

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 63**

**[EPA-HQ-OAR-2019-0314, EPA-HQ-OAR-2019-0312, EPA-HQ-OAR-2019-0313, EPA-HQ-OAR-2017-0670, EPA-HQ-OAR-2017-0668, EPA-HQ-OAR-2017-0669; FRL-]**

**RIN 2060-AT49 and RIN 2060-AT72**

**National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks; Surface Coating of Miscellaneous Metal Parts and Products; Surface Coating of Plastic Parts and Products; Surface Coating of Large Appliances; Printing, Coating, and Dyeing of Fabrics and Other Textiles; and Surface Coating of Metal Furniture Residual Risk and Technology Reviews**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The U.S. Environmental Protection Agency (EPA) is proposing amendments to address the results of the residual risk and technology reviews (RTR) that the EPA is required to conduct in accordance with the Clean Air Act (CAA) with regard to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for the Surface Coating of Automobiles and Light-Duty Trucks (ALDT), the NESHAP for the Surface Coating of Miscellaneous Metal Parts and Products (MMPP), and the NESHAP for the Surface Coating of Plastic Parts and Products (PPP). The EPA is proposing to find the risks due to emissions of air toxics from these source categories under the current standards are acceptable and the standards provide an ample margin of safety to protect public health. We are proposing no revisions to the numerical emission limits based on these analyses. The EPA is proposing to amend provisions addressing emissions during

periods of startup, shutdown, and malfunction (SSM); to amend provisions regarding electronic reporting of performance test results; to amend provisions regarding monitoring requirements; and to make miscellaneous clarifying and technical corrections. This notice also proposes technical corrections to the NESHAP for Surface Coating of Large Appliances; NESHAP for Printing, Coating, and Dyeing of Fabrics and Other Textiles; and NESHAP for Surface Coating of Metal Furniture.

**DATES: Comments.** Comments must be received on or before **[Insert date 45 days after date of publication in the Federal Register]**. Under the Paperwork Reduction Act (PRA), comments on the information collection provisions are best assured of consideration if the Office of Management and Budget (OMB) receives a copy of your comments on or before **[Insert date 30 days after date of publication in the Federal Register]**.

*Public hearing.* If anyone contacts us requesting a public hearing on or before **[Insert date 5 days after date of publication in the Federal Register]**, we will hold a hearing. Additional information about the hearing, if requested, will be published in a subsequent **Federal Register** document and posted at <https://www.epa.gov/stationary-sources-air-pollution/surface-coating-automobiles-and-light-duty-trucks-national-emission>, <https://www.epa.gov/stationary-sources-air-pollution/surface-coating-miscellaneous-metal-parts-and-products-national> and <https://www.epa.gov/stationary-sources-air-pollution/surface-coating-plastic-parts-and-products-national-emission>. See **SUPPLEMENTARY INFORMATION** for information on requesting and registering for a public hearing.

**ADDRESSES:** You may send comments, identified by Docket ID No. EPA-HQ-OAR-2019-0314 for 40 Code of Federal Regulations (CFR) part 63, subpart IIII, Automobiles and Light-Duty Trucks; Docket ID No. EPA-HQ-OAR-2019-0312 for 40 CFR part 63, subpart MMMM,

Surface Coating of Miscellaneous Metal Parts and Products; Docket ID No. EPA-HQ-OAR-2019-0313 for 40 CFR part 63, subpart PPPP, Surface Coating of Plastic Parts and Products; Docket ID No. EPA-HQ-OAR-2017-0668 for 40 CFR part 63, subpart OOOO, Printing Coating, and Dyeing of Fabrics and Other Textiles; EPA-HQ-OAR-2017-0669 for 40 CFR part 63, subpart RRRR, Surface Coating of Metal Furniture; Docket ID No. EPA-HQ-OAR-2017-0670, for 40 CFR part 63 subpart NNNN for Surface Coating of Large Appliances by any of the following methods:

- Federal eRulemaking Portal: <https://www.regulations.gov/> (our preferred method).  
Follow the online instructions for submitting comments.
- Email: [a-and-r-docket@epa.gov](mailto:a-and-r-docket@epa.gov). Include Docket ID No. EPA-HQ-OAR-2019-0312, EPA-HQ-OAR-2019-0313, EPA-HQ-OAR-2019-0314, HQ-OAR-2017-0668, EPA-HQ-OAR-2017-0669, or EPA-HQ-OAR-2017-0670 (specify the applicable docket number) in the subject line of the message.
- Fax: (202) 566-9744. Attention Docket ID No. EPA-HQ-OAR-2019-0312, EPA-HQ-OAR-2019-0313, or EPA-HQ-OAR-2019-0314, HQ-OAR-2017-0668, EPA-HQ-OAR-2017-0669, or EPA-HQ-OAR-2017-0670 (specify the applicable docket number).
- Mail: U.S. Environmental Protection Agency, EPA Docket Center, Docket ID No. EPA-HQ-OAR-2019-0312, EPA-HQ-OAR-2019-0313, or EPA-HQ-OAR-2019-0314, HQ-OAR-2017-0668, EPA-HQ-OAR-2017-0669, or EPA-HQ-OAR-2017-0670 (specify the applicable docket number), Mail Code 28221T, 1200 Pennsylvania Avenue, NW, Washington, DC 20460.

- Hand/Courier Delivery: EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Avenue, NW, Washington, DC 20004. The Docket Center's hours of operation are 8:30 a.m. – 4:30 p.m., Monday – Friday (except federal holidays).

*Instructions:* All submissions received must include the applicable Docket ID No. for this rulemaking. Comments received may be posted without change to <https://www.regulations.gov/>, including any personal information provided. For detailed instructions on sending comments and additional information on the rulemaking process, *see* the **SUPPLEMENTARY INFORMATION** section of this document.

**FOR FURTHER INFORMATION CONTACT:** For questions about this proposed action for the Surface Coating of Miscellaneous Metal Parts and Products (MMPP) NESHAP, the Surface Coating of Plastic Parts and Products (PPP) NESHAP, and the technical corrections to the NESHAP for Surface Coating of Large Appliances contact Ms. Kim Teal, Minerals and Manufacturing Group, Sector Policies and Programs Division (D243-04), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-5580; fax number: (919) 541-4991; and email address: [teal.kim@epa.gov](mailto:teal.kim@epa.gov). For questions about the proposed action for the Surface Coating of Automobiles and Light-Duty Trucks (ALDT) NESHAP and the technical corrections to the NESHAP for Surface Coating of Metal Furniture contact Ms. J. Kaye Whitfield, Minerals and Manufacturing Group, Sector Policies and Programs Division (D243-04), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-2509; fax number: (919) 541-4991; and email address: [whitfield.kaye@epa.gov](mailto:whitfield.kaye@epa.gov). For questions about the technical corrections to the Printing, Coating, and Dyeing of Fabrics and Other Textiles contact Ms. Paula Hirtz, Minerals and

Manufacturing Group, Sector Policies and Programs Division (D243-04), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-2618; fax number: (919) 541-4991; and email address: *hirtz.paula@epa.gov*. For specific information regarding the risk modeling methodology, contact Mr. Chris Sarsony, Health and Environmental Impacts Division (C539-02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-4843; fax number: (919) 541-0840; and email address: *sarsony.chris@epa.gov*. For information about the applicability of any of these NESHAP to a particular entity, contact Mr. John Cox, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, EPA WJC South Building (Mail Code 2227A), 1200 Pennsylvania Avenue, NW, Washington DC 20460; telephone number: (202) 564-1395; and email address: *cox.john@epa.gov*. For questions about monitoring and testing requirements, contact Mr. Muntasir Ali, Measurement Policy Group, Sector Policies and Programs Division (D221-01), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-0833; fax number: (919) 541-4991; and email address: *ali.muntasir@epa.gov*.

**SUPPLEMENTARY INFORMATION:**

*Public hearing.* Please contact Ms. Nancy Perry at (919) 541-5628 or by email at *perry.nancy@epa.gov* to request a public hearing, to register to speak at the public hearing, or to inquire as to whether a public hearing will be held.

*Docket.* The EPA has established three separate dockets for these rulemakings. Docket ID No. EPA-HQ-OAR-2019-0314 has been established for 40 CFR part 63, subpart IIII, Surface

Coating of Automobiles and Light-Duty Trucks. Docket ID No. EPA-HQ-OAR-2019-0312 has been established for 40 CFR part 63, subpart MMMM, Surface Coating of Miscellaneous Metal Parts and Products. EPA-HQ-OAR-2019-0313 has been established for 40 CFR part 63, subpart PPPP, Surface Coating of Plastic Parts and Products. In addition, docket numbers for the technical corrections have been established: Docket ID No. EPA-HQ-OAR-2017-0670 for 40 CFR part 63, subpart NNNN, Surface Coating of Large Appliances; Docket ID No. EPA-HQ-OAR-2017-0669 for 40 CFR part 63, subpart RRRR, Surface Coating of Metal Furniture; and Docket ID No. EPA-HQ-OAR-2017-0668 for 40 CFR part 63, subpart OOOO, Printing, Coating, and Dyeing of Fabrics and Other Textiles. All documents in the dockets are listed in Regulations.gov. Although listed, some information is not publicly available, *e.g.*, Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy. Publicly available docket materials are available either electronically in Regulations.gov or in hard copy at the EPA Docket Center, Room 3334, WJC West Building, 1301 Constitution Avenue, NW, Washington, DC. The 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 Public Reading Room is (202) 566-1744, and the telephone number for the EPA Docket Center is (202) 566-1742.

The dockets related to the technical corrections to the NESHAP for Surface Coating of Large Appliances, the NESHAP for Printing, Coating, and Dyeing of Fabrics and Other Textiles, and the NESHAP for Surface Coating of Metal Furniture are discussed in section II.E of this preamble.

*Instructions.* Direct your comments to Docket ID No. EPA-HQ-OAR-2019-0314 for 40 CFR part 63, subpart IIII, Surface Coating of Automobiles and Light-Duty Trucks, Docket ID No. EPA-HQ-OAR-2019-0312 for 40 CFR part 63, subpart MMMM, Surface Coating of Miscellaneous Metal Parts and Products, or Docket ID No. EPA-HQ-OAR-2019-0313 for 40 CFR part 63, subpart PPPP, Surface Coating of Plastic Parts and Products, as applicable to your comments. Direct your comments for the technical corrections to Docket ID No. EPA-HQ-OAR-2017-0670 for 40 CFR part 63, subpart NNNN, Surface Coating of Large Appliances; Docket ID No. EPA-HQ-OAR-2017-0669 for 40 CFR part 63, subpart RRRR, Surface Coating of Metal Furniture; and Docket ID No. EPA-HQ-OAR-2017-0668 for 40 CFR part 63, subpart OOOO, Printing, Coating, and Dyeing of Fabrics and Other Textiles. The EPA's policy is that all comments received will be included in the public docket without change and may be made available online at <https://www.regulations.gov/>, including any personal information provided, unless the comment includes information claimed to be CBI or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through <https://www.regulations.gov/> or email. This type of information should be submitted by mail as discussed below.

The EPA may publish any comment received to its public docket. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.*, on the Web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia

submissions, and general guidance on making effective comments, please visit

<https://www.epa.gov/dockets/commenting-epa-dockets>.

The <https://www.regulations.gov/> website allows you to submit your comment anonymously, which means the EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to the EPA without going through <https://www.regulations.gov/>, your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, the EPA recommends that you include your name and other contact information in the body of your comment and with any digital storage media you submit. If the EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, the EPA may not be able to consider your comment. Electronic files should not include special characters or any form of encryption and be free of any defects or viruses. For additional information about the EPA's public docket, visit the EPA Docket Center homepage at <https://www.epa.gov/dockets>.

*Submitting CBI.* Do not submit information containing CBI to the EPA through <https://www.regulations.gov/> or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information on any digital storage media that you mail to the EPA, mark the outside of the digital storage media as CBI and then identify electronically within the digital storage media the specific information that is claimed as CBI. In addition to one complete version of the comments that includes information claimed as CBI, you must submit a copy of the comments that does not contain the information claimed as CBI directly to the public docket through the procedures outlined in *Instructions* above. If you submit any digital storage media that does not contain CBI, mark the outside of the digital storage media clearly that it does not



contain CBI. Information not marked as CBI will be included in the public docket and the EPA's electronic public docket without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. Send or deliver information identified as CBI only to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Attention Docket ID No. EPA-HQ-OAR-2019-0314 for 40 CFR part 63, subpart IIII, Surface Coating of Automobiles and Light-Duty Trucks (ALDT Docket); Docket ID No. EPA-HQ-OAR-2019-0312 for 40 CFR part 63, subpart MMMM, Surface Coating of Miscellaneous Metal Parts and Products (MMPP Docket); and Docket ID No. EPA-HQ-OAR-2019-0313 for 40 CFR part 63, subpart PPPP, Surface Coating of Plastic Parts and Products (PPP Docket), as applicable.

*Preamble acronyms and abbreviations.* We use multiple acronyms and terms in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, the EPA defines the following terms and acronyms here:

ACA	American Coatings Association
AEGL	acute exposure guideline level
AERMOD	air dispersion model used by the HEM-3 model
ALDT	automobile and light-duty truck
BACT	best available control technology
CAA	Clean Air Act
CalEPA	California EPA
CBI	Confidential Business Information
CDX	Central Data Exchange
CEDRI	Compliance and Emissions Data Reporting Interface
CEMS	continuous emissions monitoring systems
CFR	Code of Federal Regulations
ECHO	Enforcement and Compliance History Online
EPA	Environmental Protection Agency
EPFP	extreme performance fluoropolymer
ERPG	emergency response planning guideline
ERT	Electronic Reporting Tool

GACT	generally available control technology
gal	gallon
HAP	hazardous air pollutant(s)
HCl	hydrochloric acid
HEM-3	Human Exposure Model
HF	hydrogen fluoride
HI	hazard index
HQ	hazard quotient
IBR	incorporation by reference
ICAC	Institute of Clean Air Companies
IRIS	Integrated Risk Information System
kg	kilogram
km	kilometer
LAER	lowest achievable emission rate
lb	pound
MACT	maximum achievable control technology
MIBK	methyl isobutyl ketone
MIR	maximum individual risk
MMPP	miscellaneous metal parts and products
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NEI	National Emission Inventory
NESHAP	national emission standards for hazardous air pollutants
NSR	New Source Review
NTTAA	National Technology Transfer and Advancement Act
OAQPS	Office of Air Quality Planning and Standards
OMB	Office of Management and Budget
OSHA	Occupational Safety and Health Administration
PB-HAP	hazardous air pollutants known to be persistent and bio-accumulative in the environment
PDF	portable document format
POM	polycyclic organic matter
PPP	plastic parts and products
PRA	Paperwork Reduction Act
PTE	permanent total enclosure
RACT	reasonably available control technology
RBLC	RACT/BACT/LAER Clearinghouse
REL	reference exposure level

RFA	Regulatory Flexibility Act
RfC	reference concentration
RfD	reference dose
RTO	regenerative thermal oxidizer
RTR	residual risk and technology review
SAB	Science Advisory Board
SSM	startup, shutdown, and malfunction
TOSHI	target organ-specific hazard index
tpy	tons per year
UF	uncertainty factor
µg/m <sup>3</sup>	micrograms per cubic meter
UMRA	Unfunded Mandates Reform Act
URE	unit risk estimate
VCS	voluntary consensus standards
VOC	volatile organic compounds

*Organization of this document.* The information in this preamble is organized as follows:

## **I. General Information**

- A. Does this action apply to me?
- B. Where can I get a copy of this document and other related information?

## **II. Background**

- A. What is the statutory authority for this action?
- B. What are the source categories and how do the current NESHAP regulate their HAP emissions?
- C. What data collection activities were conducted to support this action?
- D. What other relevant background information and data are available?

## **III. Analytical Procedures and Decision-Making**

- A. How do we consider risk in our decision-making?
- B. How do we perform the technology review?
- C. How did we estimate post-MACT risks posed by these source categories?

## **IV. Analytical Results and Proposed Decisions**

- A. What are the analytical results and proposed decisions for the Surface Coating of Automobiles and Light-Duty Trucks source category?
- B. What are the analytical results and proposed decisions for the MMPP source category?
- C. What are the analytical results and proposed decisions for the Surface Coating of Plastic Parts and Products source category?
- D. Proposed Corrections to Earlier Subparts.

## **V. Summary of Cost, Environmental, and Economic Impacts**

- A. What are the affected sources?
- B. What are the air quality impacts?
- C. What are the cost impacts?
- D. What are the economic impacts?

E. What are the benefits?

**VI. Request for Comments**

**VII. Submitting Data Corrections**

**VIII. Statutory and Executive Order Reviews**

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

C. Paperwork Reduction Act (PRA)

D. Regulatory Flexibility Act (RFA)

E. Unfunded Mandates Reform Act (UMRA)

F. Executive Order 13132: Federalism

G. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

H. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

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

J. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR part 51

K. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.

**I. General Information**

*A. Does this action apply to me?*

Table 1 of this preamble lists the NESHAP and associated regulated industrial source categories that are the subject of this proposal. Table 1 is not intended to be exhaustive, but rather provides a guide for readers regarding the entities that this proposed action is likely to affect. The proposed standards, once promulgated, will be directly applicable to the affected sources. Federal, state, local, and tribal government entities would not be affected by this proposed action. As defined in the *Initial List of Categories of Sources Under Section 112(c)(1) of the Clean Air Act Amendments of 1990* (see 57 FR 31576, July 16, 1992) and *Documentation for Developing the Initial Source Category List, Final Report* (see EPA-450/3-91-030, July 1992), the Surface Coating of Automobiles and Light-Duty Trucks (ALDT) source category includes any facility that is a major source of hazardous air pollutants (HAP) and is engaged in the surface coating of new automobile or new light-duty truck bodies or body parts for new

automobiles or new light-duty trucks. We estimate that 43 major source facilities engaged in surface coating of automobiles and light-duty trucks would be subject to this proposal. The MMPP source category includes any facility engaged in the surface coating of miscellaneous metal parts and products that is a major source of HAP emissions. Miscellaneous metal parts and products include, but are not limited to, metal components of the following types of products as well as the products themselves: motor vehicle parts and accessories; bicycles and sporting goods; recreational vehicles; extruded aluminum structural components; railroad cars; heavy-duty trucks; medical equipment; lawn and garden equipment; electronic equipment; magnet wire; steel drums; industrial machinery; metal pipes; and numerous other industrial, household, and consumer products. We estimate that 368 major source facilities engaged in surface coating of miscellaneous metal parts and products would be subject to this proposal. The PPP source category includes any facility engaged in the surface coating of plastic parts or products that is a major source of HAP emissions. Plastic parts and products include, but are not limited to, plastic components of the following types of products as well as the products themselves: motor vehicle parts and accessories for automobiles, trucks, recreational vehicles; sporting and recreational goods; toys; business machines; laboratory and medical equipment; and household and other consumer products. We estimate that 125 major source facilities engaged in plastic parts and products surface coating would be subject to this proposal.

