvent content presented in ''Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,'' EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22).

$TE_{c,i}$ = Transfer efficiency of coating, i, or average transfer efficiency for the group of coatings including coating, i, in the spray booth(s) for the flash-off area or bake oven for which the panel test is conducted determined according to § 63.3161(g), expressed as a decimal, for example 60 percent must be expressed as 0.60. (Transfer efficiency also may be determined by testing representative coatings. The same coating groupings may be appropriate used for both transfer efficiency testing and panel testing. In this case, all of the coatings in a panel test grouping would have the same transfer efficiency.)

(f) *Alternative capture efficiency procedure.* As an alternative to the procedures specified in paragraphs (c) through (e) and (g) 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.

(g) *Panel testing to determine the capture efficiency of spray booth emissions from solvent-borne coatings.* You may conduct panel testing to determine the capture efficiency of spray booth emissions from solvent-borne coatings using the procedure in appendix A to this subpart.

§ 63.3166 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 § 63.3160. 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. The ANSI/ASME PTC 19.10–1981, ''Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus]'' (incorporated by reference, see § 63.14), may be used as an alternative to Method 3B.

(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, as specified in paragraphs (b)(1) through (3) of this section. You must use the same method for both the inlet and outlet measurements.

(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 by volume (ppmv) 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 ppmv or less at the control device outlet.

(3) Use Method 25A if the add-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 of each device. For example, if one add-on control device is a concentrator with an outlet 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 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.

$$M_{f=}Q_{sd}C_{c}(12)(0.0416)\left(10^{-6}\right) \qquad \text{(Eq. 1)}$$

Where:

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

C_c = Concentration of organic compounds as carbon in the vent gas, as determined by Method 25 or Method 25A, 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 per 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:

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

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.

§ 63.3167 How do I establish the add-on control device operating limits during the performance test?

During the performance test required by § 63.3160 and described in §§ 63.3164 and 63.3166, you must establish the operating limits required by § 63.3093 according to this section, unless you have received approval for alternative monitoring and operating limits under § 63.8(f) as specified in § 63.3093.

(a) *Thermal oxidizers.* If your add-on control device is a thermal oxidizer, establish the operating limit according to paragraphs (a)(1) through (3) 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 all valid 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.

(3) As an alternative, if the latest operating permit issued before April 26, 2007, for the thermal oxidizer at your facility contains recordkeeping and reporting requirements for the combustion temperature that are consistent with the requirements for thermal oxidizers in 40 CFR 60.395(c), then you may set the minimum operating limit for the combustion temperature for each such thermal oxidizer at your affected source at 28 degrees Celsius (50 degrees Fahrenheit) below the average combustion temperature during the performance test of that thermal oxidizer. If you do not have an operating permit for the thermal oxidizer at your facility and the latest construction permit issued before April 26, 2007, for the thermal oxidizer at your facility contains recordkeeping and reporting requirements for the combustion temperature that are consistent with the requirements for

thermal oxidizers in 40 CFR 60.395(c), then you may set the minimum operating limit for the combustion temperature for each such thermal oxidizer at your affected source at 28 degrees Celsius (50 degrees Fahrenheit) below the average combustion temperature during the performance test of that thermal oxidizer. If you use 28 degrees Celsius (50 degrees Fahrenheit) below the combustion temperature maintained during the performance test as the minimum operating limit for a thermal oxidizer, then you must keep the combustion temperature set point on that thermal oxidizer no lower than 14 degrees Celsius (25 degrees Fahrenheit) below the lower of that set point during the performance test for that thermal oxidizer and the average combustion temperature maintained during the performance test for that 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) through (3) or paragraphs (b)(4) through (6) 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 all valid 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. The minimum operating limits for your catalytic oxidizer are the average temperature just before the catalyst bed maintained during the performance test of that catalytic oxidizer and 80 percent of the average temperature difference across the catalyst bed maintained during the performance test of that catalytic oxidizer, except during periods of low production the latter minimum operating limit is to maintain a positive temperature gradient across the catalyst bed. A low production period is when production is less than 80 percent of production rate during the performance test of that catalytic oxidizer.

(3) As an alternative, if the latest operating permit issued before April 26, 2007, for the catalytic oxidizer at your facility contains recordkeeping and reporting requirements for the temperature before the catalyst bed that are consistent with the requirements for catalytic oxidizers in 40 CFR 60.395(c), then you may set the minimum operating limits for each such catalytic oxidizer at your affected source at 28 degrees Celsius (50 degrees Fahrenheit) below the average temperature just before the catalyst bed maintained during the performance test for that catalytic oxidizer and 80 percent of the average temperature difference across the catalyst bed maintained during the performance test for that catalytic oxidizer, except during periods of low production the latter minimum operating limit is to maintain a positive temperature gradient across the catalyst bed. If you do not have an operating permit for the catalytic oxidizer at your facility and the latest construction permit issued before April 26, 2007, for the catalytic oxidizer at your facility contains recordkeeping and reporting requirements for the temperature before the catalyst bed that are consistent with the requirements for catalytic oxidizers in 40 CFR 60.395(c), then you may set the minimum operating limits for each such catalytic oxidizer at your affected source at 28 degrees Celsius (50 degrees Fahrenheit) below the average temperature just before the catalyst bed maintained during the performance test for that catalytic oxidizer and 80 percent of the average temperature difference across the catalyst bed maintained during the performance test for that catalytic oxidizer, except during periods of low production the latter minimum operating limit is to maintain a positive temperature gradient across the catalyst bed. A low production period is when production is less than 80 percent of production rate during the performance test. If you use 28 degrees Celsius (50 degrees Fahrenheit) below the average temperature just before the catalyst bed maintained during the performance test as the minimum operating limits for a catalytic oxidizer, then you must keep the set point for the temperature just before the catalyst bed on that catalytic oxidizer no lower than 14 degrees Celsius (25 degrees Fahrenheit) below the lower of that set point during the performance test for that catalytic oxidizer and the average temperature just before the catalyst bed maintained during the performance test for that catalytic oxidizer.

(4) 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)(6) 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 all valid 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.

(5) If the latest operating permit issued before April 26, 2007, for the catalytic oxidizer at your facility contains recordkeeping and reporting requirements for the temperature before the catalyst bed that are consistent with the requirements for catalytic oxidizers in 40 CFR 60.395(c), then you may set the minimum operating limit for each such catalytic oxidizer at your affected source at 28 degrees Celsius (50 degrees Fahrenheit) below the average temperature just before the catalyst bed maintained during the performance test for that catalytic oxidizer. If you do not have an operating permit for the catalytic oxidizer at your facility and the latest construction permit issued before April 26, 2007, for the catalytic oxidizer at your facility contains recordkeeping and reporting requirements for the temperature before the catalyst bed that are consistent with the requirements for catalytic oxidizers in 40 CFR 60.395(c), then you may set the minimum operating limit for each such catalytic oxidizer at your affected source at 28 degrees Celsius (50 degrees Fahrenheit) below the average temperature just before the catalyst bed maintained during the performance test for that catalytic oxidizer. If you use 28 degrees Celsius (50 degrees Fahrenheit) below the average temperature just before the catalyst bed maintained during the performance test as the minimum operating limit for a catalytic oxidizer, then you must keep the set point for the temperature just before the catalyst bed on that catalytic oxidizer no lower than 14 degrees Celsius (25 degrees Fahrenheit) below the lower of that set point during the performance test for that catalytic oxidizer and the average temperature just before the catalyst bed maintained during the performance test for that catalytic oxidizer.