**Table 1. NESHAP, Industrial and Government Sources Affected By This Proposed Action**

<b>NESHAP Source Category</b>	<b>NAICS Code<sup>1</sup></b>	<b>Regulated Entities<sup>2</sup></b>
Surface Coating of Automobiles and Light-Duty Trucks	336111, 336112, 336211	Automobile and light-duty truck assembly plants, producers of automobile and light-duty truck bodies.
Surface Coating of Miscellaneous Metal Parts and Products	335312, 336111, 336211, 336312, 33632, 33633,	Automobile parts (engine parts, vehicle parts and accessories, brakes, axles, etc.)

	33634, 33637, 336399	
	331316, 331524, 332321, 332323	Extruded aluminum, architectural components, rod, and tubes.
	33312, 333611, 333618	Heavy equipment (tractors, earth moving machinery).
	332312, 332722, 332813, 332991, 332999, 334119, 336413, 339999	Job shops (making any of the products from the miscellaneous metal parts and products segments)
	33612, 336211	Large trucks and buses.
	331319, 331422, 335929	Magnet wire.
	332311	Prefabricated metal buildings, carports, docks, dwellings, greenhouses, panels for buildings.
	33242, 81131, 322214, 326199, 331513, 332439	Metal drums, kegs, pails, shipping containers.
	331111, 33121, 331221, 331511	Metal pipe and foundry (plate, tube, rods, nails, spikes, etc.)
	33651, 336611, 482111	Rail transportation (brakes, engines, freight cars, locomotives).
	3369, 331316, 336991, 336211, 336112, 336213, 336214, 336399	Recreational vehicles (motorcycles, motor homes, semitrailers, truck trailers).
	326291, 326299	Rubber to metal products (engine mounts, rubberized tank tread, harmonic balancers).
	332311, 332312	Structural steel (joists, railway bridge sections, highway bridge sections)
	336212, 336999, 33635, 56121, 8111. 56211	Miscellaneous transportation related equipment and parts.
Surface Coating of Plastic Parts and Products	337214	Office furniture, except wood.
	32614, 32615	Plastic foam products ( <i>e.g.</i> , pool floats, wrestling mats, life jackets).
	326199	Plastic products not elsewhere classified ( <i>e.g.</i> , name plates, coin holders, storage boxes, license plate housings, cosmetic caps, cup holders).
	333313	Office machines.
	33422	Radio and television broadcasting and communications equipment ( <i>e.g.</i> , cellular telephones).

	336211	Motor vehicle body manufacturing.
	336399	Motor vehicle parts and accessories.
	336212	Truck trailer manufacturing.
	336213	Motor home manufacturing.
	336214	Travel trailer and camper manufacturing.
	336999	Transportation equipment not elsewhere classified (e.g., snowmobile hoods, running boards, tractor body panels, personal watercraft parts).
	339111, 339112	Medical equipment and supplies.
	33992	Sporting and athletic goods.
	33995	Signs and advertising specialties.
	339999	Manufacturing industries not elsewhere classified (e.g., bezels, consoles, panels, lenses).

<sup>1</sup> North American Industry Classification System.

<sup>2</sup> Regulated entities means major source facilities that apply surface coatings to these parts or products.

*B. Where can I get a copy of this document and other related information?*

In addition to being available in the dockets for this action, an electronic copy of this proposed action is available on the Internet. Following signature by the EPA Administrator, the EPA will post a copy of this proposed action at <https://www.epa.gov/stationary-sources-air-pollution/surface-coating-automobiles-and-light-duty-trucks-national-emission>, <https://www.epa.gov/stationary-sources-air-pollution/surface-coating-miscellaneous-metal-parts-and-products-national>, and <https://www.epa.gov/stationary-sources-air-pollution/surface-coating-plastic-parts-and-products-national-emission>. Following publication in the **Federal Register**, the EPA will post the **Federal Register** version of the proposal and key technical documents at these same websites. Information on the overall RTR program is available at <https://www3.epa.gov/ttn/atw/rrisk/rtrpg.html>.

A redline version of the regulatory language that incorporates the proposed changes in this action are available in the Automobiles and Light-Duty Trucks, the Metal Parts and Products, and the Plastic Parts and Products Dockets (Docket ID No. EPA-HQ-OAR-2019-0314,

Docket ID No. EPA-HQ-OAR-2019-0312, and Docket ID No. EPA-HQ-OAR-2019-0313, respectively).

## **II. Background**

### *A. What is the statutory authority for this action?*

The statutory authority for this action is provided by sections 112 and 301 of the CAA, as amended (42 U.S.C. 7401 *et seq.*).<sup>1</sup> Section 112 of the CAA establishes a two-stage regulatory process to develop standards for emissions of HAP from stationary sources. Generally, the first stage involves establishing technology-based standards and the second stage involves evaluating those standards that are based on maximum achievable control technology (MACT) to determine whether additional standards are needed to further address any remaining risk associated with HAP emissions. This second stage is commonly referred to as the “residual risk review.” In addition to the residual risk review, the CAA also requires the EPA to review standards set under CAA section 112 every 8 years to determine if there are “developments in practices, processes, or control technologies” that may be appropriate to incorporate into the standards. This review is commonly referred to as the “technology review.” When the two reviews are combined into a single rulemaking, it is commonly referred to as the “risk and technology review.” The discussion that follows identifies the most relevant statutory sections and briefly explains the contours of the methodology used to implement these statutory requirements. A more comprehensive discussion appears in the document titled *CAA Section 112 Risk and Technology Reviews: Statutory Authority and Methodology*, in the dockets for each subpart in this rulemaking (Docket ID No. EPA-HQ-OAR-2019-0314 for Automobiles and Light-Duty Trucks,

---

<sup>1</sup> In addition, section 301 of the CAA provides general authority for the Administrator to “prescribe such regulations as are necessary to carry out his functions” under the CAA.



Docket ID No. EPA-HQ-OAR-2019-0312 for Miscellaneous Metal Parts and Products, and Docket ID No. EPA-HQ-OAR-2019-0313 for Plastic Parts and Products).

In the first stage of the CAA section 112 standard setting process, the EPA promulgates technology-based standards under CAA section 112(d) for categories of sources identified as emitting one or more of the HAP listed in CAA section 112(b). Sources of HAP emissions are either major sources or area sources, and CAA section 112 establishes different requirements for major source standards and area source standards. “Major sources” are those that emit or have the potential to emit 10 tons per year (tpy) or more of a single HAP or 25 tpy or more of any combination of HAP. All other sources are “area sources.” For major sources, CAA section 112(d) provides that the technology-based NESHAP must reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts). These standards are commonly referred to as MACT standards. CAA section 112(d)(3) also establishes a minimum control level for MACT standards, known as the MACT “floor.” The EPA must also consider control options that are more stringent than the floor. Standards more stringent than the floor are commonly referred to as beyond-the-floor standards. In certain instances, as provided in CAA section 112(h), the EPA may set work practice standards where it is not feasible to prescribe or enforce a numerical emission standard. For area sources, CAA section 112(d)(5) gives the EPA discretion to set standards based on generally available control technologies or management practices (GACT standards) in lieu of MACT standards.

The second stage in standard-setting focuses on identifying and addressing any remaining (*i.e.*, “residual”) risk according to CAA section 112(f). For source categories subject to MACT standards, section 112(f)(2) of the CAA requires the EPA to determine whether promulgation of

additional standards is needed to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect. Section 112(d)(5) of the CAA provides that this residual risk review is not required for categories of area sources subject to GACT standards. Section 112(f)(2)(B) of the CAA further expressly preserves the EPA's use of the two-step approach for developing standards to address any residual risk and the Agency's interpretation of "ample margin of safety" developed in the *National Emissions Standards for Hazardous Air Pollutants: Benzene Emissions from Maleic Anhydride Plants, Ethylbenzene/Styrene Plants, Benzene Storage Vessels, Benzene Equipment Leaks, and Coke By-Product Recovery Plants* (Benzene NESHAP) (54 FR 38044, September 14, 1989). The EPA notified Congress in the Risk Report that the Agency intended to use the Benzene NESHAP approach in making CAA section 112(f) residual risk determinations (EPA-453/R-99-001, p. ES-11). The EPA subsequently adopted this approach in its residual risk determinations and the United States Court of Appeals for the District of Columbia Circuit (the Court) upheld the EPA's interpretation that CAA section 112(f)(2) incorporates the approach established in the Benzene NESHAP. *See NRDC v. EPA*, 529 F.3d 1077, 1083 (D.C. Cir. 2008).

The approach incorporated into the CAA and used by the EPA to evaluate residual risk and to develop standards under CAA section 112(f)(2) is a two-step approach. In the first step, the EPA determines whether risks are acceptable. This determination "considers all health information, including risk estimation uncertainty, and includes a presumptive limit on maximum individual lifetime [cancer] risk (MIR)<sup>2</sup> of approximately [1-in-10 thousand] [*i.e.*, 100-in-1 million]." 54 FR 38045, September 14, 1989. If risks are unacceptable, the EPA must determine the emissions standards necessary to bring risks to an acceptable level without

---

<sup>2</sup>Although defined as "maximum individual risk," MIR refers only to cancer risk. MIR, one metric for assessing cancer risk, is the estimated risk if an individual were exposed to the maximum level of a pollutant for a lifetime.

considering costs. In the second step of the approach, the EPA considers whether the emissions standards provide an ample margin of safety to protect public health “in consideration of all health information, including the number of persons at risk levels higher than approximately [1-in-1 million], as well as other relevant factors, including costs and economic impacts, technological feasibility, and other factors relevant to each particular decision.” *Id.* The EPA must promulgate emission standards necessary to provide an ample margin of safety to protect public health or determine that the standards being reviewed provide an ample margin of safety without any revisions. After conducting the ample margin of safety analysis, we consider whether a more stringent standard is necessary to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect.

CAA section 112(d)(6) separately requires the EPA to review standards promulgated under CAA section 112 and revise them “as necessary (taking into account developments in practices, processes, and control technologies)” no less frequently than every 8 years. In conducting this review, which we call the “technology review,” the EPA is not required to recalculate the MACT floor. *Natural Resources Defense Council (NRDC) v. EPA*, 529 F.3d 1077, 1084 (D.C. Cir. 2008). *Association of Battery Recyclers, Inc. v. EPA*, 716 F.3d 667 (D.C. Cir. 2013). The EPA may consider cost in deciding whether to revise the standards pursuant to CAA section 112(d)(6).

*B. What are the source categories and how do the current NESHAP regulate their HAP emissions?*

1. What is the Surface Coating of Automobiles and Light-Duty Trucks source category and how does the current NESHAP regulate its HAP emissions?

*a. Source Category Description*

The NESHAP for the ALDT source category was promulgated on April 26, 2004 (69 FR 22602), and is codified at 40 CFR part 63, subpart IIII. Technical corrections and clarifying amendments were promulgated on December 22, 2006 (71 FR 76922) and April 24, 2007 (72 FR 20227). The ALDT NESHAP applies to any coating operations which apply topcoats to new automobile or new light-duty truck bodies or body parts for new automobiles or new light-duty trucks and/or coatings to new other motor vehicle bodies or body parts for new other motor vehicles; parts intended for use in new automobiles, new light-duty trucks, or new other motor vehicles; or aftermarket repair or replacement parts for automobiles, light-duty trucks, or other motor vehicles; and the affected source is located at a facility that is a major source, is located at a major source, or is part of a major source of emissions of HAP (40 CFR 63.3081). The ALDT NESHAP (40 CFR 63.3176) defines an “automobile” as “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,” and “light-duty truck” as “vans, sport utility vehicles, and motor vehicles designed primarily to transport light loads of property with gross vehicle weight rating of 8,500 lbs [pounds] or less.”

The ALDT NESHAP defines a “coating” as “a material that is 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.” (40 CFR 63.3176).

The ALDT NESHAP does not apply to a surface coating operation that is subject to any other NESHAP as of June 25, 2004, except when a source chooses to comply with the ALDT

NESHAP instead of the MMPP NESHAP (40 CFR part 63, subpart MMMM) or the PPP NESHAP (40 CFR part 63, subpart PPPP). (40 CFR 63.3082(c).)

Based on our search of the National Emission Inventory (NEI) ([www.epa.gov/air-emissions-inventories/national-emissions-inventory-nei](http://www.epa.gov/air-emissions-inventories/national-emissions-inventory-nei)) and the EPA's Enforcement and Compliance History Online (ECHO) database ([echo.epa.gov](http://echo.epa.gov)) and a review of active air emissions permits, we estimate that 43 facilities are subject to the ALDT NESHAP. A complete list of facilities subject to the ALDT NESHAP is available in Table 1 of Appendix 10 to the memorandum titled *Residual Risk Assessment for the Surface Coating of Automobiles and Light-duty Trucks Source Category in Support of the 2019 Risk and Technology Review Proposed Rule* (hereafter referred to as the *Automobiles and Light-Duty Trucks Risk Assessment Report*), in the ALDT Docket (Docket ID No. EPA-HQ-OAR-2019-0314).

*b. HAP Emission Sources*

The primary HAP emitted from ALDT surface coating operations are organic HAP and included toluene, xylene, glycol ethers, methyl isobutyl ketone (MIBK), ethyl benzene, and methanol. The HAP emissions are from coating application and drying and curing ovens in the ALDT surface coating operations. Some emissions occur from the cleaning of spray booths and equipment. In most cases, HAP emissions from surface preparation, storage and handling are relatively small (*i.e.*, not quantifiable) for this source category.

Inorganic (metal) HAP emissions were considered in the development of the ALDT NESHAP and the EPA determined that, although very low levels of emissions were reported in coatings, no inorganic HAP are emitted. Based on data obtained during development of the 2004 proposed NESHAP (67 FR 78612, December 24, 2002), some coatings in the ALDT source category reported emissions of inorganic HAP that likely were not emitted due to coating

application techniques used. Instead, the 2004 proposed NESHAP found that the inorganic HAP components of the coatings mostly remained as solids in the dry coating film on the parts being coated, were collected by the circulating water under the spray booth floor grates, or were deposited on the walls, floor, and grates of the spray booths and other equipment in which they are applied. More recent data from the 2011 NEI data, used to inform this RTR, show total reported source category inorganic HAP emissions of 0.008 tpy from antimony, chromium, manganese, and nickel, and no reported emissions of inorganic HAP in thinners or cleaning materials. (See Appendix 1 to the *Automobiles and Light-Duty Trucks Risk Assessment Report*, in the ALDT Docket). Based on feedback from industry and information gleaned from EPA site visits, facilities in the ALDT source category employ high-efficiency spray equipment (including robotic spraying) to minimize the overall amount of coating used, thereby reducing inorganic HAP emissions further. Therefore, we conclude that, although inorganic HAP are reported components of coatings, no inorganic HAP are emitted.

*c. Current NESHAP Requirements for Control of HAP*

The NESHAP specifies numerical limits for the organic HAP emissions from both existing sources and new or reconstructed sources. These emissions limits are established for each of several process groupings at the source including (1) 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; (2) 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; (3) adhesives and sealers, other than glass bonding adhesive materials; and (4) deadener materials.

The specific organic HAP emission limits are summarized in Table 2 of the memorandum titled *Technology Review for Surface Coating Operations in the Automobiles and Light-Duty Trucks Source Category* in the ALDT Docket.

Compliance with the ALDT NESHAP emission limits can be achieved using several different options, including a compliant material option, an emission rate without add-on controls option (averaging option), and an emission rate with add-on controls option. For bake ovens used to cure electrodeposition primers, an alternative is to capture the emissions and duct them to a control device having a destruction or removal efficiency of at least 95 percent. For any coating operation(s) on which the facility uses the compliant material option or the emission rate without add-on controls option, the facility is not required to meet any work practice standards. Facilities that have multiple paint lines may choose to group operations from two or more paint lines together, or to make a separate grouping of the operations from individual paint lines. Operating limits may apply for facilities that use an emission capture and control system to reduce emissions.

If the facility uses the emission rate with add-on controls option, they must develop and implement a work practice plan to minimize organic HAP emissions from all processes associated with the coating operations (i.e., storage; mixing and conveying of coatings; thinners; cleaning materials; and waste materials). The plan must specify practices and procedures to ensure that a set of minimum work practices specified in the NESHAP are implemented. The facility must also comply with site-specific operating limits for the emission capture and control system.

2. What is the Surface Coating of Miscellaneous Metal Parts and Products source category and how does the current NESHAP regulate its HAP emissions?

*a. Source Category Description*

The MMPP NESHAP was promulgated on January 2, 2004 (69 FR 130), and is codified at 40 CFR part 63, subpart MMMM. A technical correction to the final rule was published on April 26, 2004 (69 FR 22602) and December 22, 2006 (71 FR 76922). The MMPP NESHAP applies to owners or operators of metal parts and products surface coating operations at facilities that are major sources of HAP.

Miscellaneous metal parts and products include, but are not limited to, metal components of the following types of products as well as the products themselves: motor vehicle parts and accessories, bicycles and sporting goods, recreational vehicles, extruded aluminum structural components, railroad cars, heavy-duty trucks, medical equipment, lawn and garden equipment, electronic equipment, magnet wire, steel drums, industrial machinery, metal pipes, and numerous other industrial, household, and consumer products. The MMPP NESHAP (40 CFR 63.3881(c)) does not apply to the surface coating or coating operations that meet the applicability criteria of eleven other surface coating NESHAP, *e.g.*, surface coating of metal components of wood furniture (subpart JJ of 40 CFR part 63), surface coating of metal components of large appliances (subpart NNNN of 40 CFR part 63), and surface coating of metal components of automobiles and light-duty trucks (subpart IIII of 40 CFR part 63).

Based on our search of the NEI and the EPA's ECHO database and a review of active air emission permits, we estimate that 368 facilities are subject to the MMPP NESHAP. A list of facilities we identified as subject to the MMPP NESHAP is available in Table 1 to Appendix 10 to the memorandum titled *Residual Risk Assessment for the Surface Coating of Miscellaneous*



*Metal Parts and Products Source Category in Support of the 2019 Risk and Technology Review Proposed Rule* (hereafter referred to as the *Miscellaneous Metal Parts and Products Risk Assessment Report*), in the MMPP Docket (Docket ID No. EPA-HQ-OAR-2019-0312).

*b. HAP Emission Sources*

The primary HAP emitted from MMPP surface coating operations are organic HAP and include xylenes, toluene, glycol ethers, ethyl benzene, MIBK, methanol, ethylene glycol, and dimethyl phthalate. The majority of organic HAP emissions can be attributed to the application, drying, and curing of coatings.