(6) 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)(4) or (5) of this section. The plan must address, at a minimum, the elements specified in paragraphs (b)(6)(i) through (iii) of this section.

(i) Annual sampling and analysis of the catalyst activity (*i.e.*, conversion efficiency) following the oxidizer 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, adjustment of 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 replace the catalyst bed and conduct a new performance test to determine destruction efficiency according to § 63.3166.

(c) *Regenerative carbon adsorbers.* If your add-on control device is a regenerative 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 all valid 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) *Concentrators.* If your add-on control device includes a concentrator, you must establish operating limits for the concentrator according to paragraphs (e)(1) and (2)of this section.

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

(2) Use all valid data collected during the performance test to calculate and record the average desorption gas inlet temperature. The minimum operating limit for the concentrator is 8 degrees Celsius (15 degrees Fahrenheit) below the average desorption gas inlet temperature maintained during the performance test for that concentrator. You must keep the set point for the desorption gas inlet temperature no lower than 6 degrees Celsius (10 degrees Fahrenheit) below the lower of that set point during the performance test for that concentrator and the average desorption gas inlet temperature maintained during the performance test for that concentrator.

(f) *Emission capture systems.* For each capture device that is not part of a PTE that meets the criteria of § 63.3165(a) and that is not capturing emissions from a downdraft spray booth or from a flash-off area or bake oven associated with a downdraft spray booth, 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 to this subpart.

(1) During the capture efficiency determination required by § 63.3160 and described in §§ 63.3164 and 63.3165, 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, using all valid data. This average gas volumetric flow rate or duct static pressure is the minimum operating limit for that specific capture device.

§ 63.3168 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 § 63.3120.

(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 to treat desorbed concentrate streams from concentrators or carbon adsorbers), 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 a gas temperature monitor upstream of the catalyst bed. If you establish the operating parameters for a catalytic oxidizer under § 63.3167(b)(1) through (3), you must also install a gas temperature monitor 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. If you establish the operating parameters for a catalytic oxidizer under § 63.3167(b)(4) through (6), you need not install a gas temperature monitor downstream of the catalyst bed.

(3) For all thermal oxidizers and catalytic oxidizers, you must meet the requirements in paragraphs (a)(1) through (6) 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) *Regenerative carbon adsorbers.* If you are using a regenerative 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 (as expressed in degrees Fahrenheit) 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)(1) through (6) and (e)(1) and (2) of this section.

(1) The gas temperature monitor must have a measurement sensitivity of 1 percent of the temperature (expressed in degrees Fahrenheit) 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) *Concentrators.* If you are using a concentrator, such as a zeolite wheel or rotary carbon bed concentrator, you must install a temperature monitor in the desorption gas stream. The temperature monitor must meet the requirements in paragraphs (a)(1) through (6) and (c)(3) of this section.

(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)(1) through (6) 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)(1) through (6) and (g)(2)(i) through (vi) of this section.

(i) Locate the pressure tap(s) in 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.

Compliance Requirements for the Combined Primer-Surfacer, Topcoat, Final Repair, Glass Bonding Primer, and Glass Bonding Adhesive Emission Limitations and the Separate Electrodeposition Primer Emission Limitations

§ 63.3170 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 § 63.3160.

(b) *Existing affected sources.* For an existing affected source, you must meet the requirements of paragraphs (b)(1) through (3) of § 63.3160.

§ 63.3171 How do I demonstrate initial compliance?

(a) You must meet all of the requirements of this section to demonstrate initial compliance. To demonstrate initial compliance, the organic HAP emissions from the combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) must meet the applicable emission limitation in § 63.3090(b) or § 63.3091(b); and the organic HAP emissions from the electrodeposition primer operation must meet the applicable emissions limitations in § 63.3092(a) or (b).

(b) *Compliance with operating limits.* Except as provided in § 63.3160(a)(4), you must establish and demonstrate continuous compliance during the initial compliance period with the operating limits required by § 63.3093, using the procedures specified in §§ 63.3167 and 63.3168.

(c) *Compliance with work practice requirements.* You must develop, implement, and document your implementation of the work practice plans required by § 63.3094(b) and (c) during the initial compliance period, as specified in § 63.3130.

(d) *Compliance with emission limits.* You must follow the procedures in § 63.3161(e) through (n), excluding materials used in electrodeposition primer operations, to demonstrate compliance with the applicable emission limit in § 63.3090(b) or § 63.3091(b). You must follow the procedures in paragraph (e) of this section to demonstrate compliance with the emission limit in § 63.3092(a), or paragraphs (f) through (g) of this section to demonstrate compliance with the emission limitations in § 63.3092(b).

(e) *Determine the mass fraction of each organic HAP in each material used in the electrodeposition primer operation.* You must determine the mass fraction of each organic HAP for each material used in the electrodeposition primer operation during the compliance period by using one of the options in paragraphs (e)(1) through (3) of this section.

(1) *Method 311 (appendix A to 40 CFR part 63).* You may use Method 311 for determining the mass fraction of each organic HAP.

(2) *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.

(3) *Information from the supplier or manufacturer of the material.* You may rely on information other than that generated by the test methods specified in paragraphs (e)(1) and (2) 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. If there is a disagreement between such information and results of a test conducted according to paragraph (e)(1) or (2) of this section, then the test method results will take precedence unless after consultation, the facility demonstrates to the satisfaction of the enforcement authority that the facility's data are correct.

(f) *Capture of electrodeposition bake oven emissions.* You must show that the electrodeposition bake oven meets the criteria in sections 5.3 through 5.5 of Method 204 of appendix M to 40 CFR part 51 and directs all of the exhaust gases from the bake oven to an add-on control device.

(g) *Control of electrodeposition bake oven emissions.* Determine the efficiency of each control device on each electrodeposition bake oven using the procedures in §§ 63.3164 and 63.3166.

(h) *Compliance demonstration.* To demonstrate initial compliance, the organic HAP emissions from the combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) must meet the applicable emission limitation in § 63.3090(b) or § 63.3091(b); the organic HAP emissions from the electrodeposition primer operation must meet the applicable emissions limitations in § 63.3092(a) or (b). You must keep all records as required by §§ 63.3130 and 63.3131. As part of the Notification of Compliance Status required by § 63.3110, you must 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 from the combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to § 63.3082(c) was less than or equal to the applicable emission limit in § 63.3090(b) or § 63.3091(b), and the organic HAP emissions from the electrodeposition primer operation met the applicable emissions limitations in § 63.3092(a) or (b), and you achieved the operating limits required by § 63.3093 and the work practice standards required by § 63.3094.

§ 63.3172 [Reserved]

§ 63.3173 How do I demonstrate continuous compliance with the emission limitations?

(a) To demonstrate continuous compliance with the applicable emission limit in § 63.3090(b) or § 63.3091(b), the organic HAP emission rate for each compliance period determined according to the procedures in § 63.3171 must be equal to or less than the applicable emission limit in § 63.3090(b) or § 63.3091(b). A compliance period consists of 1 month. Each month after the end of the initial compliance period described in § 63.3170 is a compliance period consisting of that month. You must perform the calculations in § 63.3171 on a monthly basis.

(b) If the organic HAP emission rate for any 1 month compliance period exceeded the applicable emission limit in § 63.3090(b) or § 63.3091(b), this is a deviation from the emission limitation for that compliance period and must be reported as specified in §§ 63.3110(c)(6) and 63.3120(a)(6).

(c) You must meet the requirements of § 63.3163(c) through (j).

Other Requirements and Information

§ 63.3175 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, 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 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 EPA 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 § 63.3094 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.

§ 63.3176 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in the General Provisions of this part, and in this section as follows:

Add-on control device 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.

Add-on control device efficiency means the ratio of the emissions collected or destroyed by an add-on air pollution control device to the total emissions that are introduced into the control device, expressed as a percentage.

Adhesive means any chemical substance that is applied for the purpose of bonding two surfaces together.

Adhesive and sealer material means adhesives, sealers and thinners added to adhesives or sealers.

Anti-chip coating means a specialty type of coating designed to reduce stone chipping damage. It is applied on selected vehicle surfaces that are exposed to impingement by stones and other road debris. It is typically applied after the electrodeposition primer and before the topcoat Anti-chip coatings are a type of *primer-surfacer*.

Automobile means a motor vehicle designed to carry up to eight passengers, excluding vans, sport utility vehicles, and motor vehicles designed primarily to transport light loads of property. See also *Light-duty truck*.

Automobile and/or light-duty truck assembly plant means facilities involved primarily in assembly of automobiles and light-duty trucks, including coating facilities and processes.

Bake oven air seal means an entry or entry vestibule to or an exit or exit vestibule from a bake oven which isolates the bake oven from the area immediately preceding (for an entry or entry vestibule) or immediately following (for an exit or exit vestibule) the bake oven. No significant VOC generating activity takes place in a bake oven air seal. Fresh air is supplied into a bake oven air seal and is then directed in part into the bake oven and in part into the area immediately preceding or immediately following the bake oven.

Basecoat/clearcoat means a topcoat system applied to exterior and selected interior vehicle surfaces primarily to provide an aesthetically pleasing appearance and acceptable durability performance. It consists of a layer of pigmented basecoat color coating, followed directly by a layer of a clear or semitransparent coating. It may include multiple layers of color coats or tinted clear materials.

Blackout coating means a type of specialty coating applied on selected vehicle surfaces (including areas of the engine compartment visible through the grill, and window and pillar trim) to provide a cosmetic appearance. Typically black or dark gray color. Blackout coating may be included in either the primer-surfacer or topcoat operations.

Body part means exterior parts such as hoods, fenders, doors, roof, quarter panels, decklids, tail gates, and cargo beds. Body parts were traditionally made of sheet metal, but now are also made of plastic. Bumpers, fascia, and cladding are not body parts.

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, both at the point of application and at subsequent points where emissions from the coatings occur, such as flash-off, 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.

Catalytic oxidizer means a device for oxidizing pollutants or waste materials via flame and heat incorporating a catalyst to aid the combustion at lower operating temperature.

Cleaning material means a solvent used to remove contaminants and other materials such as dirt, grease, oil, and dried (*e.g.*, depainting) or wet coating from a substrate before or after coating application; or from equipment associated with a coating operation, such as spray booths, spray guns, 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, caulks, inks, adhesives, primers, deadeners, 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 coating to a substrate (coating application) and to dry or cure the coating after application. A single coating operation always includes at least the point at which a coating is applied and all subsequent points in the affected source where organic HAP emissions from that coating occur. There may be multiple coating operations in an affected source. Coating application with hand-held nonrefillable aerosol containers, touchup bottles, touchup markers, marking pens, or pinstriping equipment is not a coating operation for the purposes of this subpart. The application of temporary materials such as protective oils and ''travel waxes'' that are designed to be removed from the vehicle before it is delivered to a retail purchaser is not a coating operation for the purposes of this subpart.

Coating solids means the nonvolatile portion of the coating.

Container means a receptacle, such as a can, vessel, tote, or tank, in which coatings, solvents or cleaning materials are held, stored, mixed, or carried.

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.

Day tank means tank with agitation and pumping system used for mixing and continuous circulation of coatings from the paint storage area to the spray booth area of the paint shop.

Deadener means a specialty coating applied to selected vehicle surfaces for the purpose of reducing the sound of road noise in the passenger compartment.

Deadener material means deadener and thinner added to deadener.

Deposited solids means the coating solids which remain on the substrate or object being painted.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard; 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 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. A deviation is not always a violation.

Electrodeposition primer or electrocoating primer means a process of applying a protective, corrosion-resistant waterborne primer on exterior and interior surfaces that provides thorough coverage of recessed areas. It is a dip coating method that uses an electrical field to apply or deposit the conductive coating onto the part. The object being painted acts as an electrode that is oppositely charged from the particles of paint in the dip tank. Also referred to as E-Coat, Uni-Prime, and ELPO Primer.

Emission limitation means an emission limit, operating limit, or work practice standard.

Final repair means the operations performed and coating(s) applied to completely-assembled motor vehicles or to parts that are not yet on a completely assembled motor vehicle to correct damage or imperfections in the coating. The curing of the coatings applied in these operations is accomplished at a lower temperature than that used for curing primer-surfacer and topcoat. This lower temperature cure avoids the need to send parts that are not yet on a completely assembled vehicle through the same type of curing process used for primer-surfacer and topcoat and is necessary to protect heat sensitive components on completely assembled motor vehicles.

Flash-off area means the portion of a coating process between the coating application station and the next coating application station or drying oven where solvent begins to evaporate from the coated vehicle.

Glass bonding adhesive means an adhesive used to bond windshield or other glass to an automobile or light-duty truck body.

Glass bonding primer means a primer applied to windshield or other glass, or to body openings to prepare the glass or body openings for the application of glass bonding adhesive, or the installation of adhesive bonded glass.

Guide coat means *Primer-surfacer.*

In-line repair means the operation performed and coating(s) applied to correct damage or imperfections in the topcoat on parts that are not yet on a completely assembled motor vehicle. The curing of the coatings applied in these operations is accomplished at essentially the same temperature as that used for curing the previously applied topcoat. Also referred to as high bake repair or high bake reprocess. In-line repair is considered part of topcoat.

Light-duty truck means vans, sport utility vehicles, and motor vehicles designed primarily to transport light loads of property with gross vehicle weight rating of 8,500 lbs or less.

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 §§ 63.3151 and 63.3161. 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 organic HAP means the ratio of the mass of organic HAP to the mass of a material in which it is contained, expressed as kg of organic HAP per kg 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 material.