Inorganic HAP emissions were considered in the development of the MMPP NESHAP and the EPA determined that inorganic HAP emissions would be very low based on the coating application techniques in place at the time of the rule development. Based on information reported in survey responses during the development of the proposal for the 2004 NESHAP, inorganic HAP, including chromium, cobalt, lead, and manganese compounds, are components of some coatings used by this source category. Inorganic HAP in the coatings would only have the potential to be emitted if they were spray-applied, but the inorganic HAP would be either deposited on the part being coated as part of the surface coating, on the walls and floors of the spray booth, or captured by the spray booth filters (typically either a dry fabric filter or a water-wash filter system). No inorganic HAP were documented in thinners or cleaning materials. Emissions would be further reduced by the use of high efficiency spray equipment, often combined with robotic spraying, that minimize the amount of coating that is sprayed. For more detailed information please see the emissions memorandum in Appendix 1 to the *Miscellaneous Metal Parts and Products Risk Assessment Report*, in the MMPP Docket.

In response to comments on the 2004 proposed NESHAP,<sup>3</sup> the EPA argued that given the combination of very low usage of coatings containing inorganic HAP in this source category, and the current and expected continued use of controls (dry filters and waterwash systems on spray booths and high efficiency equipment) to reduce overspray emissions, the EPA believed that levels of inorganic HAP emissions did not warrant federal regulation because those regulations would not be expected to result in additional emissions reduction.

*c. Current NESHAP Requirements for Control of HAP*

The MMPP NESHAP establishes the organic HAP emissions limits for new and existing sources. The final rule contains five subcategories: (1) general use coating, (2) high performance coating, (3) magnet wire coating, (4) rubber-to-metal coating, and (5) extreme performance fluoropolymer coating (EPFP).

Compliance can be demonstrated with using a variety of compliance options including, (1) a compliant coatings option, where all coatings used have organic HAP contents that individually meet the organic HAP emissions limit, and all thinners and cleaning materials contain no organic HAP; (2) an emission rate without add-on controls option, where the organic HAP emission rate, calculated as a rolling 12-month emission rate and determined on a monthly basis, is equal to or less than the organic HAP emissions limit; or (3) an emission rate with add-on controls option, where the organic HAP emission rate, calculated as a rolling 12-month emissions rate and determined on a monthly basis, taking into account the emissions reduction achieved through the use of one or more emissions capture and control devices, is equal to or less than the organic HAP emissions limit. A facility using the add-on control option must also comply with work practice standards to minimize organic HAP emissions from the storage,

---

<sup>3</sup> *Surface Coating of Miscellaneous Metal Parts and Products, Summary of Public Comments and Responses on Proposed Rule*. August 2003. EPA-453/R-03-008; p. 83.

mixing, and conveying of coatings, thinners, cleaning materials, and waste materials associated with the coating operation(s) and must also comply with operating limits for the emissions capture systems and add-on control devices.

If a facility's surface coating operations meet the applicability criteria of more than one of the coating subcategories in the MMPP NESHAP, the facility may comply separately with each emissions limit or comply using one of the following options:

- If general use coating or magnet wire coating constitute 90 percent or more of the surface coating activity at the facility (*i.e.*, it is the predominant activity), then the facility can comply with that one emissions limit for all surface coating at the facility.
- The facility can comply with a facility-specific emissions limit calculated on the basis of the applicable emissions limits and the amount of coating activity performed in each coating subcategory, where activity is measured as the volume of coating solids used.

The specific organic HAP emission limits for each coating subcategory and the operating limits are summarized in Tables 4 and 5 of the memorandum titled *Technology Review for Surface Coating Operations in the Miscellaneous Metal Parts and Products Category*.

3. What is the Surface Coating of Plastic Parts and Products source category and how does the current NESHAP regulate its HAP emissions?

*a. Source Category Description*

The NESHAP for the PPP source category was promulgated on April 19, 2004 (69 FR 20968), and is codified at 40 CFR part 63, subpart PPPP. Technical corrections to the final rule were published on December 22, 2006 (71 FR 76922) and April 24, 2007 (72 FR 20227). The PPP NESHAP applies to owners or operators of PPP surface coating operations at facilities that are major sources of HAP. Plastic parts and products include, but are not limited to, plastic

components of the following types of products as well as the products themselves: motor vehicle parts and accessories for automobiles, trucks, recreational vehicles; sporting and recreational goods; toys; business machines; laboratory and medical equipment; and household and other consumer products. The PPP NESHAP (40 CFR 63. 4481(c)) does not apply to the surface coating or coating operations of items that meet the applicability criteria of eleven other surface coating NESHAP, *e.g.*, surface coating of plastic components of wood furniture (subpart JJ of 40 CFR part 63), surface coating of plastic components of large appliances (subpart NNNN of 40 CFR part 63), and surface coating of plastic components of automobiles and light-duty trucks (subpart IIII of 40 CFR part 63).

Based on our search of the NEI and the EPA's ECHO database and a review of active air emission permits, we estimate that 125 facilities are subject to the PPP NESHAP. A list of facilities we identified as subject to the PPP NESHAP is available in Table 1 to Appendix 10 to the memorandum titled *Residual Risk Assessment for the Surface Coating of Plastic Parts and Products Source Category in Support of the 2019 Risk and Technology Review Proposed Rule* (hereafter referred to as the *Plastic Parts and Products Risk Assessment Report*), in the PPP Docket (Docket ID No. EPA-HQ-OAR-2019-0313).

#### *b. HAP Emission Sources*

The primary HAP emitted from PPP surface coating operations are organic HAP and, based on the 2011 NEI, include xylene, toluene, MIBK, ethylbenzene, styrene, glycol ethers, and methanol, in order of decreasing emissions. These compounds account for about 96 percent of the nationwide HAP emissions from this source category, based on an analysis of the NEI.

No inorganic HAP are currently associated with the coatings used in this source category, based on the data in the NEI.

*c. Current NESHAP Requirements for Control of HAP*

The PPP NESHAP specifies numerical emission limits for existing sources and for new and reconstructed sources for organic HAP emissions. The final rule contains four subcategories: (1) general use coating, (2) thermoplastic olefin coating, (3) automotive lamp coating, and (4) assembled on-road vehicle coating.

Compliance can be demonstrated with a variety of compliance options including, (1) a compliant material option, where the HAP content of each coating used is less than or equal to the applicable organic HAP emissions limit and each thinner, additive, and cleaning material uses no organic HAP; (2) an emission rate without add-on controls option, where the organic HAP emission rate, calculated as a rolling 12-month emission rate and determined on a monthly basis, is equal to or less than the organic HAP emissions limit; or (3) an emission rate with add-on controls option, where the organic HAP emission rate, calculated as a rolling 12-month emissions rate and determined on a monthly basis, taking into account the emissions reduction achieved through the use of one or more emissions capture and control devices, is equal to or less than the organic HAP emissions limit. A facility using the add-on control option must also comply with work practice standards to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners, cleaning materials, and waste materials associated with the coating operation(s) and must also comply with operating limits for the emissions capture systems and add-on control devices.

The specific organic HAP emission limits for each coating subcategory are summarized in Table 2 of the memorandum titled *Technology Review for Surface Coating Operations in the Plastic Parts and Products Category*.

*C. What data collection activities were conducted to support this action?*

For the risk modeling portion of these RTRs, the EPA used data from the 2011 and 2014 NEI. The NEI is a database that contains information about sources that emit criteria air pollutants, their precursors, and HAP. The database includes estimates of annual air pollutant emissions from point, nonpoint, and mobile sources in the 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands. The EPA collects this information and releases an updated version of the NEI database every 3 years. The NEI includes data necessary for conducting risk modeling, including annual HAP emissions estimates from individual emission points at facilities and the related emissions release parameters. We used NEI emissions and supporting data as the primary data to develop the model input files for the risk assessments for each of these three source categories. Detailed information on the development of the modeling file for the ALDT source category can be found in Appendix 1 to the *Automobiles and Light-Duty Trucks Risk Assessment Report*, in the ALDT Docket (Docket ID No. EPA-HQ-OAR-2017-0314). Detailed information on the development of the modeling file for the MMPP source category can be found in Appendix 1 to the *Miscellaneous Metal Parts and Products Risk Assessment Report*, in the MMPP Docket (Docket ID No. EPA-HQ-OAR-2019-0312). Detailed information on the development of the modeling file for the PPP source category can be found in Appendix 1 to the *Plastic Parts and Products Risk Assessment Report*, in the PPP Docket (Docket ID No. EPA-HQ-OAR-2019-0313).

For each risk modeling and technology review portion of these three RTRs, we also gathered data from facility construction and operating permits regarding emission points, air pollution control devices, and process operations. We collected permits and supporting documentation from state permitting authorities through state-maintained online databases for many, but not all, of the facilities in each source category. The facility permits were also used to

confirm that the facilities were major sources of HAP and were subject to the NESHAP that are the subject of these risk assessments. In certain cases, we contacted industry associations and facility owners or operators to confirm and clarify the sources of emissions that were reported in the NEL.

For the technology review portion of these RTRs, we also used information from the EPA's ECHO database as a tool to identify which facilities were potentially subject to the NESHAP. The ECHO database provides integrated compliance and enforcement information for approximately 800,000 regulated facilities nationwide. Using the search feature in ECHO, the EPA identified facilities that could potentially be subject to each of these three NESHAP. We then reviewed operating permits for these facilities, when available, to confirm that they were major sources of HAP with emission sources subject to these NESHAP. For many sources in the MMPP source category in the rubber-to-metal bonding and the high-performance coating subcategories, we also reviewed recent semi-annual compliance reports to confirm the compliance option they were using and the emission rates they were achieving.

Also, for the technology reviews, we collected information from the reasonably available control technology (RACT), best available control technology (BACT), and lowest achievable emission rate (LAER) determinations in the EPA's RACT/BACT/LAER Clearinghouse (RBLC).<sup>4</sup> This database contains case-specific information on air pollution technologies that have been required to reduce the emissions of air pollutants from stationary sources. Under the EPA's New Source Review (NSR) program, an NSR permit must be obtained if a facility is planning new construction that increases the air emissions of any regulated NSR pollutant at or above 100 or 250 tpy (could be a lower threshold depending upon nonattainment severity) or a

---

<sup>4</sup> <https://www.epa.gov/catc/ractbactlaer-clearinghouse-rblc-basic-information>.

modification that results in a significant emissions increase and a significant net emissions increase of any regulated NSR pollutant (“significant” emissions increase is defined in the NSR regulations and is pollutant-specific, ranging from less than 1 pound (lb) to 100 tpy of the applicable regulated NSR pollutant). This central database promotes the sharing of information among permitting agencies and aids in case-by-case determinations for NSR permits. We examined information contained in the RBLC to determine what technologies are currently used for these surface coating operations to reduce air emissions.

Additional information about these data collection activities for the technology reviews is contained in the technology review memoranda titled *Technology Review for Surface Coating Operations in the Automobiles and Light-Duty Trucks Category*, July 2019 (hereafter referred to as the *Automobiles and Light-Duty Trucks Technology Review Memo*), *Technology Review for the Surface Coating Miscellaneous Metal Parts and Products Source Category*, July 2019 (hereafter referred to as the *Miscellaneous Metal Parts and Products Technology Review Memo*), and *Technology Review for Surface Coating Operations in the Plastic Parts and Products Category*, July 2019 (hereafter referred to as the *Plastic Parts and Products Technology Review Memo*), available in the respective ALDT, MMPP, and PPP Dockets.

*D. What other relevant background information and data are available?*

As part of the technology review for the ALDT, the MMPP, and the PPP NESHAP source categories, we reviewed information available in the American Coatings Association’s (ACA) *Industry Market Analysis* 9th Edition (2014 – 2019).<sup>5</sup> The *ACA Industry Market Analysis* provided information on trends in coatings technology that can affect emissions from the ALDT, the MMPP, and the PPP source categories. Additional details regarding our review of these

---

<sup>5</sup> Prepared for the ACA, Washington, DC, by The ChemQuest Group, Inc., Cincinnati, Ohio. 2015.



information sources are contained in the *Automobiles and Light-Duty Trucks Technology Review Memo*, *Miscellaneous Metal Parts and Products Technology Review Memo*, and the *Plastic Parts and Products Technology Review Memo*, available in the respective ALDT, MMPP, and PPP Dockets.

### **III. Analytical Procedures and Decision-Making**

In this section, we describe the analyses performed to support the proposed decisions for the RTRs and other issues addressed in this proposal.

#### *A. How do we consider risk in our decision-making?*

As discussed in section II.A of this preamble and in the Benzene NESHAP, in evaluating and developing standards under CAA section 112(f)(2), we apply a two-step approach to determine whether or not risks are acceptable and to determine if the standards provide an ample margin of safety to protect public health. As explained in the Benzene NESHAP, “the first step judgment on acceptability cannot be reduced to any single factor” and, thus, “[t]he Administrator believes that the acceptability of risk under section 112 is best judged on the basis of a broad set of health risk measures and information.” 54 FR 38046, September 14, 1989. Similarly, with regard to the ample margin of safety determination, “the Agency again considers all of the health risk and other health information considered in the first step. Beyond that information, additional factors relating to the appropriate level of control will also be considered, including cost and economic impacts of controls, technological feasibility, uncertainties, and any other relevant factors.” *Id.*

The Benzene NESHAP approach provides flexibility regarding factors the EPA may consider in making determinations and how the EPA may weigh those factors for each source category. The EPA conducts a risk assessment that provides estimates of the MIR posed by the

HAP emissions from each source in the source category, the hazard index (HI) for chronic exposures to HAP with the potential to cause noncancer health effects, and the hazard quotient (HQ) for acute exposures to HAP with the potential to cause noncancer health effects.<sup>6</sup> The assessment also provides estimates of the distribution of cancer risks within the exposed populations, cancer incidence, and an evaluation of the potential for adverse environmental effects. The scope of EPA's risk analysis is consistent with EPA's response to comments on our policy under the Benzene NESHAP where the EPA explained that:

“[t]he policy chosen by the Administrator permits consideration of multiple measures of health risk. Not only can the MIR figure be considered, but also incidence, the presence of non-cancer health effects, and the uncertainties of the risk estimates. In this way, the effect on the most exposed individuals can be reviewed as well as the impact on the general public. These factors can then be weighed in each individual case. This approach complies with the *Vinyl Chloride* mandate that the Administrator ascertain an acceptable level of risk to the public by employing his expertise to assess available data. It also complies with the Congressional intent behind the CAA, which did not exclude the use of any particular measure of public health risk from the EPA's consideration with respect to CAA section 112 regulations, and thereby implicitly permits consideration of any and all measures of health risk which the Administrator, in his judgment, believes are appropriate to determining what will ‘protect the public health’.”

See 54 FR 38057, September 14, 1989. Thus, the level of the MIR is only one factor to be weighed in determining acceptability of risks. The Benzene NESHAP explained that “an MIR of approximately one in 10 thousand should ordinarily be the upper end of the range of acceptability. As risks increase above this benchmark, they become presumptively less acceptable under CAA section 112, and would be weighed with the other health risk measures and information in making an overall judgment on acceptability. Or, the Agency may find, in a particular case, that a risk that includes MIR less than the presumptively acceptable level is unacceptable in the light of other health risk factors.” *Id.* at 38045. In other words, risks that

---

<sup>6</sup> The MIR is defined as the cancer risk associated with a lifetime of exposure at the highest concentration of HAP where people are likely to live. The HQ is the ratio of the potential HAP exposure concentration to the noncancer dose-response value; the HI is the sum of HQs for HAP that affect the same target organ or organ system.

include an MIR above 100-in-1 million may be determined to be acceptable, and risks with an MIR below that level may be determined to be unacceptable, depending on all of the available health information. Similarly, with regard to the ample margin of safety analysis, the EPA stated in the Benzene NESHAP that: “EPA believes the relative weight of the many factors that can be considered in selecting an ample margin of safety can only be determined for each specific source category. This occurs mainly because technological and economic factors (along with the health-related factors) vary from source category to source category.” *Id.* at 38061. We also consider the uncertainties associated with the various risk analyses, as discussed earlier in this preamble, in our determinations of acceptability and ample margin of safety.

The EPA notes that it has not considered certain health information to date in making residual risk determinations. At this time, we do not attempt to quantify those HAP risks that may be associated with emissions from other facilities that do not include the source categories under review, mobile source emissions, natural source emissions, persistent environmental pollution, or atmospheric transformation in the vicinity of the sources in the categories.

The EPA understands the potential importance of considering an individual’s total exposure to HAP in addition to considering exposure to HAP emissions from the source category and facility. We recognize that such consideration may be particularly important when assessing noncancer risks, where pollutant-specific exposure health reference levels (*e.g.*, reference concentrations (RfCs)) are based on the assumption that thresholds exist for adverse health effects. For example, the EPA recognizes that, although exposures attributable to emissions from a source category or facility alone may not indicate the potential for increased risk of adverse noncancer health effects in a population, the exposures resulting from emissions from the facility in combination with emissions from all of the other sources (*e.g.*, other facilities) to which an

individual is exposed may be sufficient to result in increased risk of adverse noncancer health effects. In May 2010, the Science Advisory Board (SAB) advised the EPA “that RTR assessments will be most useful to decision makers and communities if results are presented in the broader context of aggregate and cumulative risks, including background concentrations and contributions from other sources in the area.”<sup>7</sup>

In response to the SAB recommendations, the EPA is incorporating cumulative risk analyses into its RTR risk assessments, including those reflected in this proposal. The Agency is (1) conducting facility-wide assessments, which include source category emission points, as well as other emission points within the facilities; (2) combining exposures from multiple sources in the same category that could affect the same individuals; and (3) for some persistent and bioaccumulative pollutants, analyzing the ingestion route of exposure. In addition, the RTR risk assessments have always considered aggregate cancer risk from all carcinogens and aggregate noncancer HQs from all noncarcinogens affecting the same target organ system.

Although we are interested in placing source category and facility-wide HAP risks in the context of total HAP risks from all sources combined in the vicinity of each source, we are concerned about the uncertainties of doing so. Estimates of total HAP risk from emission sources other than those that we have studied in depth during this RTR review would have significantly greater associated uncertainties than the source category or facility-wide estimates. Such aggregate or cumulative assessments would compound those uncertainties, making the assessments too unreliable.

*B. How do we perform the technology review?*

---

<sup>7</sup> Recommendations of the SAB Risk and Technology Review Methods Panel are provided in their report, which is available at: [http://yosemite.epa.gov/sab/sabproduct.nsf/4AB3966E263D943A8525771F00668381/\\$File/EPA-SAB-10-007-unsigned.pdf](http://yosemite.epa.gov/sab/sabproduct.nsf/4AB3966E263D943A8525771F00668381/$File/EPA-SAB-10-007-unsigned.pdf).

Our technology reviews focus on the identification and evaluation of developments in practices, processes, and control technologies that have occurred since the MACT standards were promulgated. Where we identify such developments, we analyze their technical feasibility, estimated costs, energy implications, and non-air environmental impacts. We also consider the emission reductions associated with applying each development. This analysis informs our decision of whether it is “necessary” to revise the emissions standards. In addition, we consider the appropriateness of applying controls to new sources versus retrofitting existing sources. For this exercise, we consider any of the following to be a “development”:

- Any add-on control technology or other equipment that was not identified and considered during development of the original MACT standards;
- Any improvements in add-on control technology or other equipment (that were identified and considered during development of the original MACT standards) that could result in additional emissions reduction;
- Any work practice or operational procedure that was not identified or considered during development of the original MACT standards;
- Any process change or pollution prevention alternative that could be broadly applied to the industry and that was not identified or considered during development of the original MACT standards; and
- Any significant changes in the cost (including cost effectiveness) of applying controls (including controls the EPA considered during the development of the original MACT standards).

In addition to reviewing the practices, processes, and control technologies that were considered at the time we originally developed the NESHAPs (*i.e.*, the 2004 ALDT NESHAP; the 2004 MMPP NESHAP; and the 2004 PPP NESHAP), we review a variety of data sources in our investigation of potential practices, processes, or controls that may have not been considered for each of the three source categories during development of the NESHAP. Among the sources we reviewed were the NESHAP for various industries that were promulgated after the MACT standards being reviewed in this action (*e.g.*, NESHAP for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources (40 CFR part 63, subpart HHHHHH)). We also reviewed the results of other technology reviews for other surface coating source categories since the promulgation of the NESHAPs (*e.g.*, the technology reviews conducted for the Shipbuilding and Ship Repair (Surface Coating) NESHAP (40 CFR part 63, subpart II) and the Wood Furniture Manufacturing Operations NESHAP (40 CFR part 63, subpart JJ)). We reviewed the regulatory requirements and/or technical analyses associated with these regulatory actions to identify any practices, processes, and control technologies considered in these efforts that could be applied to emission sources in the ALDT, the MMPP, and the PPP source categories, as well as the costs, non-air impacts, and energy implications associated with the use of these technologies. Finally, we reviewed information from other sources, such as state and/or local permitting agency databases and industry-specific market analyses and trade journals, to research advancements in add-on controls and lower HAP technology for coatings and solvents. For a more detailed discussion of our methods for performing these technology reviews, refer to the *Automobiles and Light-Duty Trucks Technology Review Memo*, the *Miscellaneous Metal Parts and Products Technology Review Memo* and the *Plastic Parts and Products Technology Review Memo*, available in the respective ALDT, MMPP, and PPP Dockets.

*C. How do we estimate post-MACT risks posed by these source categories?*

In this section, we provide a complete description of the types of analyses that we generally perform during the risk assessment process. In some cases, we do not perform a specific analysis because it is not relevant. For example, in the absence of emissions of HAP known to be persistent and bioaccumulative in the environment (PB-HAP), we would not perform a multipathway exposure assessment. Where we do not perform an analysis, we state that we do not and provide the reason. While we present all of our risk assessment methods, we only present risk assessment results for the analyses actually conducted (see the presentation of results in sections IV.A.1, IV.B.1, and IV.C.1 of this preamble).

The EPA conducted risk assessments that provide estimates of the MIR for cancer posed by the HAP emissions from each source in each source category, the HI for chronic exposures to HAP with the potential to cause noncancer health effects, and the HQ for acute exposures to HAP with the potential to cause noncancer health effects. The assessments also provide estimates of the distribution of cancer risks within the exposed populations, cancer incidence, and an evaluation of the potential for adverse environmental effects. The seven sections that follow this paragraph describe how we estimated emissions and conducted the risk assessments. The ALDT, MMPP, and PPP Dockets contain the respective *Automobiles and Light-Duty Trucks Risk Assessment Report*, *Miscellaneous Metal Parts and Products Risk Assessment Report* and the *Plastic Parts and Products Risk Assessment Report*, which provide more information on the risk assessment inputs and models. The methods used to assess risks (as described in the seven primary steps below) are consistent with those peer-reviewed by a panel of the EPA's SAB in

2009<sup>8</sup> and described in the SAB review report issued in 2010. They are also consistent with the key recommendations contained in that report.

1. How did we estimate actual emissions and identify the emissions release characteristics?

The actual emissions and the emission release characteristics for each facility were obtained primarily from either the 2011 NEI or the 2014 NEI. Most data were obtained from the 2011 NEI, unless the 2014 NEI included HAP data for emission units or processes for which the 2011 NEI included only volatile organic compounds (VOC) or particulate matter. In some cases, the industry association or the specific facilities were contacted to confirm emissions that appeared to be outliers, that were otherwise inconsistent with our understanding of the industry, or that were associated with high risk values in our initial risk screening analyses. When appropriate, emission values and release characteristics were revised based on these facility contacts, and these changes were documented. Additional information on the development of the modeling file for each source category, including the development of the actual emissions estimates and emissions release characteristics, can be found in Appendix 1 to the *Automobiles and Light-Duty Trucks Risk Assessment Report*, in the ALDT Docket; in Appendix 1 to the *Miscellaneous Metal Parts and Products Risk Assessment Report*, in the MMPP Docket; and Appendix 1 to the *Plastic Parts and Products Risk Assessment Report*, in the PPP Docket.

2. How did we estimate MACT-allowable emissions?

The available emissions data in the RTR emissions dataset include estimates of the mass of HAP emitted during a specified annual time period. These “actual” emission levels are often lower than the emission levels allowed under the requirements of the current MACT standards.

---

<sup>8</sup> U.S. EPA SAB. *Risk and Technology Review (RTR) Risk Assessment Methodologies: For Review by the EPA's Science Advisory Board with Case Studies – MACT I Petroleum Refining Sources and Portland Cement Manufacturing*, June 2009. EPA-452/R-09-0006. <https://www3.epa.gov/airtoxics/rtrpg.html>.



The emissions level allowed to be emitted under the MACT standards is referred to as the “MACT-allowable” emissions level. We discussed the use of both MACT-allowable and actual emissions in the final Coke Oven Batteries RTR (70 FR 19998–19999, April 15, 2005) and in the proposed and final Hazardous Organic NESHAP RTRs (71 FR 34428, June 14, 2006, and 71 FR 76609, December 21, 2006, respectively). In those actions, we noted that assessing the risks at the MACT-allowable level is inherently reasonable since these risks reflect the maximum level facilities could emit and still comply with national emission standards. We also explained that it is reasonable to consider actual emissions, where such data are available, in both steps of the risk analysis, in accordance with the Benzene NESHAP approach. (54 FR 38044, September 14, 1989.)

For the ALDT, MMPP, and PPP source categories, the EPA calculated allowable emissions by developing source category-specific multipliers of 1.1 for Automobiles and Light-duty Trucks and 1.2 for both Miscellaneous Metal Parts and Plastic Parts and Products. These multipliers were applied to the current emissions for each category to estimate the allowable emissions. The multipliers were based on information obtained from the facility operating permits and industry information.

For details on how the EPA estimated the MACT allowable emissions for the ALDT source category, please *see* Appendix 1 to the *Automobiles and Light-Duty Trucks Risk Assessment Report*, in the ALDT Docket (Docket ID No. EPA-HQ-OAR-2019-0314). For details on how the EPA calculated the MACT allowable emissions for the MMPP source category, please *see* Appendix 1 to the *Miscellaneous Metal Parts and Products Risk Assessment Report*, in the MMPP Docket (Docket ID No. EPA-HQ-OAR-2019-0312). For details on how the EPA calculated the MACT allowable emissions for the PPP source category, please *see* Appendix 1 to

the *Plastic Parts and Products Risk Assessment Report*, in the PPP Docket (Docket ID No. EPA-HQ-OAR-2019-0313).

3. How do we conduct dispersion modeling, determine inhalation exposures, and estimate individual and population inhalation risks?

Both long-term and short-term inhalation exposure concentrations and health risks from the source categories addressed in this proposal were estimated using the Human Exposure Model (HEM-3).<sup>9</sup> The HEM-3 performs three primary risk assessment activities: (1) conducting dispersion modeling to estimate the concentrations of HAP in ambient air, (2) estimating long-term and short-term inhalation exposures to individuals residing within 50 kilometers (km) of the modeled sources, and (3) estimating individual and population-level inhalation risks using the exposure estimates and quantitative dose-response information.

*a. Dispersion Modeling*

The air dispersion model AERMOD, used by the HEM-3 model, is one of the EPA's preferred models for assessing air pollutant concentrations from industrial facilities.<sup>10</sup> To perform the dispersion modeling and to develop the preliminary risk estimates, HEM-3 draws on three data libraries. The first is a library of meteorological data, which is used for dispersion calculations. This library includes 1 year (2016) of hourly surface and upper air observations from 824 meteorological stations, selected to provide coverage of the U.S. and Puerto Rico. A second library of U.S. Census Bureau census block<sup>11</sup> internal point locations and populations provides the basis of human exposure calculations (U.S. Census, 2010). In addition, for each

---

<sup>9</sup> For more information about HEM-3, go to <https://www.epa.gov/fera/risk-assessment-and-modeling-human-exposure-model-hem>.

<sup>10</sup> U.S. EPA. Revision to the *Guideline on Air Quality Models: Adoption of a Preferred General Purpose (Flat and Complex Terrain) Dispersion Model and Other Revisions* (70 FR 68218, November 9, 2005).

<sup>11</sup> A census block is the smallest geographic area for which census statistics are tabulated.

census block, the census library includes the elevation and controlling hill height, which are also used in dispersion calculations. A third library of pollutant-specific dose-response values is used to estimate health risks. These are discussed below:

*b. Risk from Chronic Exposure to HAP*

In developing the risk assessment for chronic exposures, we use the estimated annual average ambient air concentrations of each HAP emitted by each source in the source categories. The HAP air concentrations at each nearby census block centroid located within 50 km of the facility are a surrogate for the chronic inhalation exposure concentration for all the people who reside in that census block. A distance of 50 km is consistent with both the analysis supporting the 1989 Benzene NESHAP (54 FR 38044, September 14, 1989) and the limitation of Gaussian dispersion modules, including AERMOD.

For each facility we calculate the MIR as the cancer risk associated with a continuous lifetime (24 hours per day, 7 days per week, 52 weeks per year, for a 70-year period) exposure to the maximum concentration at the centroid of each inhabited census block. We calculate individual cancer risk by multiplying the estimated lifetime exposure to the ambient concentration of each HAP (in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ )) by its unit risk estimate (URE). The URE is an upper bound estimate of an individual's probability of contracting cancer over a lifetime of exposure to a concentration of 1 microgram of the pollutant per cubic meter of air. For residual risk assessments, we generally use UREs from the EPA's Integrated Risk Information System (IRIS). For carcinogenic pollutants without IRIS values, we look to other reputable sources of cancer dose-response values, often using California EPA (CalEPA) UREs, where available. In cases where new, scientifically credible dose-response values have been developed in a manner consistent with EPA guidelines and have undergone a peer review

process similar to that used by the EPA, we may use such dose-response values in place of, or in addition to, other values, if appropriate. The pollutant-specific dose-response values used to estimate health risk are available at <https://www.epa.gov/fera/dose-response-assessment-assessing-health-risks-associated-exposure-hazardous-air-pollutants>.

To estimate individual lifetime cancer risks associated with exposure to HAP emissions from each facility in the source category, we sum the risks for each of the carcinogenic HAP<sup>12</sup> emitted by the modeled facility. We estimate cancer risk at every census block within 50 km of every facility in the source category. The MIR is the highest individual lifetime cancer risk estimated for any of those census blocks. In addition to calculating the MIR, we estimate the distribution of individual cancer risks for the source category by summing the number of individuals within 50 km of the sources whose estimated risk falls within a specified risk range. We also estimate annual cancer incidence by multiplying the estimated lifetime cancer risk at each census block by the number of people residing in that block, summing results for all of the census blocks, and then dividing this result by a 70-year lifetime.

---

<sup>12</sup> The EPA's 2005 *Guidelines for Carcinogen Risk Assessment* classifies carcinogens as: "carcinogenic to humans," "likely to be carcinogenic to humans," and "suggestive evidence of carcinogenic potential." These classifications also coincide with the terms "known carcinogen, probable carcinogen, and possible carcinogen," respectively, which are the terms advocated in the EPA's *Guidelines for Carcinogen Risk Assessment*, published in 1986 (51 FR 33992, September 24, 1986). In August 2000, the document, *Supplemental Guidance for Conducting Health Risk Assessment of Chemical Mixtures* (EPA/630/R-00/002), was published as a supplement to the 1986 document. Copies of both documents can be obtained from <https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=20533&CFID=70315376&CFTOKEN=71597944>. Summing the risk of these individual compounds to obtain the cumulative cancer risk is an approach that was recommended by the EPA's SAB in their 2002 peer review of the EPA's National Air Toxics Assessment (NATA) titled *NATA - Evaluating the National-scale Air Toxics Assessment 1996 Data -- an SAB Advisory*, available at [https://yosemite.epa.gov/sab/sabproduct.nsf/214C6E915BB04E14852570CA007A682C/\\$File/ecadv02001.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/214C6E915BB04E14852570CA007A682C/$File/ecadv02001.pdf).

To assess the risk of noncancer health effects from chronic exposure to HAP, we calculate either an HQ or a target organ-specific hazard index (TOSHI). We calculate an HQ when a single noncancer HAP is emitted. Where more than one noncancer HAP is emitted, we sum the HQ for each of the HAP that affects a common target organ or target organ system to obtain a TOSHI. The HQ is the estimated exposure divided by the chronic noncancer dose-response value, which is a value selected from one of several sources. The preferred chronic noncancer dose-response value is the EPA RfC, defined as “an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime”

([https://iaspub.epa.gov/sor\\_internet/registry/termreg/searchandretrieve/glossariesandkeywordlists/search.do?details=&vocabName=IRIS%20Glossary](https://iaspub.epa.gov/sor_internet/registry/termreg/searchandretrieve/glossariesandkeywordlists/search.do?details=&vocabName=IRIS%20Glossary)). In cases where an RfC from the EPA’s IRIS is not available or where the EPA determines that using a value other than the RfC is appropriate, the chronic noncancer dose-response value can be a value from the following prioritized sources, which define their dose-response values similarly to the EPA: (1) The Agency for Toxic Substances and Disease Registry (ATSDR) Minimum Risk Level (<https://www.atsdr.cdc.gov/mrls/index.asp>); (2) the CalEPA Chronic Reference Exposure Level (REL) (<https://oehha.ca.gov/air/crnrr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>); or (3) as noted above, a scientifically credible dose-response value that has been developed in a manner consistent with the EPA guidelines and has undergone a peer review process similar to that used by the EPA. The pollutant-specific dose-response values used to estimate health risks are available at <https://www.epa.gov/fera/dose-response-assessment-assessing-health-risks-associated-exposure-hazardous-air-pollutants>.

*c. Risk from Acute Exposure to HAP that May Cause Health Effects Other Than Cancer*

For each HAP for which appropriate acute inhalation dose-response values are available, the EPA also assesses the potential health risks due to acute exposure. For these assessments, the EPA makes conservative assumptions about emission rates, meteorology, and exposure location. In this proposed rulemaking, as part of our efforts to continually improve our methodologies to evaluate the risks that HAP emitted from categories of industrial sources pose to human health and the environment,<sup>13</sup> we are revising our treatment of meteorological data to use reasonable worst-case air dispersion conditions in our acute risk screening assessments instead of worst-case air dispersion conditions. This revised treatment of meteorological data and the supporting rationale are described in more detail in *Automobiles and Light-Duty Trucks Risk Assessment Report*, the *Miscellaneous Metal Parts and Products Risk Assessment Report*, and the *Plastic Parts and Products Risk Assessment Report*, and in Appendix 5 of the report: *Technical Support Document for Acute Risk Screening Assessment*. We will be applying this revision in RTR rulemakings proposed on or after June 3, 2019.

To assess the potential acute risk to the maximally exposed individual, we use the peak hourly emission rate for each emission point,<sup>14</sup> reasonable worst-case air dispersion conditions (*i.e.*, 99<sup>th</sup> percentile), and the point of highest off-site exposure. Specifically, we assume that

---

<sup>13</sup> See, e.g., U.S. EPA. “Screening Methodologies to Support Risk and Technology Reviews (RTR): A Case Study Analysis” (Draft Report, May 2017. <https://www3.epa.gov/ttn/atw/risk/rtrpg.html>).

<sup>14</sup> In the absence of hourly emission data, we develop estimates of maximum hourly emission rates by multiplying the average actual annual emissions rates by a factor to account for variability. This is documented in the *Automobiles and Light-Duty Trucks Risk Assessment Report*, the *Miscellaneous Metal Parts and Products Risk Assessment Report*, and the *Plastic Parts and Products Risk Assessment Report* and in Appendix 5 of the report: *Technical Support Document for Acute Risk Screening Assessment*. These documents are available in the ALDT Docket, the MMPP Docket, and the PPP Docket.

peak emissions from the source category and reasonable worst-case air dispersion conditions co-occur and that a person is present at the point of maximum exposure.

To characterize the potential health risks associated with estimated acute inhalation exposures to a HAP, we generally use multiple acute dose-response values, including acute RELs, acute exposure guideline levels (AEGLs), and emergency response planning guidelines (ERPG) for 1-hour exposure durations, if available, to calculate acute HQs. The acute HQ is calculated by dividing the estimated acute exposure concentration by the acute dose-response value. For each HAP for which acute dose-response values are available, the EPA calculates acute HQs.

An acute REL is defined as “the concentration level at or below which no adverse health effects are anticipated for a specified exposure duration.”<sup>15</sup> Acute RELs are based on the most sensitive, relevant, adverse health effect reported in the peer-reviewed medical and toxicological literature. They are designed to protect the most sensitive individuals in the population through the inclusion of margins of safety. Because margins of safety are incorporated to address data gaps and uncertainties, exceeding the REL does not automatically indicate an adverse health impact. AEGLs represent threshold exposure limits for the general public and are applicable to emergency exposures ranging from 10 minutes to 8 hours.<sup>16</sup> They are guideline levels for “once-

---

<sup>15</sup> CalEPA issues acute RELs as part of its Air Toxics Hot Spots Program, and the 1-hour and 8-hour values are documented in *Air Toxics Hot Spots Program Risk Assessment Guidelines, Part I, The Determination of Acute Reference Exposure Levels for Airborne Toxicants*, which is available at <https://oehha.ca.gov/air/general-info/oehha-acute-8-hour-and-chronic-reference-exposure-level-rel-summary>.

<sup>16</sup> National Academy of Sciences, 2001. *Standing Operating Procedures for Developing Acute Exposure Levels for Hazardous Chemicals*, page 2. Available at [https://www.epa.gov/sites/production/files/2015-09/documents/sop\\_final\\_standing\\_operating\\_procedures\\_2001.pdf](https://www.epa.gov/sites/production/files/2015-09/documents/sop_final_standing_operating_procedures_2001.pdf). Note that the National Advisory Committee for Acute Exposure Guideline Levels for Hazardous Substances ended in

in-a-lifetime, short-term exposures to airborne concentrations of acutely toxic, high-priority chemicals.” *Id.* at 21. The AEGL–1 is specifically defined as “the airborne concentration (expressed as ppm (parts per million) or mg/m<sup>3</sup> (milligrams per cubic meter)) of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure.” The document also notes that “Airborne concentrations below AEGL–1 represent exposure levels that can produce mild and progressively increasing but transient and nondisabling odor, taste, and sensory irritation or certain asymptomatic, nonsensory effects.” *Id.* AEGL–2 are defined as “the airborne concentration (expressed as parts per million or milligrams per cubic meter) of a substance above which it is predicted that the general population, including susceptible individuals, could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.” *Id.*

ERPGs are “developed for emergency planning and are intended as health-based guideline concentrations for single exposures to chemicals.”<sup>17</sup> *Id.* at 1. The ERPG–1 is defined as “the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to 1 hour without experiencing other than mild transient adverse health effects or without perceiving a clearly defined, objectionable odor.” *Id.* at 2. Similarly, the ERPG–2 is defined as “the maximum airborne concentration below which it is believed that nearly all

---

October 2011, but the AEGL program continues to operate at the EPA and works with the National Academies to publish final AEGLs (<https://www.epa.gov/aegl>).