Paint line means a set of coating operations which includes a topcoat operation and, if present, includes electrodeposition primer, primer-surfacer, final repair, glass bonding primer and glass bonding adhesive operations in which the same new automobile or new light-duty truck bodies, or body parts for new automobiles, or new light-duty trucks are coated. The most typical paint line consists of a set of electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations in which the same new automobile or new light-duty truck bodies are coated.

Paint shop means the collection of all areas at the facility in which new automobile or new light-duty truck bodies, or body parts for new automobiles or new light-duty trucks are phosphated and coated (including application, flash-off, drying and curing of electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, glass bonding adhesive, deadener, adhesives and sealers); all coating operations added to the affected source pursuant to § 63.3082(c); all areas at the facility in which substrates or equipment are cleaned relating to the coating of new automobile or new light-duty truck bodies, the coating of body parts for new automobiles or new light-duty trucks, or coating operations added to the affected source pursuant to § 63.3082(c); and all areas at the facility used for storage, mixing, conveying and waste handling of coatings, thinners and cleaning materials related to the coating of new automobile or new light-duty truck bodies, the coating of body parts for new automobiles or new light-duty trucks, or coating operations added to the affected source pursuant to § 63.3082(c). If there is no application of topcoat to new automobile or new light-duty truck bodies, or body parts for new automobiles or new light-duty trucks at the facility, then for purposes of this subpart the facility does not have a paint shop.

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.

Primer-surfacer means an intermediate protective coating applied on the electrodeposition primer and under the topcoat. It provides adhesion, protection, and appearance properties to the total finish. Also called a guide coat or surfacer. *Anti-chip coatings* are a type of primer-surfacer.

Purge/clean operation means the process of flushing paint out and cleaning the spray lines when changing colors or to remove undesired material. It includes use of air and solvents to clean the lines.

Purge capture means the capture of purge solvent and materials into a closed collection system immediately after purging the system. It is used to prevent the release of organic HAP emissions and includes the disposal of the captured purge material.

Purge material means the coating and associated cleaning solvent materials expelled from the spray system during the process of cleaning the spray lines and applicators when color-changing or to maintain the cleanliness of the spray system.

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 operations means surface coating for which the primary purpose is research and development of new processes and products, that is conducted under the close supervision of technically trained personnel, and that is not part of 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.

Sealer means a high solids, high viscosity material, generally, but not always, applied in the paint shop after the body has received an electrodeposition primer coating. The primary purpose of sealers is to fill body joints completely so that there is no intrusion of water, gases or corrosive materials into the passenger area of the body compartment. Also referred to as sealants.

Spray booth means a ventilated structure housing automatic and/or manual spray application equipment for coating operations. Includes facilities for the capture and entrapment of particulate overspray.

Spray booth air seal means an entry vestibule to or exit vestibule from a spray booth which isolates the spray booth from the area immediately preceeding (for an entry vestibule) or immediately following (for an exit vestibule) the spray booth. No coating application or other VOC generating activity takes place in a spray booth air seal. Fresh air is supplied into a spray booth air seal and is then directed in part into the spray booth and in part into the area immediately preceeding or immediately following the spray booth.

Startup, initial means the first time equipment is used in a facility to produce a salable product.

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.’’

Surfacer means *Primer-surfacer*.

Tack-wipe means solvent impregnated cloth used to remove dust from surfaces prior to application of coatings.

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.

Thermal oxidizer means a device for oxidizing air pollutants or waste materials via flame and heat.

Thinner means an organic solvent that is added to a coating after the coating is received from the supplier.

Topcoat means the final coating system applied to provide the final color and/or a protective finish. The topcoat may be a monocoat color or basecoat/clearcoat system. In-line repair and two-tone are part of topcoat.

Total volatile hydrocarbon (TVH) means the total amount of nonaqueous volatile organic matter determined according to Methods 204 and 204A through F 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.

Touchup bottle means a glass or metal bottle of less than 0.10 liter volume furnished with a brush that is permanently attached to the bottle closure.

Transfer efficiency means the ratio of the amount of coating solids deposited onto the surface of the object to the total amount of coating solids sprayed while applying the coating to the object.

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).

Volume fraction of coating solids means the ratio of the volume of coating solids (also known as volume of nonvolatiles) to the volume of coating; liters of coating solids per liter of coating.

Tables to Subpart IIII of Part 63

If you are required to comply with operating limits by § 63.3093, you must comply with the applicable operating limits in the following table:

TABLE 1 TO SUBPART IIII OF PART 63.—OPERATING LIMITS FOR CAPTURE SYSTEMS AND ADD-ON CONTROL DEVICES

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 § 63.3167(a).	i. Collecting the combustion temperature data according to § 63.3168(c); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average combustion temperature at or above 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 § 63.3167(b); and either.	i. Collecting the temperature data temperature according to § 63.3168(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.

TABLE 1 TO SUBPART IIII OF PART 63.—OPERATING LIMITS FOR CAPTURE SYSTEMS AND ADD-ON CONTROL DEVICES—Continued

For the following device . . .	You must meet the following operating limit . . .	And you must demonstrate continuous compliance with the operating limit by
	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 § 63.3167(b)(2); or.	i. Collecting the temperature data according to § 63.3168(c); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average temperature difference at or above the temperature difference limit; or
	c. Develop and implement an inspection and maintenance plan according to § 63.3167(b)(4).	i. Maintaining an up-to-date inspection 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 § 63.3167(b)(4), you must take corrective action as soon as practicable consistent with the manufacturer's recommendations.
3. Regenerative 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 § 63.3167(c).	i. Measuring the total regeneration desorbing gas (*e.g.*, steam or nitrogen) mass flow for each regeneration cycle according to § 63.3168(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 § 63.3167(c).	i. Measuring the temperature of the carbon bed after completing each regeneration and any cooling cycle according to § 63.3168(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 § 63.3167(d).	i. Collecting the condenser outlet (product side) gas temperature according to § 63.3168(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 desorption gas inlet temperature in any 3-hour period must not fall below the limit established according to § 63.3167(e).	i. Collecting the temperature data according to § 63.3168(f); ii. Reducing the data to 3-hour block averages; and iii. maintaining the 3-hour average temperature at or above the temperature limit.
6. Emission capture system that is a PTE.	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 water, 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 § 63.3168(g)(1) or the pressure drop across the enclosure according to § 63.3168(g)(2); and ii. Maintaining the facial velocity of air flow through all natural draft openings or the pressure drop 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.	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 § 63.3167(f).	i. Vollecting the gas volumetric flow rate or duct static pressure for each capture device according to § 63.3168(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 IIII OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART IIII OF PART 63

Citation	Subject	Applicable to subpart IIII	Explanation
§ 63.1(a)(1)–(12)	General Applicability	Yes.	
§ 63.1(b)(1)–(3)	Initial Applicability Determination	Yes	Applicability to subpart IIII is also specified in § 63.3081.
§ 63.1(c)(1)	Applicability After Standard Established	Yes.	
§ 63.1(c)(2)	Applicability of Permit Program for Area Sources.	No	Area sources are not subject to subpart IIII.
§ 63.1(c)(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 § 63.3176.
§ 63.3(a)–(c)	Units and Abbreviations	Yes.	
§ 63.4(a)(1)–(5)	Prohibited Activities	Yes.	
§ 63.4(b)–(c)	Circumvention/Fragmentation	Yes.	
§ 63.5(a)	Preconstruction Review Applicability	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	Section 63.3083 specifies the compliance dates.
§ 63.6(c)(1)–(5)	Compliance Dates for Existing Sources	Yes	Section 63.3083 specifies the compliance dates.
§ 63.6(e)(1)–(2)	Operation and Maintenance	Yes.	
§ 63.6(e)(3)	SSMP	Yes	Only sources using an add-on control device to comply with the standard must complete SSMP.
§ 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 standards.
§ 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 IIII does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).
§ 63.6(i)	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 §§ 63.3164 and 63.3166.
§ 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 standards. Section 63.3160 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 standards.
§ 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.
§ 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 standards.