<sup>17</sup> *ERPGS Procedures and Responsibilities*. March 2014. American Industrial Hygiene Association. Available at: <https://www.aiha.org/get-involved/AIHAGuidelineFoundation/EmergencyResponsePlanningGuidelines/Documents/ERPG%20Committee%20Standard%20Operating%20Procedures%20%20-%20March%202014%20Revision%20%28Updated%2010-2-2014%29.pdf>.



individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action." *Id.* at 1.

An acute REL for 1-hour exposure durations is typically lower than its corresponding AEGL-1 and ERPG-1. Even though their definitions are slightly different, AEGL-1s are often the same as the corresponding ERPG-1s, and AEGL-2s are often equal to ERPG-2s. The maximum HQs from our acute inhalation screening risk assessment typically result when we use the acute REL for a HAP. In cases where the maximum acute HQ exceeds 1, we also report the HQ based on the next highest acute dose-response value (usually the AEGL-1 and/or the ERPG-1).

For these source categories, we did not have short-term emissions data; therefore, we developed source category-specific factors based on information about each industry. We request comment on our assumptions regarding hour-to-hour variation in emissions and our methods of calculating the multiplier for estimating the peak 1-hour emissions for each source category and any additional information that could help refine our approach.

The ALDT process is a continuous (non-batch) coating application and curing process which results in consistent emission rates. The sources in this category dip and spray-apply coatings onto the surface of the vehicle. The sources employ the use of various compliance options, which include the use of compliant coatings, averaging among coatings to meet the emission limits, and the use of add-on controls by facilities that cannot use the first two options. We expect that the hourly variations in emissions from these processes during routine operations to be minimal. Thus, applying the default multiplier of 10 to estimate the worst-case hourly emission rate is not reasonable for this category. We expect that minimal variations in emissions

occur due to variations in the organic HAP content of the coatings. We calculated acute emissions by developing a source category-specific multiplier of 1.2 that was applied to the actual annual emissions, which were then divided by the total number of hours in a year (8,760 hours). A further discussion of why this factor was chosen can be found in Appendix 1 to the *Automobiles and Light-Duty Trucks Risk Assessment Report* in the ALDT Docket.

Similarly, for the MMPP source category, we expect to see minimal hour-to-hour variation in emissions during routine operations because coating operations dip or spray-apply coating onto the surface of metal parts and products in a continuous coating process. Thus, the default multiplier of 10 to estimate the worst-case hourly emission rate is not reasonable for this category. We expect that minimal variation in emissions occur due to variations in the organic HAP content of the coatings from batch to batch. We calculated acute emissions by developing a source category-specific multiplier of 1.2 that was applied to the actual annual emissions, which were then divided by the total number of hours in a year (8,760 hours). A further discussion of why this factor was chosen can be found in Appendix 1 to the *Miscellaneous Metal Parts and Products Risk Assessment Report* in the MMPP Docket.

For the PPP source category, we expect to see minimal hour-to-hour variation in emissions during routine operations because coating operations spray-apply coating onto the surface of plastic parts and products in a continuous coating process. Thus, the default multiplier of 10 to estimate the worst-case hourly emission rate is not reasonable for this category. We expect that minimal variation in emissions occur due to variations in the organic HAP content of the coatings from batch to batch. We calculated acute emissions by developing a source category-specific multiplier of 1.2 that was applied to the actual annual emissions, which were then divided by the total number of hours in a year (8,760 hours). A further discussion of why

this factor was chosen can be found in Appendix 1 to the *Plastic Parts and Products Risk Assessment Report* in the PPP Docket.

In our acute inhalation screening risk assessment, acute impacts are deemed negligible for HAP where acute HQs are less than or equal to 1, and no further analysis is performed for these HAP. In cases where an acute HQ from the screening step is greater than 1, we assess the site-specific data to ensure that the acute HQ is at an off-site location. For the three source categories in this action, the acute data refinements consisted of plotting the HEM-3 polar grid results for each HAP with an acute HQ value greater than 1 on aerial photographs of the facilities. We then assessed whether the highest acute HQs were off-site and at locations that may be accessible to the public (e.g., roadways and public buildings). These refinements are discussed more fully in the *Automobiles and Light-Duty Trucks*, *Miscellaneous Metal Parts and Products*, and *Plastic Parts and Products Risk Assessment Reports*, available in the respective ALDT, MMPP, and PPP Dockets.

#### 4. How do we conduct the multipathway exposure and risk screening assessment?

The EPA conducts a tiered screening assessment examining the potential for significant human health risks due to exposures via routes other than inhalation (i.e., ingestion). We first determine whether any sources in the source categories emitted any HAP known to be persistent and bioaccumulative in the environment, as identified in the EPA's Air Toxics Risk Assessment Library (see Volume 1, Appendix D, at [https://www.epa.gov/sites/production/files/2013-08/documents/volume\\_1\\_reflibrary.pdf](https://www.epa.gov/sites/production/files/2013-08/documents/volume_1_reflibrary.pdf)).

For the ALDT source category, we identified emissions of lead. In evaluating the potential multipathway risk from emissions of lead compounds, rather than developing a screening threshold emission rate, we compare maximum estimated chronic inhalation exposure

concentrations to the level of the current National Ambient Air Quality Standard (NAAQS) for lead ( $0.15 \mu\text{g}/\text{m}^3$ ).<sup>18</sup> Values below the level of the primary (health-based) lead NAAQS are considered to have a low potential for multipathway risk. For additional discussion of the multipathway screening results for this source category *see* section IV.A of this preamble and the *Automobiles and Light-Duty Trucks Risk Assessment Report* in the ALDT Docket.

For the MMPP source category, we identified emissions of arsenic, cadmium, and lead, so we proceeded to the next step of the evaluation. Except for lead, the human health risk screening assessment for PB-HAP consists of three progressive tiers. In a Tier 1 screening assessment, we determine whether the magnitude of the facility-specific emissions of PB-HAP warrants further evaluation to characterize human health risk through ingestion exposure. To facilitate this step, we use previously developed screening threshold emission rates for several PB-HAP that are based on a hypothetical upper-end screening exposure scenario developed for use in conjunction with the EPA's Total Risk Integrated Methodology.Fate, Transport, and Ecological Exposure (TRIM.FaTE) model. The PB-HAP with screening threshold emission rates are arsenic compounds, cadmium compounds, chlorinated dibenzodioxins and furans, mercury compounds, and polycyclic organic matter (POM). Based on the EPA estimates of toxicity and bioaccumulation potential, the pollutants above represent a conservative list for inclusion in

---

<sup>18</sup> In doing so, the EPA notes that the legal standard for a primary NAAQS – that a standard is requisite to protect public health and provide an adequate margin of safety (CAA section 109(b)) – differs from the CAA section 112(f) standard (requiring, among other things, that the standard provide an “ample margin of safety to protect public health”). However, the primary lead NAAQS is a reasonable measure of determining risk acceptability (*i.e.*, the first step of the Benzene NESHAP analysis) since it is designed to protect the most susceptible group in the human population – children, including children living near major lead emitting sources. 73 FR 67002/3; 73 FR 67000/3; 73 FR 67005/1. In addition, applying the level of the primary lead NAAQS at the risk acceptability step is conservative, since that primary lead NAAQS reflects an adequate margin of safety.

multipathway risk assessments for RTR rules. (See Volume 1, Appendix D at [https://www.epa.gov/sites/production/files/2013-08/documents/volume\\_1\\_reflibrary.pdf](https://www.epa.gov/sites/production/files/2013-08/documents/volume_1_reflibrary.pdf).) In this assessment, we compare the facility-specific emission rates of these PB-HAP to the screening threshold emission rates for each PB-HAP to assess the potential for significant human health risks via the ingestion pathway. We call this application of the TRIM.FaTE model the Tier 1 screening assessment. The ratio of a facility's actual emission rate to the Tier 1 screening threshold emission rate is a "screening value."

We derive the Tier 1 screening threshold emission rates for these PB-HAP (other than lead compounds) to correspond to a maximum excess lifetime cancer risk of 1-in-1 million (*i.e.*, for arsenic compounds, polychlorinated dibenzodioxins and furans and POM) or, for HAP that cause noncancer health effects (*i.e.*, cadmium compounds and mercury compounds), a maximum HQ of 1. If the emission rate of any one PB-HAP or combination of carcinogenic PB-HAP in the Tier 1 screening assessment exceeds the Tier 1 screening threshold emission rate for any facility (*i.e.*, the screening value is greater than 1), we conduct a second screening assessment, which we call the Tier 2 screening assessment (ingestion rates are decoupled into separate upper-bound ingestion rates for the fisher, farmer, and gardener scenarios). Since, the PB-HAP emissions did not exceed the Tier 1 multipathway screening value of 1, the Tier 2 multipathway screen was not conducted.

In evaluating the potential multipathway risk from emissions of lead compounds, rather than developing a screening threshold emission rate, we compare maximum estimated chronic inhalation exposure concentrations to the level of the current National Ambient Air Quality

Standard (NAAQS) for lead.<sup>19</sup> Values below the level of the primary (health-based) lead NAAQS are considered to have a low potential for multipathway risk.

For additional discussion of the multipathway screening results for this source category *see* section IV.B of this preamble and the *Miscellaneous Metal Parts and Products Risk Assessment Report* in the MMPP Docket.

For the PPP source category, we did not identify emissions of any PB-HAP. Therefore, further evaluation of multipathway risk was not conducted for the PPP source category.

#### 5. How do we conduct the environmental risk screening assessment?

##### *a. Adverse Environmental Effects, Environmental HAP, and Ecological Benchmarks*

The EPA conducts a screening assessment to examine the potential for adverse environmental effects as required under section 112(f)(2)(A) of the CAA. Section 112(a)(7) of the CAA defines “adverse environmental effect” as “any significant and widespread adverse effect, which may reasonably be anticipated, to wildlife, aquatic life, or other natural resources, including adverse impacts on populations of endangered or threatened species or significant degradation of environmental quality over broad areas.”

The EPA focuses on eight HAP, which are referred to as “environmental HAP,” in its screening assessment: six PB-HAP and two acid gases. The PB-HAP included in the screening

---

<sup>19</sup> In doing so, the EPA notes that the legal standard for a primary NAAQS – that a standard is requisite to protect public health and provide an adequate margin of safety (CAA section 109(b)) – differs from the CAA section 112(f) standard (requiring, among other things, that the standard provide an “ample margin of safety to protect public health”). However, the primary lead NAAQS is a reasonable measure of determining risk acceptability (*i.e.*, the first step of the Benzene NESHAP analysis) since it is designed to protect the most susceptible group in the human population – children, including children living near major lead emitting sources. 73 FR 67002/3; 73 FR 67000/3; 73 FR 67005/1. In addition, applying the level of the primary lead NAAQS at the risk acceptability step is conservative, since that primary lead NAAQS reflects an adequate margin of safety.

assessment are arsenic compounds, cadmium compounds, dioxins/furans, polycyclic organic matter (POM), mercury (both inorganic mercury and methyl mercury), and lead compounds. The acid gases included in the screening assessment are hydrochloric acid (HCl) and hydrogen fluoride (HF).

HAP that persist and bioaccumulate are of particular environmental concern because they accumulate in the soil, sediment, and water. The acid gases, HCl and HF, were included due to their well-documented potential to cause direct damage to terrestrial plants. In the environmental risk screening assessment, we evaluate the following four exposure media: terrestrial soils, surface water bodies (includes water-column and benthic sediments), fish consumed by wildlife, and air. Within these four exposure media, we evaluate nine ecological assessment endpoints, which are defined by the ecological entity and its attributes. For PB-HAP (other than lead), both community-level and population-level endpoints are included. For acid gases, the ecological assessment evaluated is terrestrial plant communities.

An ecological benchmark represents a concentration of HAP that has been linked to a particular environmental effect level. For each environmental HAP, we identified the available ecological benchmarks for each assessment endpoint. We identified, where possible, ecological benchmarks at the following effect levels: probable effect levels, lowest-observed-adverse-effect level, and no-observed-adverse-effect level. In cases where multiple effect levels were available for a particular PB-HAP and assessment endpoint, we use all of the available effect levels to help us to determine whether ecological risks exist and, if so, whether the risks could be considered significant and widespread.

For further information on how the environmental risk screening assessment was conducted, including a discussion of the risk metrics used, how the environmental HAP were

identified, and how the ecological benchmarks were selected, *see* Appendix 9 of the *Automobiles and Light-Duty Trucks Risk Assessment Report*, the *Miscellaneous Metal Parts and Products Risk Assessment Report*, and the *Plastic Parts and Products Risk Assessment Report*, in the respective ALDT, MMPP and PPP Dockets.

*b. Environmental Risk Screening Methodology*

For the environmental risk screening assessment, the EPA first determined whether any facilities in the ALDT, MMPP, and PPP source categories emitted any of the environmental HAP. For the ALDT source category, we identified emissions of lead, HCl and HF. For the MMPP source category, we identified emissions of arsenic, cadmium, lead and HCl. For the PPP source category, we did not identify emissions of any environmental HAP.

Because the environmental HAP evaluated are emitted by at least one facility in the ALDT source category and the MMPP source category, we proceeded to the second step of the evaluation for each of these source categories.

*c. PB-HAP Methodology*

The environmental screening assessment includes six PB-HAP, arsenic compounds, cadmium compounds, dioxins/furans, POM, mercury (both inorganic mercury and methyl mercury), and lead compounds. With the exception of lead, the environmental risk screening assessment for PB-HAP consists of three tiers. The first tier of the environmental risk screening assessment uses the same health-protective conceptual model that is used for the Tier 1 human health screening assessment. TRIM.FaTE model simulations were used to back-calculate Tier 1 screening threshold emission rates. The screening threshold emission rates represent the emission rate in tons of pollutant per year that results in media concentrations at the facility that equal the relevant ecological benchmark. To assess emissions from each facility in the category, the



reported emission rate for each PB-HAP was compared to the Tier 1 screening threshold emission rate for that PB-HAP for each assessment endpoint and effect level. If emissions from a facility do not exceed the Tier 1 screening threshold emission rate, the facility “passes” the screening assessment, and, therefore, is not evaluated further under the screening approach. If emissions from a facility exceed the Tier 1 screening threshold emission rate, we evaluate the facility further in Tier 2.

In Tier 2 of the environmental screening assessment, the screening threshold emission rates are adjusted to account for local meteorology and the actual location of lakes in the vicinity of facilities that did not pass the Tier 1 screening assessment. For soils, we evaluate the average soil concentration for all soil parcels within a 7.5-km radius for each facility and PB-HAP. For the water, sediment, and fish tissue concentrations, the highest value for each facility for each pollutant is used. If emission concentrations from a facility do not exceed the Tier 2 screening threshold emission rate, the facility “passes” the screening assessment and typically is not evaluated further. If emissions from a facility exceed the Tier 2 screening threshold emission rate, we evaluate the facility further in Tier 3.

In Tier 3 of the environmental screening assessment, we examine the suitability of the lakes around the facilities to support life and remove those that are not suitable (*e.g.*, lakes that have been filled in or are industrial ponds), adjust emissions for plume-rise, and conduct hour-by-hour time-series assessments. If these Tier 3 adjustments to the screening threshold emission rates still indicate the potential for an adverse environmental effect (*i.e.*, facility emission rate exceeds the screening threshold emission rate), we may elect to conduct a more refined assessment using more site-specific information. If, after additional refinement, the facility

emission rate still exceeds the screening threshold emission rate, the facility may have the potential to cause an adverse environmental effect.

To evaluate the potential for an adverse environmental effect from lead, we compared the average modeled air concentrations (from HEM-3) of lead around each facility in the source category to the level of the secondary NAAQS for lead. The secondary lead NAAQS is a reasonable means of evaluating environmental risk because it is set to provide substantial protection against adverse welfare effects which can include “effects on soils, water, crops, vegetation, man-made materials, animals, wildlife, weather, visibility and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being.”

*d. Acid Gas Environmental Risk Methodology*

The environmental screening assessment for acid gases evaluates the potential phytotoxicity and reduced productivity of plants due to chronic exposure to HCl and HF. The environmental risk screening methodology for acid gases is a single-tier screening assessment that compares modeled ambient air concentrations (from AERMOD) to the ecological benchmarks for each acid gas. To identify potential adverse environmental effects (as defined in section 112(a)(7) of the CAA) from emissions of HCl and HF, we evaluate the following metrics: the size of the modeled area around each facility that exceeds the ecological benchmark for each acid gas, in units of acres and squared kilometers; the percentage of the modeled area around each facility that exceeds the ecological benchmark for each acid gas; and the area-weighted average screening value around each facility (calculated by dividing the area-weighted average concentration over the 50-km modeling domain by the ecological benchmark for each acid gas). For further information on the environmental screening assessment approach, *see*

Appendix 9 of the *Automobiles and Light-Duty Trucks Risk Assessment Report*, the *Miscellaneous Metal Parts and Products Risk Assessment Report*, and the *Plastic Parts and Products Risk Assessment Report*, in the ALDT Docket, the MMPP Docket, and the PPP Docket, respectively.

6. How did we conduct facility-wide assessments?

To put the source category risks in context, we typically examine the risks from the entire “facility,” where the facility includes all HAP-emitting operations within a contiguous area and under common control. In other words, we examine the HAP emissions not only from the source category emission points of interest, but also emissions of HAP from all other emission sources at the facility for which we have data. For each of these three source categories, we conducted the facility-wide assessment using a dataset compiled from the 2014 NEI. The source category records of that NEI dataset were removed, evaluated, and updated as described in section II.C of this preamble: “What data collection activities were conducted to support this action?” Once a quality assured source category dataset was available, it was placed back with the remaining records from the NEI for that facility. The facility-wide file was then used to analyze risks due to the inhalation of HAP that are emitted “facility-wide” for the populations residing within 50 km of each facility, consistent with the methods used for the source category analysis described above. For these facility-wide risk analyses, the modeled source category risks were compared to the facility-wide risks to determine the portion of the facility-wide risks that could be attributed to the source categories addressed in this proposal. We also specifically examined the facility that was associated with the highest estimate of risk and determined the percentage of that risk attributable to the source category of interest. The *Automobiles and Light-Duty Trucks Risk Assessment Report*, *Miscellaneous Metal Parts and Products Risk Assessment Report*, and

*Plastic Parts and Products Risk Assessment Report*, available in the respective dockets for this action, provide the methodology and results of the facility-wide analyses, including all facility-wide risks and the percentage of source category contribution to facility-wide risks.

7. How did we consider uncertainties in risk assessment?

Uncertainty and the potential for bias are inherent in all risk assessments, including those performed for this proposal. Although uncertainty exists, we believe that our approach, which used conservative tools and assumptions, ensures that our decisions are health and environmentally protective. A brief discussion of the uncertainties in the RTR emissions datasets, dispersion modeling, inhalation exposure estimates, and dose-response relationships follows below. Also included are those uncertainties specific to our acute screening assessments, multipathway screening assessments, and our environmental risk screening assessments. A more thorough discussion of these uncertainties is included in the *Automobiles and Light-Duty Trucks Risk Assessment Report*, *Miscellaneous Metal Parts and Products Risk Assessment Report*, and *Plastic Parts and Products Risk Assessment Report*, available in the respective dockets for this action. If a multipathway site-specific assessment was performed for any of these source categories, a full discussion of the uncertainties associated with that assessment can be found in Appendix 11 of that document, *Site-Specific Human Health Multipathway Residual Risk Assessment Report*.

*a. Uncertainties in the RTR Emissions Datasets*

Although the development of the RTR emissions datasets involved quality assurance/quality control processes, the accuracy of emissions values will vary depending on the source of the data, the degree to which data are incomplete or missing, the degree to which assumptions made to complete the datasets are accurate, errors in emission estimates, and other

factors. The emission estimates considered in this analysis generally are annual totals for certain years, and they do not reflect short-term fluctuations during the course of a year or variations from year to year. The estimates of peak hourly emission rates for the acute effects screening assessment were based on an emission adjustment factor applied to the average annual hourly emission rates, which are intended to account for emission fluctuations due to normal facility operations.

*b. Uncertainties in Dispersion Modeling*

We recognize there is uncertainty in ambient concentration estimates associated with any model, including the EPA's recommended regulatory dispersion model, AERMOD. In using a model to estimate ambient pollutant concentrations, the user chooses certain options to apply. For RTR assessments, we select some model options that have the potential to overestimate ambient air concentrations (*e.g.*, not including plume depletion or pollutant transformation). We select other model options that have the potential to underestimate ambient impacts (*e.g.*, not including building downwash). Other options that we select have the potential to either under- or overestimate ambient levels (*e.g.*, meteorology and receptor locations). On balance, considering the directional nature of the uncertainties commonly present in ambient concentrations estimated by dispersion models, the approach we apply in the RTR assessments should yield unbiased estimates of ambient HAP concentrations. We also note that the selection of meteorology dataset location could have an impact on the risk estimates. As we continue to update and expand our library of meteorological station data used in our risk assessments, we expect to reduce this variability.

*c. Uncertainties in Inhalation Exposure Assessment*

Although every effort is made to identify all of the relevant facilities and emission points, as well as to develop accurate estimates of the annual emission rates for all relevant HAP, the uncertainties in our emission inventory likely dominate the uncertainties in the exposure assessment. Some uncertainties in our exposure assessment include human mobility, using the centroid of each census block, assuming lifetime exposure, and assuming only outdoor exposures. For most of these factors, there is neither an under nor overestimate when looking at the maximum individual risk or the incidence, but the shape of the distribution of risks may be affected. With respect to outdoor exposures, actual exposures may not be as high if people spend time indoors, especially for very reactive pollutants or larger particles. For all factors, we reduce uncertainty when possible. For example, with respect to census-block centroids, we analyze large blocks using aerial imagery and adjust locations of the block centroids to better represent the population in the blocks. We also add additional receptor locations where the population of a block is not well represented by a single location.

*d. Uncertainties in Dose-Response Relationships*

There are uncertainties inherent in the development of the dose-response values used in our risk assessments for cancer effects from chronic exposures and noncancer effects from both chronic and acute exposures. Some uncertainties are generally expressed quantitatively, and others are generally expressed in qualitative terms. We note, as a preface to this discussion, a point on dose-response uncertainty that is stated in the EPA's *2005 Guidelines for Carcinogen Risk Assessment*; namely, that "the primary goal of EPA actions is protection of human health; accordingly, as an Agency policy, risk assessment procedures, including default options that are used in the absence of scientific data to the contrary, should be health protective" (the EPA's

2005 Guidelines for Carcinogen Risk Assessment, page 1-7). This is the approach followed here as summarized in the next paragraphs.

Cancer UREs used in our risk assessments are those that have been developed to generally provide an upper bound estimate of risk.<sup>20</sup> That is, they represent a “plausible upper limit to the true value of a quantity” (although this is usually not a true statistical confidence limit). In some circumstances, the true risk could be as low as zero; however, in other circumstances the risk could be greater.<sup>21</sup> Chronic noncancer RfC and reference dose (RfD) values represent chronic exposure levels that are intended to be health-protective levels. To derive dose-response values that are intended to be “without appreciable risk,” the methodology relies upon an uncertainty factor (UF) approach,<sup>22</sup> which considers uncertainty, variability, and gaps in the available data. The UFs are applied to derive dose-response values that are intended to protect against appreciable risk of deleterious effects.

Many of the UFs used to account for variability and uncertainty in the development of acute dose-response values are quite similar to those developed for chronic durations. Additional adjustments are often applied to account for uncertainty in extrapolation from observations at one exposure duration (*e.g.*, 4 hours) to derive an acute dose-response value at another exposure duration (*e.g.*, 1 hour). Not all acute dose-response values are developed for the same purpose, and care must be taken when interpreting the results of an acute assessment of human health

---

<sup>20</sup> IRIS glossary

([https://ofmpub.epa.gov/sor\\_internet/registry/termreg/searchandretrieve/glossariesandkeywords/search.do?details=&glossaryName=IRIS%20Glossary](https://ofmpub.epa.gov/sor_internet/registry/termreg/searchandretrieve/glossariesandkeywords/search.do?details=&glossaryName=IRIS%20Glossary)).

<sup>21</sup> An exception to this is the URE for benzene, which is considered to cover a range of values, each end of which is considered to be equally plausible, and which is based on maximum likelihood estimates.

<sup>22</sup> See *A Review of the Reference Dose and Reference Concentration Processes*, U.S. EPA, December 2002, and *Methods for Derivation of Inhalation Reference Concentrations and Application of Inhalation Dosimetry*, U.S. EPA, 1994.

effects relative to the dose-response value or values being exceeded. Where relevant to the estimated exposures, the lack of acute dose-response values at different levels of severity should be factored into the risk characterization as potential uncertainties.

Uncertainty also exists in the selection of ecological benchmarks for the environmental risk screening assessment. We established a hierarchy of preferred benchmark sources to allow selection of benchmarks for each environmental HAP at each ecological assessment endpoint. We searched for benchmarks for three effect levels (*i.e.*, no-effects level, threshold-effect level, and probable effect level), but not all combinations of ecological assessment/environmental HAP had benchmarks for all three effect levels. Where multiple effect levels were available for a particular HAP and assessment endpoint, we used all of the available effect levels to help us determine whether risk exists and whether the risk could be considered significant and widespread.

Although we make every effort to identify appropriate human health effect dose-response values for all pollutants emitted by the sources in this risk assessment, some HAP emitted by these source categories are lacking dose-response assessments. Accordingly, these pollutants cannot be included in the quantitative risk assessment, which could result in quantitative estimates understating HAP risk. To help to alleviate this potential underestimate, where we conclude similarity with a HAP for which a dose-response value is available, we use that value as a surrogate for the assessment of the HAP for which no value is available. To the extent use of surrogates indicates appreciable risk, we may identify a need to increase priority for an IRIS assessment for that substance. We additionally note that, generally speaking, HAP of greatest concern due to environmental exposures and hazard are those for which dose-response assessments have been performed, reducing the likelihood of understating risk. Further, HAP not



included in the quantitative assessment are assessed qualitatively and considered in the risk characterization that informs the risk management decisions, including consideration of HAP reductions achieved by various control options.

For a group of compounds that are unspeciated (*e.g.*, glycol ethers), we conservatively use the most protective dose-response value of an individual compound in that group to estimate risk. Similarly, for an individual compound in a group (*e.g.*, ethylene glycol diethyl ether) that does not have a specified dose-response value, we also apply the most protective dose-response value from the other compounds in the group to estimate risk.

*e. Uncertainties in Acute Inhalation Screening Assessments*

In addition to the uncertainties highlighted above, there are several factors specific to the acute exposure assessment that the EPA conducts as part of the risk review under section 112 of the CAA. The accuracy of an acute inhalation exposure assessment depends on the simultaneous occurrence of independent factors that may vary greatly, such as hourly emissions rates, meteorology, and the presence of a person. In the acute screening assessment that we conduct under the RTR program, we assume that peak emissions from the source category and reasonable worst-case air dispersion conditions (*i.e.*, 99<sup>th</sup> percentile) co-occur. We then include the additional assumption that a person is located at this point at the same time. Together, these assumptions represent a reasonable worst-case actual exposure scenario. In most cases, it is unlikely that a person would be located at the point of maximum exposure during the time when peak emissions and reasonable worst-case air dispersion conditions occur simultaneously.

*f. Uncertainties in the Multipathway and Environmental Risk Screening Assessments.*

The ALDT source category emits PB-HAP (lead) and environmental HAP (lead, HF and HCl); therefore, further evaluation of multipathway risk and an environmental risk screening was

conducted. The MMPP source category emits PB-HAP (arsenic, cadmium, and lead) and environmental HAP (arsenic, cadmium, lead, HF, and HCl); therefore, an environmental risk screening was conducted for this source category. The PPP source category in this action does not emit any PB-HAP or environmental HAP; therefore, further evaluation of multipathway risk and an environmental risk screening was not conducted for this source category.

For each source category, we generally rely on site-specific levels of PB-HAP or environmental HAP emissions to determine whether a refined assessment of the impacts from multipathway exposures is necessary or whether it is necessary to perform an environmental screening assessment. This determination is based on the results of a three-tiered screening assessment that relies on the outputs from models – TRIM.FaTE and AERMOD – that estimate environmental pollutant concentrations and human exposures for five PB-HAP (dioxins, POM, mercury, cadmium, and arsenic) and two acid gases (HF and HCl). For lead, we use AERMOD to determine ambient air concentrations, which are then compared to the secondary NAAQS standard for lead. Two important types of uncertainty associated with the use of these models in RTR risk assessments and inherent to any assessment that relies on environmental modeling are model uncertainty and input uncertainty.<sup>23</sup>

Model uncertainty concerns whether the model adequately represents the actual processes (e.g., movement and accumulation) that might occur in the environment. For example, does the model adequately describe the movement of a pollutant through the soil? This type of uncertainty is difficult to quantify. However, based on feedback received from previous the EPA SAB

---

<sup>23</sup> In the context of this discussion, the term “uncertainty” as it pertains to exposure and risk encompasses both *variability* in the range of expected inputs and screening results due to existing spatial, temporal, and other factors, as well as *uncertainty* in being able to accurately estimate the true result.

reviews and other reviews, we are confident that the models used in the screening assessments are appropriate and state-of-the-art for the multipathway and environmental screening risk assessments conducted in support of RTR.

Input uncertainty is concerned with how accurately the models have been configured and parameterized for the assessment at hand. For Tier 1 of the multipathway and environmental screening assessments, we configured the models to avoid underestimating exposure and risk. This was accomplished by selecting upper-end values from nationally representative datasets for the more influential parameters in the environmental model, including selection and spatial configuration of the area of interest, lake location and size, meteorology, surface water, soil characteristics, and structure of the aquatic food web. We also assume an ingestion exposure scenario and values for human exposure factors that represent reasonable maximum exposures.

For the environmental screening assessment for acid gases, we employ a single-tiered approach. We use the modeled air concentrations and compare those with ecological benchmarks.

For all tiers of the multipathway and environmental screening assessments, our approach to addressing model input uncertainty is generally cautious. We choose model inputs from the upper end of the range of possible values for the influential parameters used in the models, and we assume that the exposed individual exhibits ingestion behavior that would lead to a high total exposure. This approach reduces the likelihood of not identifying high risks for adverse impacts.

Despite the uncertainties, when individual pollutants or facilities do not exceed screening threshold emission rates (*i.e.*, screen out), we are confident that the potential for adverse multipathway impacts on human health is very low. On the other hand, when individual pollutants or facilities do exceed screening threshold emission rates, it does not mean that

impacts are significant, only that we cannot rule out that possibility and that a refined assessment for the site might be necessary to obtain a more accurate risk characterization for the source category.

The EPA evaluates the following HAP in the multipathway and/or environmental risk screening assessments, where applicable: arsenic, cadmium, dioxins/furans, lead, mercury (both inorganic and methyl mercury), POM, HCl, and HF. These HAP represent pollutants that can cause adverse impacts either through direct exposure to HAP in the air or through exposure to HAP that are deposited from the air onto soils and surface waters and then through the environment into the food web. These HAP represent those HAP for which we can conduct a meaningful multipathway or environmental screening risk assessment. For other HAP not included in our screening assessments, the model has not been parameterized such that it can be used for that purpose. In some cases, depending on the HAP, we may not have appropriate multipathway models that allow us to predict the concentration of that pollutant. The EPA acknowledges that other HAP beyond these that we are evaluating may have the potential to cause adverse effects and, therefore, the EPA may evaluate other relevant HAP in the future, as modeling science and resources allow.

#### **IV. Analytical Results and Proposed Decisions**

*A. What are the analytical results and proposed decisions for the Surface Coating of Automobiles and Light-Duty Trucks source category?*

1. What are the results of the risk assessment and analyses?

As described in section III of this preamble, for the ALDT source category, we conducted a risk assessment for all HAP emitted. We present results of the risk assessment briefly below

and in more detail in the *Automobiles and Light-Duty Trucks Risk Assessment Report* in the ALDT Docket (Docket ID No. EPA-HQ-OAR-2019-0314).

*a. Chronic Inhalation Risk Assessment Results*

Table 2 of this preamble provides a summary of the results of the inhalation risk assessment for the source category.

**Table 2. Surface Coating of Automobiles and Light-Duty Trucks Source Category Inhalation Risk Assessment Results**

Risk Assessment	Maximum Individual Cancer Risk (in 1 million)		Estimated Population at Increased Risk of Cancer $\geq$ 1-in-1 Million		Estimated Annual Cancer Incidence (cases per year)		Maximum Chronic Noncancer TOSHI <sup>1</sup>		Maximum Screening Acute Noncancer HQ <sup>2</sup>
	Based on Actual Emissions	Based on Allowable Emissions	Based on Actual Emissions	Based on Allowable Emissions	Based on Actual Emissions	Based on Allowable Emissions	Based on Actual Emissions	Based on Allowable Emissions	Based on Actual Emissions
Source Category	10	10	15,000	19,000	0.01	0.01	0.3	0.3	HQREL = 1
Whole Facility	10	-	48,000	-	0.02	-	0.3	-	-

<sup>1</sup> The target organ specific hazard index (TOSHI) is the sum of the chronic noncancer HQs for substances that affect the same target organ or organ system.

<sup>2</sup> The maximum estimated acute exposure concentration was divided by available short-term threshold values to develop HQ values.

The results of the inhalation risk modeling using actual emissions data, as shown in Table 2 of this preamble, indicate that the maximum individual cancer risk based on actual emissions (lifetime) could be up to 10-in-1 million (driven by naphthalene and ethyl benzene from miscellaneous industrial processes - other/not classified), the maximum chronic noncancer TOSHI value based on actual emissions could be up to 0.3 (driven by hexamethylene-1,6-diisocyanate from a painting topcoat process), and the maximum screening acute noncancer HQ value (off-facility site) could be up to 1 (driven by formaldehyde). The total estimated annual

cancer incidence (national) from these facilities based on actual emission levels is 0.01 excess cancer cases per year or 1 case in every 100 years.

*b. Screening Level Acute Risk Assessment Results*

Table 2 of this preamble shows the acute risk results for the ALDT source category. The screening analysis for acute impacts was based on an industry specific multiplier of 1.2, to estimate the peak emission rates from the average rates. For more detailed acute risk results, refer to the *Automobiles and Light-Duty Trucks Risk Assessment Report*, in the ALDT Docket.

*c. Multipathway Risk Screening Results*

The emissions data for the ALDT source category indicate that one PB-HAP is emitted by sources within this source category: lead. In evaluating the potential for multipathway effects from emissions of lead, we compared modeled annual lead concentrations to the NAAQS for lead ( $0.15 \mu\text{g}/\text{m}^3$ , arithmetic mean concentration over a 3-month period). The highest annual average lead concentration of  $1.5 \times 10^{-5} \mu\text{g}/\text{m}^3$  is below the NAAQS for lead, indicating a low potential for multipathway impacts of concern due to lead even assuming a shorter averaging period is. Therefore, we do not expect any human health multipathway risks as a result of emissions from this source category.

*d. Environmental Risk Screening Results*

The emissions data for the ALDT source category indicate that three environmental HAP are emitted by sources within this source category: lead, HCl and HF. Therefore, we conducted a screening-level evaluation of the potential adverse environmental effects associated with emissions of lead, HCl, and HF for the ALDT source category. In evaluating the potential for adverse environmental effects from emissions of lead, we compared modeled annual lead concentrations to the secondary NAAQS for lead ( $0.15 \mu\text{g}/\text{m}^3$ , arithmetic mean concentration

over a 3-month period). The highest annual average lead concentration of  $1.5 \times 10^{-5} \mu\text{g}/\text{m}^3$  is below the secondary NAAQS for lead, indicating a low potential for adverse environmental impacts due to lead even assuming a shorter averaging period is analyzed. For both HCl and HF, each individual concentration (*i.e.*, each off-site data point in the modeling domain) was below the ecological benchmarks for all facilities. Therefore, we do not expect an adverse environmental effect as a result of HAP emissions from this source category.

*e. Facility-Wide Risk Results*

Fifteen facilities have a facility-wide cancer MIR greater than or equal to 1-in-1 million. The maximum facility-wide cancer MIR is 10-in-1 million, driven by naphthalene and ethyl benzene from miscellaneous industrial processes - other/not classified. The total estimated cancer incidence from the whole facility is 0.02 excess cancer cases per year, or one excess case in every 50 years. Approximately 48,000 people were estimated to have cancer risks above 1-in-1 million from exposure to HAP emitted from both MACT and non-MACT sources at 15 of the 43 facilities in this source category. The maximum facility-wide TOSHI for the source category is estimated to be 0.3, mainly driven by emissions of hexamethylene-1,6-diisocyanate from a painting topcoat process.

*f. What demographic groups might benefit from this regulation?*

To examine the potential for any environmental justice issues that might be associated with the source category, we performed a demographic analysis, which is an assessment of risks to individual demographic groups of the populations living within 5 km and within 50 km of the facilities. In the analysis, we evaluated the distribution of HAP-related cancer and noncancer

risks from the ALDT source category across different demographic groups within the populations living near facilities.<sup>24</sup>

The results of the demographic analysis are summarized in Table 3 of this preamble. These results, for various demographic groups, are based on the estimated risks from actual emissions levels for the population living within 50 km of the facilities.