TABLE 2 TO SUBPART IIII OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART IIII OF PART 63—Continued

Citation	Subject	Applicable to subpart IIII	Explanation
§ 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 standards. Additional requirements for monitoring are specified in § 63.3168.
§ 63.8(a)(4)	Additional Monitoring Requirements	No	Subpart IIII does not have monitoring requirements for flares.
§ 63.8(b)	Conduct of Monitoring	Yes	
63.8(c)(1)–(3)	Continuous Monitoring Systems (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 standards. Additional requirements for CMS operations and maintenance are specified in § 63.3168.
§ 63.8(c)(4)	CMS	No	Section 63.3168 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply with the standards.
§ 63.89(c)(5)	COMS	No	Subpart IIII does not have opacity or visible emission standards.
§ 63.8(c)(6)	CMS Requirements	No	Section 63.3168 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply with the standards.
§ 63.8(c)(7)	CMS Out-of-Control Periods	No	
§ 63.8(c)(8)	CMS Out-of-Control Periods Reporting	No	Section 63.3120 requires reporting of CMS out-of-control periods.
§ 63.8(d)–(e)	Quality Control Program and CMS Performance Evaluation.	No	Subpart IIII 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 IIII does not require the use of continuous emissions monitoring systems.
§ 63.8(g)(1)–(5)	Data Reduction	No	Sections 63.3167 and 63.3168 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 standards.
§ 63.9(f)	Notification of Visible Emissions/Opacity Test.	No	Subpart IIII does not have opacity or visible emission standards.
§ 63.9(g)(1)–(3)	Additional Notifications When Using CMS.	No	Subpart IIII does not require the use of continuous emissions monitoring systems.
§ 63.9(h)	Notification of Compliance Status	Yes	Section 63.3110 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 §§ 63.3130 and 63.3131.
§ 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 capture systems and add-on control devices used to comply with the standards.
§ 63.10(b)(2)(vi)–(xi)		Yes.	
§ 63.10(b)(2)(xii)	Records	Yes.	

TABLE 2 TO SUBPART IIII OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART IIII OF PART 63—Continued

Citation	Subject	Applicable to subpart IIII	Explanation
§ 63.10(b)(2)(xiii)		No	Subpart IIII 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 § 63.3120(a)(6).
§ 63.10(c)(9)–(15)		Yes	
§ 63.10(d)(1)	General Reporting Requirements	Yes	Additional requirements are specified in § 63.3120.
§ 63.10(d)(2)	Report of Performance Test Results	Yes	Additional requirements are specified in § 63.3120(b).
§ 63.10(d)(3)	Reporting Opacity or Visible Emissions Observations.	No	Subpart IIII 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 capture systems and add-on control devices used to comply with the standards.
§ 63.10(e)(1)–(2)	Additional CMS Reports	No	Subpart IIII does not require the use of continuous emissions monitoring systems.
§ 63.10(e)(3)	Excess Emissions/CMS Performance Reports.	No	Section 63.3120(b) specifies the contents of periodic compliance reports.
§ 63.10(e)(4)	COMS Data Reports	No	Subpart IIII does not specify requirements for opacity or COMS.
§ 63.10(f)	Recordkeeping/Reporting Waiver	Yes	
§ 63.11	Control Device Requirements/Flares	No	Subpart IIII 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 IIII 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.
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.

TABLE 3 TO SUBPART IIII 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
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 IIII 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] *E.g.*, 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] *E.g.*, Medium-flash Naphtha, High-flash Naphtha, Aromatic Naphtha, Light Aromatic Naphtha, Light Aromatic Hydrocarbons, Aromatic Hydrocarbons, Light Aromatic Solvent.

Appendix A to Subpart IIII of Part 63—Determination of Capture Efficiency of Automobile and Light-Duty Truck Spray Booth Emissions From Solvent-borne Coatings Using Panel Testing

1.0 Applicability, Principle, and Summary of Procedure.

1.1 Applicability.

This procedure applies to the determination of capture efficiency of automobile and light-duty truck spray booth emissions from solvent-borne coatings using panel testing. This procedure can be used to determine capture efficiency for partially controlled spray booths (*e.g.*, automated spray zones controlled and manual spray zones not controlled) and for fully controlled spray booths.

1.2 Principle.

1.2.1 The volatile organic compounds (VOC) associated with the coating solids deposited on a part (or panel) in a controlled spray booth zone (or group of contiguous controlled spray booth zones) partition themselves between the VOC that volatilize in the controlled spray booth zone (principally between the spray gun and the part) and the VOC that remain on the part (or panel) when the part (or panel) leaves the controlled spray booth zone. For solvent-borne coatings essentially all of the VOC associated with the coating solids deposited on a part (or panel) in a controlled spray booth zone that volatilize in the controlled spray booth zone pass through the waterwash and are exhausted from the controlled spray booth zone to the control device.

1.2.2 The VOC associated with the overspray coating solids in a controlled spray booth zone partition themselves between the VOC that volatilize in the controlled spray booth zone and the VOC that are still tied to the overspray coating solids when the overspray coating solids hit the waterwash. For solvent-borne coatings almost all of the VOC associated with the overspray coating solids that volatilize in the controlled spray booth zone pass through the waterwash and are exhausted from the controlled spray booth zone to the control device. The exact fate of the VOC still tied to the overspray coating solids when the overspray coating solids hit the waterwash is unknown. This procedure assumes that none of the VOC still tied to the overspray coating solids when the overspray coating solids hit the waterwash are captured and delivered to the control device. Much of this VOC may become entrained in the water along with the overspray coating solids. Most of the VOC that become entrained in the water along with the overspray coating solids leave the water, but the point at which this VOC leave the water is unknown. Some of the VOC still tied to the overspray coating solids when the overspray coating solids hit the waterwash may pass through the waterwash and be exhausted from the controlled spray booth zone to the control device.

1.2.3 This procedure assumes that the portion of the VOC associated with the overspray coating solids in a controlled spray booth zone that volatilizes in the controlled spray booth zone, passes through the waterwash and is exhausted from the controlled spray booth zone to the control device is equal to the portion of the VOC associated with the coating solids deposited on a part (or panel) in that controlled spray booth zone that volatilizes in the controlled spray booth zone, passes through the waterwash, and is exhausted from the controlled spray booth zone to the control device. This assumption is equivalent to treating all of the coating solids sprayed in the controlled spray booth zone as if they are deposited coating solids (*i.e.*, assuming 100 percent transfer efficiency) for purposes of using a panel test to determine spray booth capture efficiency.