**Table 3. Surface Coating of Automobiles and Light-Duty Trucks Source Category Demographic Risk Analysis Results**

	Nationwide	Population with Cancer Risk at or Above 1-in-1 Million Due to Surface Coating of Automobiles and Light-Duty Trucks	Population with Chronic Noncancer HI Above 1 Due to Surface Coating of Automobiles and Light-Duty Trucks
Total Population	317,746,049	15,000	0
White and Minority by Percent			
White	62	60	0
Minority	38	40	0
Minority Detail by Percent			
African American	12	10	0
Native American	0.8	0.2	0
Hispanic or Latino	18	27	0
Other and Multiracial	7	3	0
Income by Percent			
Below the Poverty Level	14	19	0
Above the Poverty Level	86	81	0
Education by Percent			
Over 25 Without High a School Diploma	14	14	0
Over 25 With a High School Diploma	86	86	0
Linguistically Isolated by Percent			
Linguistically Isolated	6	3	0

The results of the ALDT source category demographic analysis indicate that emissions from the source category expose approximately 15,000 people to a cancer risk at or above 1-in-1 million and no one to a chronic noncancer HI greater than 1. The percent of minorities is similar nationally (38 percent) and for the category population with cancer risk greater than or equal to 1-in-1 million (40 percent). However, the category population with cancer risk greater than or

---



equal to 1-in-1 million has a greater percentage of Hispanic (27 percent) as compared to nationally (18 percent).

The methodology and the results of the demographic analysis are presented in a technical report titled *Risk and Technology Review – Analysis of Demographic Factors for Populations Living Near Automobile and Light-Duty Truck Surface Coating Source Category Operations*, March 2019 (hereafter referred to as the *Automobiles and Light-Duty Trucks Demographic Analysis Report*) in the ALDT Docket.

2. What are our proposed decisions regarding risk acceptability, ample margin of safety, and adverse environmental effects?

*a. Risk Acceptability*

As noted in section III.A of this preamble, we weigh all health risk factors in our risk acceptability determination, including the cancer MIR, the number of persons in various cancer and noncancer risk ranges, cancer incidence, the maximum noncancer TOSHI, the maximum acute noncancer HQ, the extent of noncancer risks, the distribution of cancer and noncancer risks in the exposed population, and risk estimation uncertainties (54 FR 38044, September 14, 1989).

For the ALDT source category, the risk analysis indicates that the cancer risks to the individual most exposed could be up to 10-in-1 million due to actual emissions or based on allowable emissions. These risks are considerably less than 100-in-1 million, which is the presumptive upper limit of acceptable risk. The risk analysis also shows very low cancer incidence (0.01 cases per year for actual and allowable emissions), and we did not identify a potential for adverse chronic noncancer health effects. The acute noncancer risks are low at an HQ of 1 (based on the REL) for formaldehyde. Therefore, we find there is little potential concern

of acute noncancer health impacts from actual emissions. In addition, the risk assessment indicates no significant potential for multipathway health effects.

Considering all of the health risk information and factors discussed above, including the uncertainties discussed in section III.C.7 of this preamble, we propose to find that the risks from the ALDT source category are acceptable.

*b. Ample Margin of Safety Analysis*

Although we are proposing that the risks from the ALDT source category are acceptable, risk estimates for approximately 15,000 individuals in the exposed population are above 1-in-1 million at the actual emissions level and 19,000 individuals at the allowable emissions level. Consequently, we further considered whether the MACT standards for the ALDT source category provide an ample margin of safety to protect public health. In this ample margin of safety analysis, we investigated available emissions control options that might reduce the risk from the source category. We considered this information along with all of the health risks and other health information considered in our determination of risk acceptability.

As described in section III.B of this preamble, our technology review focused on identifying developments in practices, processes, and control technologies for the ALDT source category, and the EPA reviewed various information sources regarding emission sources that are currently regulated by the ALDT NESHAP. Based on our review, we did not identify any cost-effective measures to further reduce HAP. Therefore, considering all of the available health information along with the absence of additional measures for reducing HAP, we are proposing that additional emissions controls for this source category are not necessary and that the current standards provide an ample margin of safety.

*c. Environmental Effects*

The emissions data for the ALDT source category indicate that three environmental HAP are emitted by sources within this source category: lead, HCl, and HF. The screening-level evaluation of the potential for adverse environmental effects from emissions of lead indicated that the secondary NAAQS for lead would not be exceeded by any facility. The screening-level evaluation of the potential for adverse environmental effects associated with emissions of HCl and HF from the ALDT source category indicated that each individual concentration (*i.e.*, each off-site data point in the modeling domain) was below the ecological benchmarks for all facilities. In addition, we are unaware of any adverse environmental effects caused by HAP emitted by this source category. Therefore, we do not expect there to be an adverse environmental effect as a result of HAP emissions from this source category and we are proposing that it is not necessary to set a more stringent standard to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect.

3. What are the results and proposed decisions based on our technology review?

As described in section III.B of this preamble, our technology review focused on identifying developments in practices, processes, and control technologies for the ALDT source category. The EPA reviewed various information sources regarding emission sources that are currently regulated by the ALDT NESHAP to support the technology review. The information sources included the following: the RBLC; state regulations; facility operating permits; regulatory actions, including technology reviews, promulgated for other surface coating NESHAP subsequent to the ALDT NESHAP; site visits; discussions with individual ALDT surface coating facilities; and industry information. The primary emission sources for the technology review included the following: the coating operations; all storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored or mixed; all

manual and automated equipment and containers used for conveying coatings, thinners, and cleaning materials; and all storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

Based on our review, we did not identify any add-on control technologies, process equipment, work practices or procedures that were not previously considered during development of the 2004 ALDT NESHAP, and we did not identify any new or improved add-on control technologies that would result in additional emission reductions. A brief summary of the EPA's findings in conducting the technology review of ALDT surface coating operations follows. For a detailed discussion of the EPA's findings, refer to the memorandum, *Technology Review for Surface Coating Operations in the Automobiles and Light-Duty Trucks Source Category*, in the ALDT Docket.

During 2004 MACT development for the ALDT NESHAP, numerical emission limits were determined for new and existing major sources within the four combinations of coating operations, for a total of eight HAP emissions limits. The emission limits were based on industry survey responses and the industry's use of low- or no-HAP coatings and thinners, high efficiency coatings spray equipment (including robotic spraying), and add-on capture and control technologies. Alternately, the NESHAP provides sources with the option of limiting HAP emissions with capture and add-on control to achieve an overall control efficiency of 95-percent. During development of that rulemaking, we identified the beyond-the-floor option to require the use of capture systems and add-on control devices for all ALDT surface coating operations. This option was rejected because we determined the additional emission reductions achieved using the beyond-the-floor option did not warrant the costs each affected source would incur or the incremental cost per ton of HAP reduced (67 FR 78622, December 24, 2002).

For this technology review, we used the EPA's NEI and the ECHO databases to identify facilities that are currently subject to the ALDT NESHAP. We also consulted Regional and state regulations and operating permits. California has existing surface coating rules for VOC from vehicle assembly plants within two air quality management districts (AQMD): Bay Area AQMD and South Coast AQMD. No state VOC rules for ALDT surface coating operations were identified that had VOC limits that would translate into lower HAP content limits. The VOC content limits in state rules (*e.g.*, BAAQMD Rule 8-13 and SCAQMD Rule 1115) are an order of magnitude higher than the HAP content limits in the ALDT NESHAP. Because the HAP are only a small fraction of the VOC in these coatings, complying with these state VOC standards would not limit HAP emissions to levels that are more stringent than the levels required.

Our search of the RBLC database for improvements in ALDT coating technologies provided results for 22 facilities with permit dates of 2000 or later. Facilities reported the use of VOC and HAP content limits, electrodeposition primers, regenerative thermal oxidizers (RTOs), catalytic oxidation, and thermal oxidation. All of these control technologies were in use by the ALDT surface coating industry during development of the ALDT NESHAP and already were considered in the development of the ALDT NESHAP. Therefore, we concluded that the results of the search did not result in any improvements in add-on control technology or other equipment.

We reviewed other surface coating NESHAP promulgated after the ALDT NESHAP to determine whether any requirements exceed the ALDT MACT level of control or included technologies that were not considered during the development of the original ALDT NESHAP. These NESHAP include Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources (40 CFR part 63, subpart HHHHHH), and Nine Metal Fabrication and Finishing Area

Source Categories (40 CFR part 63, subpart XXXXXX). We also reviewed the results of the technology reviews for the following NESHAP: Printing and Publishing (40 CFR part 63, subpart KK), Shipbuilding and Ship Repair (40 CFR part 63, subpart II), Wood Furniture Manufacturing (40 CFR part 63, subpart JJ), and Aerospace Manufacturing and Rework Facilities (40 CFR part 63, subpart GG).

Technology reviews for these NESHAP identified permanent total enclosures (PTE) and/or RTOs as improvements in add-on control technology. The original ALDT NESHAP includes a compliance option involving the use of a PTE and an add-on control device. Because these measures were considered in the development of the original ALDT NESHAP and reflected in the MACT level of control, we concluded that these measures do not represent an improvement in control technology under CAA section 112(d)(6).

The control technology assessment conducted for the Paint Stripping and Miscellaneous Surface Coating NESHAP and Nine Metal Fabrication and Finishing NESHAP confined all coating operations to a spray booth fitted with high-efficiency filters, use of high-transfer efficiency spray guns, and training and certification of spray equipment operator to optimize transfer efficiency for facilities that spray apply coatings containing certain inorganic HAP. The technology controls for inorganic HAP adopted in subparts HHHHHH and XXXXXX, spray booths fitted with overspray filters and the use of high efficiency spray equipment, were already considered in the development of the original ALDT NESHAP, and, therefore, do not constitute a development for the purpose of the technology review.

The technology review conducted for the Wood Furniture NESHAP identified the use of more efficient spray guns as a technology review development and revised the requirements to prohibit the use of conventional spray guns. Air-assisted airless spraying was added as a more

efficient coating application technology. The original ALDT NESHAP is based on the use of high-efficiency application technology, such as airless and electrostatic spray equipment. This equipment increases coating transfer efficiency, minimizes emissions by reducing the amount of coating sprayed and still achieves a given film thickness with exceptional finish. The format of the ALDT emission limits, in mass of HAP per mass of coating solids applied to the part, accounts for the transfer efficiency of the application equipment and is based on high-efficiency methods.

The technology review conducted for the Printing and Publishing NESHAP identified the use of a PTE in the form of coating spray booths and curing tunnels. These PTEs are commonly used in ALDT surface coating operations to maintain a clean environment for applying the coatings, and for capturing and removing coating overspray and solvent vapors from the coating area. Therefore, the use of a PTE, as identified in the Printing and Publishing NESHAP technology review, does not represent a development in control technology with respect to ALDT surface coating operations.

In conclusion, we found no improvements in add-on control technology or other equipment during review of the RBLC, the state rules, and subsequent NESHAP that were not already identified and considered during the ALDT NESHAP development.

Alternatives to conventional solvent-borne coatings were identified and considered during MACT development but were not considered to be suitable for all ALDT coating applications. These alternative coatings include higher solids coatings, waterborne coatings, low-energy electron beam ultraviolet (UV) cured coatings, and powder coating. Waterborne and higher solids coatings with lower HAP and VOC content were considered in the development of the proposed and final standards and are already reflected in the HAP emission limitations in the

final rule. Industry trends and advances in coating formulation, as documented in the *ACA Industry Market Analysis*, showed that powder coated finishes would be difficult to repair and would likely require refinishing the entire car in case of damage. Further, the *ACA analysis* stated that no progress had been made in overcoming technical hurdles that would make UV-cured coatings applicable to main vehicle body parts (*e.g.*, shadowing of certain areas from UV rays, high energy demands, residual UV photo-initiators in the coating film). Therefore, the EPA did not identify any developments in coating technology, other process changes, or pollution prevention alternatives that would represent a development relative to the coating technologies on which the final rule is based.

Finally, no improvements in work practices or operational procedures were identified for the ALDT source category that were not previously identified and considered during MACT development. The current MACT standards require that, if a facility uses add-on controls to comply with the emission limitations, the facility 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, those coating operations. If a facility is not using add-on controls and is using either the compliant material option or the emission rate without add-on controls option, the facility does not need to comply with work practice standards. Under the emission rate option, HAP emitted from spills or from containers would be counted against the facility in the compliance calculations, so facilities must already minimize these losses to maintain compliance.

Based on these findings, we conclude that there have not been any developments in add-on control technology or other equipment not identified and considered during MACT development, nor any improvements in add-on controls, nor any significant changes in the cost



(including cost effectiveness) of the add-on controls. Therefore, we are proposing no revisions to the ALDT NESHAP pursuant to CAA section 112(d)(6). For further discussion of the technology review results, refer to the *Automobiles and Light-Duty Trucks Technology Review Memo*, in the ALDT Docket.

4. What other actions are we proposing for the ALDT source category?

We are proposing to require electronic submittal of notifications, semiannual reports, and compliance reports (which include performance test reports) for ALDT surface coating facilities. In addition, we are proposing revisions to the SSM provisions of the MACT rule in order to ensure that they are consistent with the Court decision in *Sierra Club v. EPA*, 551 F. 3d 1019 (D.C. Cir. 2008), which vacated two provisions that exempted source owners and operators from the requirement to comply with otherwise applicable CAA section 112(d) emission standards during periods of SSM. We are proposing to require periodic emissions testing of add-on control devices. We also propose other changes, including updating references to equivalent test methods, making technical and editorial revisions, and incorporation by reference (IBR) of alternative test methods. Our analyses and proposed changes related to these issues are discussed in the sections below.

*a. Electronic Reporting Requirements*

The EPA is proposing that owners and operators of ALDT surface coating facilities submit electronic copies of initial notifications required in 40 CFR 63.9(b) and 63.3110(b), notifications of compliance status required in 40 CFR 63.9(h) and 63.3110(c), performance test reports required in 40 CFR 63.3120(b), and semiannual reports required in 40 CFR 63.3120(a), through the EPA's Central Data Exchange (CDX) using the Compliance and Emissions Data Reporting Interface (CEDRI). For further information regarding the electronic data submission

process, please refer to the memorandum titled *Electronic Reporting for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules*, in the ALDT Docket. The proposed rule requires that performance test results collected using test methods that are supported by the EPA's Electronic Reporting Tool (ERT) as listed on the ERT website<sup>25</sup> at the time of the test be submitted in the format generated through the use of the ERT and that other performance test results be submitted in portable document format (PDF) using the attachment module of the ERT. No specific form is proposed at this time for the initial notifications required in 40 CFR 63.9(b) and notification of compliance status in 40 CFR 63.9(h). Until the EPA has completed electronic forms for these notifications, the notifications will be required to be submitted via CEDRI in PDF. After development of the final forms, we will notify sources about their availability via the CEDRI website and the CHIEF Listserv. For semiannual reports required in 40 CFR 63.3120(a) the proposed rule requires that owners and operators use the appropriate spreadsheet template to submit information to CEDRI. A draft version of the proposed templates for these reports is included in the docket for this rulemaking.<sup>26</sup> The EPA specifically requests comment on the content, layout, and overall design of the templates.

Additionally, the EPA has identified two broad circumstances in which electronic reporting extensions may be provided. In both circumstances, the decision to accept the claim of needing additional time to report is within the discretion of the Administrator, and reporting should occur as soon as possible. The EPA is providing these potential extensions to protect owners and operators from noncompliance in cases where they cannot successfully submit a

---

<sup>25</sup> <https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>

<sup>26</sup> See *Electronic Reporting Template for Surface Coating of Automobiles and Light-Duty Trucks Subpart III Semiannual Reports*, in docket ID NO. EPA-HQ-OAR-0314.

report by the reporting deadline for reasons outside of their control. The situation where an extension may be warranted due to outages of the EPA's CDX or CEDRI which precludes an owner or operator from accessing the system and submitting required reports is addressed in 40 CFR 63.9(b), notifications of compliance status required in 40 CFR 63.9(h), and semiannual reports required in 40 CFR 63.3120(a). The situation where an extension may be warranted due to a force majeure event, which is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents an owner or operator from complying with the requirement to submit a report electronically as required by this rule is addressed in 40 CFR 63.3120(g). Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazards beyond the control of the facility.

The electronic submittal of the reports addressed in this proposed rulemaking will increase the usefulness of the data contained in those reports, is in keeping with current trends in data availability and transparency, will further assist in the protection of public health and the environment, will improve compliance by facilitating the ability of regulated facilities to demonstrate compliance with requirements and by facilitating the ability of delegated state, local, tribal, and territorial air agencies and the EPA to assess and determine compliance, and will ultimately reduce burden on regulated facilities, delegated air agencies, and the EPA. Electronic reporting also eliminates paper-based, manual processes, thereby saving time and resources, simplifying data entry, eliminating redundancies, minimizing data reporting errors, and providing data quickly and accurately to the affected facilities, air agencies, the EPA, and the

public. Moreover, electronic reporting is consistent with the EPA's plan<sup>27</sup> to implement Executive Order 13563 and is in keeping with the EPA's agency-wide policy<sup>28</sup> developed in response to the White House's Digital Government Strategy.<sup>29</sup> For more information on the benefits of electronic reporting, see the memorandum *Electronic Reporting Requirements for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules*, available in Docket ID No. EPA-OAR-2019-0314.

*b. SSM Requirements*

(1.) Proposed Elimination of the SSM Exemption

In its 2008 decision in *Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008), the Court vacated portions of two provisions in the EPA's CAA section 112 regulations governing the emissions of HAP during periods of SSM. Specifically, the Court vacated the SSM exemption contained in 40 CFR 63.6(f)(1) and 40 CFR 63.6(h)(1), holding that under section 302(k) of the CAA, emissions standards or limitations must be continuous in nature and that the SSM exemption violates the CAA's requirement that some CAA section 112 standards apply continuously.

We are proposing the elimination of the SSM exemption in this rule. Consistent with *Sierra Club v. EPA*, we are proposing standards in this rule that apply at all times. We are also proposing several revisions to Table 2 to subpart IIII of 40 CFR part 63 (*Applicability of General*

---

<sup>27</sup> EPA's Final Plan for Periodic Retrospective Reviews, August 2011. Available at: <https://www.regulations.gov/document?D=EPA-HQ-OA-2011-0156-0154>.

<sup>28</sup> *E-Reporting Policy Statement for EPA Regulations*, September 2013. Available at: <https://www.epa.gov/sites/production/files/2016-03/documents/epa-ereporting-policy-statement-2013-09-30.pdf>.

<sup>29</sup> *Digital Government: Building a 21<sup>st</sup> Century Platform to Better Serve the American People*, May 2012. Available at: <https://obamawhitehouse.archives.gov/sites/default/files/omb/egov/digital-government/digital-government.html>.