1.2.4 This is a conservative (low) assumption for the portion of the VOC associated with the overspray coating solids in a controlled spray booth zone that volatilizes in the controlled spray booth zone. Thus, this assumption results in an underestimate of conservative capture efficiency. The overspray coating solids have more travel time and distance from the spray gun to the waterwash than the deposited coating solids have between the spray gun and the part (or panel). Therefore, the portion of the VOC associated with the overspray coating solids in a controlled spray booth zone that volatilizes in the controlled spray booth zone should be greater than the portion of the VOC associated with the coating solids deposited on a part (or panel) in that controlled spray booth zone that volatilizes in that controlled spray booth zone.

1.3 Summary of Procedure.

1.3.1 A panel test is performed to determine the mass of VOC that remains on the panel when the panel leaves a controlled spray booth zone. The total mass of VOC associated with the coating solids deposited on the panel is calculated.

1.3.2 The percent of the total VOC associated with the coating solids deposited on the panel in the controlled spray booth zone that remains on the panel when the panel leaves the controlled section of the spray booth is then calculated from the ratio of the two previously determined masses. The percent of the total VOC associated with the coating solids deposited on the panel in the controlled spray booth zone that is captured and delivered to the control device equals 100 minus this percentage. (The mass of VOC associated with the coating solids deposited on the panel which is volatilized and captured in the controlled spray booth zone equals the difference between the total mass of VOC associated with the coating solids deposited on the panel and the mass of VOC remaining with the coating solids deposited on the panel when the panel leaves the controlled spray booth zone.)

1.3.3 The percent of the total VOC associated with the coating sprayed in the controlled spray booth zone that is captured and delivered to the control device is assumed to be equal to the percent of the total VOC associated with the coating solids deposited on the panel in the controlled spray booth zone that is captured and delivered to the control device. The percent of the total VOC associated with the coating sprayed in the entire spray booth that is captured and delivered to the control device can be calculated by multiplying the percent of the total VOC associated with the coating sprayed in the controlled spray booth zone that is captured and delivered to the control device by the fraction of coating sprayed in the spray booth that is sprayed in the controlled spray booth zone.

2.0 Procedure.

2.1 You may conduct panel testing to determine the capture efficiency of spray booth emissions. You must follow the instructions and calculations in this appendix A, and use the panel testing procedures in ASTM Method D5087–02, ‘‘Standard Test Method for Determining Amount of Volatile Organic Compound (VOC) Released from Solventborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement)’’ (incorporated by reference, see § 63.14), or the guidelines presented in ‘‘Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,’’ EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22). You must weigh panels at the points described in section 2.5 of this appendix A and perform calculations as described in sections 3 and 4 of this appendix A. You may conduct panel tests on the production paint line in your facility or in a laboratory simulation of the production paint line in your facility.

2.2 You may conduct panel testing on representative coatings as described in ‘‘Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,’’ EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22). If you panel test representative coatings, then you may calculate either a unique percent capture efficiency value for each coating grouped with that representative coating, or a composite percent capture efficiency value for the group of coatings. If you panel test each coating, then you must convert the panel test result for each coating to a unique percent capture efficiency value for that coating.

2.3 Identification of Controlled Spray Booth Zones.

You must identify each controlled spray booth zone or each group of contiguous controlled spray booth zones to be tested. (For example, a controlled bell zone immediately followed by a controlled robotic zone.) Separate panel tests are required for non-contiguous controlled spray booth zones. The flash zone between the last basecoat zone and the first clearcoat zone makes these zones non-contiguous.

2.4 Where to Apply Coating to the Panel.

If you are conducting a panel test for a single controlled spray booth zone, then you must apply coating to the panel only in that controlled spray booth zone. If you are conducting a panel test for a group of contiguous controlled spray booth zones, then you must apply coating to the panel only in that group of contiguous controlled spray booth zones.

2.5 How to Process and When to Weigh the Panel.

The instructions in this section pertain to panel testing of coating, i, or of the coating representing the group of coatings that includes coating, i.

2.5.1 You must weigh the blank panel. (Same as in bake oven panel test.) The mass of the blank panel is represented by $W_{blank,i}$ (grams).

2.5.2 Apply coating, i, or the coating representing coating, i, to the panel in the controlled spray booth zone or group of contiguous controlled spray booth zones being tested (in plant test), or in a simulation of the controlled spray booth zone or group of contiguous controlled spray booth zones being tested (laboratory test).

2.5.3 Remove and weigh the wet panel as soon as the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested. (Different than bake oven panel test.) This weighing must be conducted quickly to avoid further evaporation of VOC. The mass of the wet panel is represented by $W_{wet,i}$ (grams).

2.5.4 Return the wet panel to the point in the coating process or simulation of the coating process where it was removed for weighing.

2.5.5 Allow the panel to travel through the rest of the coating process in the plant or laboratory simulation of the coating process. You must not apply any more coating to the panel after it leaves the controlled spray booth zone (or group of contiguous controlled spray booth zones) being tested. The rest of the coating process or simulation of the coating process consists of:

2.5.5.1 All of the spray booth zone(s) or simulation of all of the spray booth zone(s) located after the controlled spray booth zone or group of contiguous controlled spray booth zones being tested and before the bake oven where the coating applied to the panel is cured,

2.5.5.2 All of the flash-off area(s) or simulation of all of the flash-off area(s) located after the controlled spray booth zone or group of contiguous controlled spray booth zones being tested and before the bake oven where the coating applied to the panel is cured, and

2.5.5.3 The bake oven or simulation of the bake oven where the coating applied to the panel is cured.

2.5.6 After the panel exits the bake oven, you must cool and weigh the baked panel. (Same as in bake oven panel test.) The mass of the baked panel is represented by $W_{baked,i}$ (grams).

3.0 Panel Calculations.

The instructions in this section pertain to panel testing of coating, i, or of the coating representing the group of coatings that includes coating, i.

3.1 The mass of coating solids (from coating, i, or from the coating representing coating, i, in the panel test) deposited on the panel equals the mass of the baked panel minus the mass of the blank panel as shown in Equation A–1.

$$W_{sdep,i} = W_{baked,i} - W_{blank,i} \qquad \text{(Eq. A-1)}$$

Where:

$W_{sdep,\,i}$ = Mass of coating solids (from coating, i, or from the coating representing coating, i, in the panel test) deposited on the panel, grams.

3.2 The mass of VOC (from coating, i, or from the coating representing coating, i, in the panel test) remaining on the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested equals the mass of the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested minus the mass of the baked panel as shown in Equation A–2.

$$W_{rem,i} = W_{wet,i} - W_{baked,i} \qquad \text{(Eq. A-2)}$$

Where:

$W_{rem,i}$ = Mass of VOC (from coating, i, or from the coating representing coating, i, in the panel test) remaining on the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested, grams.

3.3 Calculate the mass of VOC (from coating, i, or from the coating representing coating, i, in the panel test) remaining on the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested per mass of coating solids deposited on the panel as shown in Equation A–3.

$$P_{m,i} = \left(W_{rem,i}\right)/\left(W_{sdep,i}\right) \qquad \text{(Eq. A-3)}$$

Where:

$P_{m,i}$ = Mass of VOC (from coating, i, or from the coating representing coating, i, in the panel test) remaining on the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested per mass of coating solids deposited on the panel, grams of VOC remaining per gram of coating solids deposited.

$W_{rem,\,i}$ = Mass of VOC (from coating, i, or from the coating representing coating, i, in the panel test) remaining on the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested, grams.

$W_{sdep,i}$ = Mass of coating solids (from coating, i, or from the coating representing coating, i, in the panel test) deposited on the panel, grams.

4.0 Converting Panel Result to Percent Capture.

The instructions in this section pertain to panel testing of for coating, i, or of the coating representing the group of coatings that includes coating, i.

4.1 If you panel test representative coatings, then you may convert the panel test result for each representative coating from section 3.3 of this appendix A either to a unique percent capture efficiency value for each coating grouped with that representative coating by using coating specific values for the mass fraction coating solids and mass fraction VOC in section 4.2 of this appendix A, or to a composite percent capture efficiency value for the group of coatings by using the average values for the group of coatings for mass fraction coating solids and mass fraction VOC in section 4.2 of this appendix A. If you panel test each coating, then you must convert the panel test result for each coating to a unique percent capture efficiency value by using coating specific values for the mass fraction coating solids and mass fraction VOC in section 4.2 of this appendix A. The mass fraction of VOC in the coating and the mass fraction of solids in the coating must be determined by Method 24 (appendix A to 40 CFR part 60) or by following the guidelines for combining analytical VOC content and formulation solvent content presented in ''Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,'' EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22).

4.2 The percent of VOC for coating, i, or composite percent of VOC for the group of coatings including coating, i, associated with the coating solids deposited on the panel that remains on the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested is calculated using Equation A–4.

$$\mathrm{Pvoc}_{\mathrm{pan,i}} = \left(\mathrm{P}_{\mathrm{m,i}}\right)\left(\mathrm{W}_{\mathrm{s,i}}\right)(100)/\left(\mathrm{Wvoc}_{\mathrm{c,i}}\right) \qquad \text{(Eq. A-4)}$$

Where:

$\mathrm{Pvoc}_{\mathrm{pan,i}}$ = Percent of VOC for coating, i, or composite percent of VOC for the group of coatings including coating, i, associated with the coating solids deposited on the panel that remains on the wet panel when the wet panel leaves the controlled spray booth zone (or group of contiguous controlled spray booth zones) being tested, percent.

$\mathrm{P}_{\mathrm{m,i}}$ = Mass of VOC (from coating, i, or from the coating representing coating, i, in the panel test) remaining on the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested per mass of coating solids deposited on the panel, grams of VOC remaining per gram of coating solids deposited.

$\mathrm{W}_{\mathrm{s,i}}$ = Mass fraction of coating solids for coating, i, or average mass fraction of coating solids for the group of coatings including coating, i, grams coating solids per gram coating, determined by Method 24 (appendix A to 40 CFR part 60) or by following the guidelines for combining analytical VOC content and formulation solvent content presented in ''Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,'' EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22).

$\mathrm{Wvoc}_{\mathrm{c,i}}$ = Mass fraction of VOC in coating, i, or average mass fraction of VOC for the group of coatings including coating, i, grams VOC per grams coating, determined by Method 24 (appendix A to 40 CFR part 60) or the guidelines for combining analytical VOC content and formulation solvent content presented in ''Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,'' EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22).

4.3 The percent of VOC for coating, i, or composite percent of VOC for the group of coatings including coating, i, associated with the coating sprayed in the controlled spray booth zone (or group of contiguous controlled spray booth zones) being tested that is captured in the controlled spray booth zone or group of contiguous controlled spray booth zones being tested, $\mathrm{CE}_{\mathrm{zone,i}}$ (percent), is calculated using Equation A–5.

$$\mathrm{CE}_{\mathrm{zone,i}} = 100 - \mathrm{Pvoc}_{\mathrm{pan,i}} \qquad \text{(Eq. A-5)}$$

Where:

$\mathrm{CE}_{\mathrm{zone,i}}$ = Capture efficiency for coating, i, or for the group of coatings including coating, i, in the controlled spray booth zone or group of contiguous controlled spray booth zones being tested as a percentage of the VOC in the coating, i, or of the group of coatings including coating, i, sprayed in the controlled spray booth zone or group of contiguous controlled spray booth zones being tested, percent.

4.4 Calculate the percent of VOC for coating, i, or composite percent of VOC for the group of coatings including coating, i, associated with the entire volume of coating, i, or with the total volume of all of the coatings grouped with coating, i, sprayed in the entire spray booth that is captured in the controlled spray booth zone or group of contiguous controlled spray booth zones being tested, using Equation A–6. The volume of coating, i, or of the group of coatings including coating, i, sprayed in the controlled spray booth zone or group of contiguous controlled spray booth zones being tested, and the volume of coating, i, or of the group of coatings including coating, i, sprayed in the entire spray booth may be determined from gun on times and fluid flow rates or from direct measurements of coating usage.

$$\mathrm{CE}_{\mathrm{i}} = \left(\mathrm{CE}_{\mathrm{zone,i}}\right)\left(\mathrm{V}_{\mathrm{zone,i}}\right)/\left(\mathrm{V}_{\mathrm{booth,i}}\right) \qquad \text{S(Eq. A-6)}$$

Where:

CE_{i} = Capture efficiency for coating, i, or for the group of coatings including coating, i, in the controlled spray booth zone (or group of contiguous controlled spray booth zones) being tested as a percentage of the VOC in the coating, i, or of the group of coatings including coating, i, sprayed in the entire spray booth in which the controlled spray booth zone (or group of contiguous controlled spray booth zones) being tested, percent.

$\mathrm{V}_{\mathrm{zone,i}}$ = Volume of coating, i, or of the group of coatings including coating, i, sprayed in the controlled spray booth zone or group of contiguous controlled spray booth zones being tested, liters.

$\mathrm{V}_{\mathrm{booth,i}}$ = Volume of coating, i, or of the group of coatings including coating, i, sprayed in the entire spray booth containing the controlled spray booth zone (or group of contiguous controlled spray booth zones) being tested, liters.

4.5 If you conduct multiple panel tests for the same coating or same group of coatings in the same spray booth (either because the coating or group of coatings is controlled in non-contiguous zones of the spray booth, or because you choose to conduct separate panel tests for contiguous controlled spray booth zones), then you may add the result from section 4.4 for each such panel test to get the total capture efficiency for the coating or group of coatings over all of the controlled zones in the spray booth for the coating or group of coatings.

Subpart MMMM—[Amended]

■ 4. Section 63.3881 is amended by adding paragraphs (c)(17), and (d), and revising paragraphs (e)(2) introductory text and (e)(3) to read as follows:

§ 63.3881 Am I subject to this subpart?

* * * * *

(c) * * *

(17) Surface coating of metal components of automobiles and light-duty trucks that meets the applicability criteria in § 63.3082(b) for the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) at a facility that meets the applicability criteria in § 63.3081(b).

(d) If your facility meets the applicability criteria in § 63.3081(b) of the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII), and you perform surface coating of metal parts or products that meets both the applicability criteria in § 63.3082(c) and the applicability criteria of the Surface Coating of Miscellaneous Metal Parts and Products (40 CFR part 63, subpart MMMM), then for the surface coating of any or all of your metal parts or products that meets the applicability criteria in § 63.3082(c), you may choose to comply with the requirements of subpart IIII of this part in lieu of complying with the Surface Coating of Miscellaneous Metal Parts and Products NESHAP. Surface coating operations on metal parts or products not intended for use in automobiles or light-duty trucks (for example, parts for motorcycles or lawn mowers) cannot be made part of your affected source under subpart IIII of this part.

(e) * * *

(2) You may comply with the emission limitation representing the predominant surface coating activity at your facility, as determined according to paragraphs (e)(2)(i) and (ii) of this section. However, you may not establish high performance, rubber-to-metal, or extreme performance fluoropolymer coating operations as the predominant activity. You must not consider any surface coating activity that is subject to the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) in determining the predominant surface coating activity at your facility.

* * * * *

(3) You may comply with a facility-specific emission limit calculated from the relative amount of coating activity that is subject to each emission limit. If you elect to comply using the facility-specific emission limit alternative, then compliance with the facility-specific emission limit and the emission limitations in this subpart for all surface coating operations constitutes compliance with this and other applicable surface coating NESHAP. The procedures for calculating the facility-specific emission limit are specified in § 63.3890. In calculating a facility-specific emission limit, you must include coating activities that meet the applicability criteria of other surface coating NESHAP and constitute more than 1 percent of total coating activities at your facility. You must not consider any surface coating activity that is subject to the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) in determining a facility-specific emission limit for your facility. Coating activities that meet the applicability criteria of other surface coating NESHAP but comprise less than 1 percent of total coating activities need not be included in the calculation of the facility-specific emission limit but must be included in the compliance calculations.

■ 5. Section 63.3910 is amended by revising paragraph (b) to read as follows:

§ 63.3910 What notifications must I submit?

* * * * *

(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 January 2, 2004, whichever is later. For an existing affected source, you must submit the initial notification no later than 1 year after January 2, 2004. If you are using compliance with the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (subpart IIII of this part) as provided for under § 63.3881(d) to constitute compliance with this subpart for any or all of your metal parts coating operations, then you must include a statement to this effect in your initial notification, and no other notifications are required under this subpart in regard to those metal parts coating operations. If you are complying with another NESHAP that constitutes the predominant activity at your facility under § 63.3881(e)(2) to constitute compliance with this subpart for your metal parts coating operations, then you must include a statement to this effect in your initial notification, and no other notifications are required under this subpart in regard to those metal parts coating operations.

* * * * *

Subpart PPPP—[Amended]

■ 6. Section 63.4481 is amended by adding paragraphs (c)(16) and (d), and revising paragraphs (e)(2) introductory text and (3) to read as follows:

§ 63.4481 Am I subject to this subpart?

* * * * *

(c) * * *

(16) Surface coating of plastic components of automobiles and light-duty trucks that meet the applicability criteria in § 63.3082(b) of the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) at a facility that meets the applicability criteria in § 63.3081(b).

(d) If your facility meets the applicability criteria in § 63.3081(b) of the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) and you perform surface coating of plastic parts or products that meets both the applicability criteria in § 63.3082(c) and the applicability criteria of this subpart, then for the surface coating of any or all of your plastic parts or products that meets the applicability criteria in § 63.3082(c), you may choose to comply with the requirements of subpart IIII of this part in lieu of complying with this subpart. Surface coating operations on plastic parts or products not intended for use in automobiles or light-duty trucks (for example, parts for motorcycles or lawn mowers) cannot be made part of your affected source under subpart IIII of this part.

(e) * * *

(2) You may comply with the emission limitation representing the predominant surface coating activity at your facility, as determined according to paragraphs (e)(2)(i) and (ii) of this section. However, you may not establish assembled on-road vehicle or automotive lamp coating operations as the predominant activity. You must not consider any surface coating activity that is subject to the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) in determining the predominant surface coating activity at your facility.

* * * * *

(3) You may comply with a facility-specific emission limit calculated from the relative amount of coating activity that is subject to each emission limit. If you elect to comply using the facility-specific emission limit alternative, then compliance with the facility-specific emission limit and the emission limitations in this subpart for all surface coating operations constitutes compliance with this subpart and other applicable surface coating NESHAP.

The procedures for calculating the facility-specific emission limit are specified in § 63.4490. In calculating a facility-specific emission limit, you must include coating activities that meet the applicability criteria of other surface coating NESHAP and constitute more than 1 percent of total coating activities at your facility. You must not consider any surface coating activity that is subject to the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) in determining a facility-specific emission limit for your facility. Coating activities that meet the applicability criteria of other surface coating NESHAP but comprise less than 1 percent of total coating activities need not be included in the calculation of the facility-specific emission limit but must be included in the compliance calculations.

■ 7. Section 63.4510 is amended by revising paragraph (b) to read as follows:

§ 63.4510 What notifications must I submit?

* * * * *

(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 April 19, 2004, whichever is later. For an existing affected source, you must submit the initial notification no later than 1 year after April 19, 2004. If you are using compliance with the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (subpart IIII of this part) as provided for under § 63.4481(d) to constitute compliance with this subpart for any or all of your plastic parts coating operations, then you must include a statement to this effect in your initial notification, and no other notifications are required under this subpart in regard to those plastic parts coating operations. If you are complying with another NESHAP that constitutes the predominant activity at your facility under § 63.4481(e)(2) to constitute compliance with this subpart for your plastic parts coating operations, then you must include a statement to this effect in your initial notification, and no other notifications are required under this subpart in regard to those plastic parts coating operations.

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PART 264—[AMENDED]

■ 8. The authority citation for part 264 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6924, and 6925, *et seq.*

■ 9. Section 264.1050 is amended by adding paragraph (h) after paragraph (g) and before the note to read as follows:

§ 264.1050 Applicability.

* * * * *

(h) Purged coatings and solvents from surface coating operations subject to the national emission standards for hazardous air pollutants (NESHAP) for the surface coating of automobiles and light-duty trucks at 40 CFR part 63, subpart IIII, are not subject to the requirements of this subpart.

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PART 265—[AMENDED]

■ 10. The authority citation for part 265 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6924, 6925, and 6935, *et seq.*

■ 11. Section 265.1050 is amended by adding paragraph (g) after paragraph (f) and before the note to read as follows:

§ 265.1050 Applicability.

* * * * *

(g) Purged coatings and solvents from surface coating operations subject to the national emission standards for hazardous air pollutants (NESHAP) for the surface coating of automobiles and light-duty trucks at 40 CFR part 63, subpart IIII, are not subject to the requirements of this subpart.

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