*Provisions to Subpart IIII*, hereafter referred to as the “General Provisions table to subpart IIII”), as explained in more detail below in section IV.A.4.b.2 of this preamble. For example, we are proposing to eliminate the incorporation of the General Provisions’ requirement that the source develop an SSM plan. Further, we are proposing to eliminate and revise certain recordkeeping and reporting requirements related to the SSM exemption as further described below. The EPA has attempted to ensure that the provisions we are proposing to eliminate are inappropriate, unnecessary, or redundant in the absence of the SSM exemption. We are specifically seeking comment on whether we have successfully done so.

In proposing these rule amendments, the EPA has taken into account startup and shutdown periods and, for the reasons explained below, has not proposed alternate standards for those periods. Startups and shutdowns are part of normal operations for the ALDT source category. As currently specified in 40 CFR 63.3100(b), all coating operation(s) must be in compliance with the operating limits for emission capture systems and add-on control devices required by 40 CFR 63.3093 “at all times except during periods of startup, shutdown, and malfunction.” Therefore, we will be removing the exemption for periods of startup, and shutdown, as well as for malfunctions. Also, as currently specified in 40 CFR 63.3100(a), you must be in compliance “at all times” with the emission limitations in 40 CFR 63.3090 and 63.3091, and as specified in 40 CFR 63.3100(c), you must be in compliance with the work practice standards in 40 CFR 63.3094 “at all times.” During startup and shutdown periods, in order for a facility (using add-on controls to meet the standards) to meet the emission and operating standards, the control device for a coating operation needs to be turned on and operating at specified levels before the facility begins coating operations, and the control equipment needs to continue to be operated until after the facility ceases coating operations. In

some cases, the facility needs to run thermal oxidizers on supplemental fuel before VOC levels are sufficient for the combustion to be (nearly) self-sustaining. Note that we are also proposing new related language in 40 CFR 63.3100(d) to require that the owner or operator operate and maintain the coating operation, including pollution control equipment, at all times to minimize emissions. *See* section IV.A.4.b.2 of this preamble for further discussion of these proposed revisions.

Periods of startup, normal operations, and shutdown are all predictable and routine aspects of a source's operations. Malfunctions, in contrast, are neither predictable nor routine. Instead they are, by definition, sudden, infrequent and not reasonably preventable failures of emissions control, process, or monitoring equipment. (40 CFR 63.2) (definition of malfunction). The EPA interprets CAA section 112 as not requiring emissions that occur during periods of malfunction to be factored into development of CAA section 112 standards and this reading has been upheld as reasonable by the Court in *U.S. Sugar Corp. v. EPA*, 830 F.3d 579, 606-610 (2016). Under CAA section 112, emissions standards for new sources must be no less stringent than the level "achieved" by the best controlled similar source and for existing sources generally must be no less stringent than the average emission limitation "achieved" by the best performing 12 percent of sources in the category. There is nothing in CAA section 112 that directs the Agency to consider malfunctions in determining the level "achieved" by the best performing sources when setting emission standards. As the Court has recognized, the phrase "average emissions limitation achieved by the best performing 12 percent of" sources "says nothing about how the performance of the best units is to be calculated." *Nat'l Ass'n of Clean Water Agencies v. EPA*, 734 F.3d 1115, 1141 (D.C. Cir. 2013). While the EPA accounts for variability in setting emissions standards, nothing in CAA section 112 requires the Agency to consider malfunctions

as part of that analysis. The EPA is not required to treat a malfunction in the same manner as the type of variation in performance that occurs during routine operations of a source. A malfunction is a failure of the source to perform in a “normal or usual manner” and no statutory language compels the EPA to consider such events in setting CAA section 112 standards.

As the Court recognized in *U.S. Sugar Corp.*, accounting for malfunctions in setting standards would be difficult, if not impossible, given the myriad different types of malfunctions that can occur across all sources in the category and given the difficulties associated with predicting or accounting for the frequency, degree, and duration of various malfunctions that might occur. *Id.* at 608 (“the EPA would have to conceive of a standard that could apply equally to the wide range of possible boiler malfunctions, ranging from an explosion to minor mechanical defects. Any possible standard is likely to be hopelessly generic to govern such a wide array of circumstances.”) As such, the performance of units that are malfunctioning is not “reasonably” foreseeable. *See e.g., Sierra Club v. EPA*, 167 F.3d 658, 662 (D.C. Cir. 1999) (“The EPA typically has wide latitude in determining the extent of data-gathering necessary to solve a problem. We generally defer to an agency's decision to proceed on the basis of imperfect scientific information, rather than to 'invest the resources to conduct the perfect study'”). *See also, Weyerhaeuser v. Costle*, 590 F.2d 1011, 1058 (D.C. Cir. 1978) (“In the nature of things, no general limit, individual permit, or even any upset provision can anticipate all upset situations. After a certain point, the transgression of regulatory limits caused by ‘uncontrollable acts of third parties,’ such as strikes, sabotage, operator intoxication or insanity, and a variety of other eventualities, must be a matter for the administrative exercise of case-by-case enforcement discretion, not for specification in advance by regulation”). In addition, emissions during a malfunction event can be significantly higher than emissions at any other time of source

operation. For example, if an air pollution control device with 99-percent removal goes off-line as a result of a malfunction (as might happen if, for example, the bags in a baghouse catch fire) and the emission unit is a steady state type unit that would take days to shut down, the source would go from 99-percent control to zero control until the control device was repaired. The source's emissions during the malfunction would be 100 times higher than during normal operations. As such, the emissions over a 4-day malfunction period would exceed the annual emissions of the source during normal operations. As this example illustrates, accounting for malfunctions could lead to standards that are not reflective of (and significantly less stringent than) levels that are achieved by a well-performing non-malfunctioning source. It is reasonable to interpret CAA section 112 to avoid such a result. The EPA's approach to malfunctions is consistent with CAA section 112 and is a reasonable interpretation of the statute.

Although no statutory language compels the EPA to set standards for malfunctions, the EPA has the discretion to do so where feasible. For example, in the Petroleum Refinery Sector Risk and Technology Review, the EPA established a work practice standard for unique types of malfunctions that result in releases from pressure relief devices or emergency flaring events because we had information to determine that such work practices reflected the level of control that applies to the best performing sources (80 FR 75178, 75211-14, December 1, 2015). The EPA will consider whether circumstances warrant setting standards for a particular type of malfunction and, if so, whether the EPA has sufficient information to identify the relevant best performing sources and establish a standard for such malfunctions. We also encourage commenters to provide any such information.

It is unlikely that a malfunction would result in a violation of the standards during ALDT surface coatings operations for facilities complying without the use of add-on controls (*i.e.*, using



low-HAP coatings and thinning materials). Facilities using low-HAP coatings and thinning materials have demonstrated that the coatings and thinners used in the coating operations are less than or equal to the applicable emission limit calculated on a monthly basis.

A malfunction event is more likely for ALDT surface coating facilities that use add-on controls as a compliance option. For this option, in addition to demonstrating compliance with the numerical emission rate limits for coatings and thinners used (calculated on a monthly basis), facilities must also demonstrate that their emission capture systems and add-on control devices meet the operating limits established by the ALDT NESHAP. Control device operating limits are listed in Table 4 of the ALDT NESHAP and are specific to the device, and most are based on maintaining an average temperature over a 3-hour block period, which must not fall below the temperature limit established during the facility's initial performance test.

All facilities must also comply with work practice standards to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners, and cleaning materials used in, and waste materials generated by, the coating operation(s), but it is unlikely that a malfunction would result in a violation of the work practice standards.

We currently have no information to suggest that it is feasible or necessary to establish any type of standard for malfunctions associated with the ALDT source category. We encourage commenters to provide any such information, if available.

In the event that a source fails to comply with the applicable CAA section 112(d) standards as a result of a malfunction event, the EPA will determine an appropriate response based on, among other things, the good faith efforts of the source to minimize emissions during malfunction periods, including preventative and corrective actions, as well as root cause analyses to ascertain and rectify excess emissions. The EPA will also consider whether the source's failure

to comply with the CAA section 112(d) standard was, in fact, sudden, infrequent, not reasonably preventable, and was not instead caused, in part, by poor maintenance or careless operation. 40 CFR 63.2 (definition of malfunction).

If the EPA determines in a particular case that an enforcement action against a source for violation of an emission standard is warranted, the source can raise any and all defenses in that enforcement action and the federal district court will determine what, if any, relief is appropriate. The same is true for citizen enforcement actions. Similarly, the presiding officer in an administrative proceeding can consider any defense raised and determine whether administrative penalties are appropriate.

In summary, the EPA interpretation of the CAA and, in particular, CAA section 112 is reasonable and encourages practices that will avoid malfunctions. Administrative and judicial procedures for addressing exceedances of the standards fully recognize that violations may occur despite good faith efforts to comply and can accommodate those situations. *U.S. Sugar Corp. v. EPA*, 830 F.3d 579, 606-610 (2016).

## (2.) Proposed Revisions to the General Provisions Applicability Table

*40 CFR 63.3100(d) General duty.* We are proposing to revise the General Provisions table to subpart IIII (Table 2) entry for 40 CFR 63.6(e)(1)(i) by changing the “yes” in column 3 to a “no.” Section 63.6(e)(1)(i) describes the general duty to minimize emissions. Some of the language in that section is no longer necessary or appropriate in light of the elimination of the SSM exemption. We are proposing instead to add general duty regulatory text at 40 CFR 63.3100(d) that reflects the general duty to minimize emissions while eliminating the reference to periods covered by an SSM exemption. The current language in 40 CFR 63.6(e)(1)(i) characterizes what the general duty entails during periods of SSM. With the elimination of the

SSM exemption, there is no need to differentiate between normal operations, startup and shutdown, and malfunction events in describing the general duty. Therefore, the language the EPA is proposing for 40 CFR 63.3100(d) does not include that language from 40 CFR 63.6(e)(1)(i).

We are also proposing to revise the General Provisions table to subpart IIII (Table 2) entry for 40 CFR 63.6(e)(1)(ii) by changing the “yes” in column 3 to a “no.” Section 63.6(e)(1)(ii) imposes requirements that are not necessary with the elimination of the SSM exemption or are redundant with the general duty requirement being added at 40 CFR 63.3100(d).

*SSM plan.* We are proposing to revise the General Provisions table to subpart IIII (Table 2) entry for 40 CFR 63.6(e)(3) by changing the “yes” in column 3 to a “no.” Generally, these paragraphs require development of an SSM plan and specify SSM recordkeeping and reporting requirements related to the SSM plan. We are also proposing to remove from 40 CFR part 63, subpart IIII, the current provisions requiring the SSM plan at 40 CFR 63.3100(f). As noted, the EPA is proposing to remove the SSM exemptions. Therefore, affected units will be subject to an emission standard during such events. The applicability of a standard during such events will ensure that sources have ample incentive to plan for and achieve compliance, and, thus, the SSM plan requirements are no longer necessary.

*Compliance with standards.* We are proposing to revise the General Provisions table to subpart IIII (Table 2) entry for 40 CFR 63.6(f)(1) by changing the “yes” in column 3 to a “no.” The current language of 40 CFR 63.6(f)(1) exempts sources from non-opacity standards during periods of SSM. As discussed above, the Court in *Sierra Club* vacated the exemptions contained in this provision and held that the CAA requires that some CAA section 112 standards apply

continuously. Consistent with *Sierra Club*, the EPA is proposing to revise the standards in this rule to apply at all times.

We are also proposing to remove rule text in 40 CFR 63.3161(j) clarifying that, in calculating emissions to demonstrate compliance, deviation periods must include deviations during an SSM period. Since the EPA is removing the SSM exemption, this clarifying text is no longer needed.

*40 CFR 63.3163 Performance testing.* We are proposing to revise the General Provisions table to subpart IIII (Table 2) entry for 40 CFR 63.7(e)(1) by changing the “yes” in column 3 to a “no.” Section 63.7(e)(1) describes performance testing requirements. The EPA is instead proposing to add a performance testing requirement at 40 CFR 63.3163 and 40 CFR 63.3164. The performance testing requirements we are proposing to add differ from the General Provisions performance testing provisions in several respects. The regulatory text does not include the language in 40 CFR 63.7(e)(1) that restated the SSM exemption and language that precluded startup and shutdown periods from being considered “representative” for purposes of performance testing. The proposed performance testing provisions in 40 CFR 63.3164 will also not allow performance testing during startup or shutdown. As in 40 CFR 63.7(e)(1), performance tests conducted under this subpart should not be conducted during malfunctions because conditions during malfunctions are often not representative of normal operating conditions. Section 63.7(e) requires that the owner or operator maintain records of the process information necessary to document operating conditions during the test and include in such records an explanation to support that such conditions represent normal operation. The EPA is proposing to add language to 40 CFR 63.3164 clarifying that the owner or operator must make such records available to the Administrator upon request.

*Monitoring.* We are proposing to revise the General Provisions table to subpart IIII (Table 2) entry for 40 CFR 63.8(c)(1) by changing the “yes” in column 3 to a “no.” The cross-references to the general duty and SSM plan requirements in 40 CFR 63.8(c)(1) are not necessary in light of other requirements of 40 CFR 63.8 that require good air pollution control practices (40 CFR 63.8(c)(1)) and that set out the requirements of a quality control program for monitoring equipment (40 CFR 63.8(d)). Further, we have determined that 40 CFR 63.8(c)(1)(ii) is redundant to the current monitoring requirement in 40 CFR 63.3168(a)(4) (*i.e.*, “have available necessary parts for routine repairs of the monitoring equipment,” except 40 CFR 63.8(c)(1)(ii) specifies “have readily available.” We are proposing to revise 40 CFR 63.3168(a)(4) to specify “readily available.”

*40 CFR 63.3512 Recordkeeping.* We are proposing to revise the General Provisions table to subpart IIII (Table 2) entry for 40 CFR 63.10(b)(2)(i) by changing the “yes” in column 3 to a “no.” Section 63.10(b)(2)(i) describes the recordkeeping requirements during startup and shutdown. These recording provisions are no longer necessary because the EPA is proposing that recordkeeping and reporting applicable to normal operations will apply to startup and shutdown. In the absence of special provisions applicable to startup and shutdown, such as a startup and shutdown plan, there is no reason to retain additional recordkeeping for startup and shutdown periods.

We are proposing to revise the General Provisions table to subpart IIII (Table 2) entry for 40 CFR 63.10(b)(2)(ii) by changing the “yes” in column 3 to a “no.” Section 63.10(b)(2)(ii) describes the recordkeeping requirements during a malfunction, requiring a record of “the occurrence and duration of each malfunction.” A similar record is already required in 40 CFR 63.3130(g), which requires a record of “the date, time, and duration of each deviation,” which

the EPA is retaining. The regulatory text in 40 CFR 63.3130(g) differs from the General Provisions in that the General Provisions requires the creation and retention of a record of the occurrence and duration of each malfunction of process, air pollution control, and monitoring equipment; whereas 40 CFR 63.3130(g) applies to any failure to meet an applicable standard and is requiring that the source record the date, time, and duration of the failure rather than the “occurrence.” For this reason, the EPA is proposing to add to 40 CFR 63.3130(g) a requirement that sources also keep records that include a list of the affected source or equipment and actions taken to minimize emissions, an estimate of the quantity of each regulated pollutant emitted over the emission limit for which the source failed to meet the standard, and a description of the method used to estimate the emissions. Examples of such methods would include product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters (*e.g.*, coating HAP content and application rates and control device efficiencies). The EPA is proposing to require that sources keep records of this information to ensure that there is adequate information to allow the EPA to determine the severity of any failure to meet a standard, and to provide data that may document how the source met the general duty to minimize emissions when the source has failed to meet an applicable standard.

We are proposing to revise the General Provisions table to subpart IIII (Table 2) entry for 40 CFR 63.10(b)(2)(iv)-(v) by changing the “yes” in column 3 to a “no.” When applicable, the provision requires sources to record actions taken during SSM events when actions were inconsistent with their SSM plan. The requirement in 40 CFR 63.10(b)(2)(iv) is no longer appropriate because SSM plans will no longer be required. The requirement previously applicable under 40 CFR 63.10(b)(2)(iv)(B) to record actions to minimize emissions and record

corrective actions is now applicable by reference to 40 CFR 63.3130(g)(4). When applicable, the provision in 40 CFR 63.10(b)(2)(v) requires sources to record actions taken during SSM events to show that actions taken were consistent with their SSM plan. The requirement is no longer appropriate because SSM plans will no longer be required.

We are proposing to revise the General Provisions table to subpart IIII (Table 2) entry for 40 CFR 63.10(b)(2)(vi) by changing the “yes” in column 3 to a “no.” The provision requires sources to maintain records during continuous monitoring system (CMS) malfunctions. Section 63.3130(g) covers records of periods of deviation from the standard, including instances where a CMS is inoperative or out-of-control. Additional recordkeeping requirements for continuous parameter monitoring systems (CPMS) are also specified in 40 CFR 63.3168.

We are proposing to revise the General Provisions table to subpart IIII (Table 2) entry for 40 CFR 63.10(c)(15) by changing the “yes” in column 3 to a “no.” When applicable, the provision allows an owner or operator to use the affected source's SSM plan or records kept to satisfy the recordkeeping requirements of the SSM plan, specified in 40 CFR 63.6(e), to also satisfy the requirements of 40 CFR 63.10(c)(10) through (12). The EPA is proposing to eliminate this requirement because SSM plans would no longer be required, and, therefore, 40 CFR 63.10(c)(15) no longer serves any useful purpose for affected units.

We are proposing to remove the requirement in 40 CFR 63.3130(g) that deviation records specify whether deviations from a standard occurred during a period of SSM. This revision is being proposed due to the proposed removal of the SSM exemption and because, as discussed above in this section, we are proposing that deviation records must specify the cause of each deviation, which could include a malfunction period as a cause. We are also proposing to remove

the requirement to report the SSM records in 40 CFR 63.6(e)(3)(iii) through (v) by deleting 40 CFR 63.3130(h).

*40 CFR 63.3120 Reporting.* We are proposing to revise the General Provisions table to subpart IIII (Table 2) entry for 40 CFR 63.10(d)(5) by changing the “yes” in column 3 to a “no.” Section 63.10(d)(5) describes the reporting requirements for startups, shutdowns, and malfunctions. To replace the General Provisions reporting requirement, the EPA is proposing to add reporting requirements to 40 CFR 63.3120(a)(5) through (a)(9). The replacement language differs from the General Provisions requirement in that it eliminates periodic SSM reports as a stand-alone report. We are proposing language that requires sources that fail to meet an applicable standard at any time to report the information concerning such events in the semi-annual compliance report already required under this rule. Subpart IIII of 40 CFR part 63 currently requires reporting of the date, time period, and cause of each deviation. We are clarifying in the rule that, if the cause of a deviation from the standard is unknown, this should be specified in the report. We are also proposing to change “date and time period” to “date, time, and duration” (*see* proposed revisions to 40 CFR 63.3130(a)(6)(vii), (viii), and (xiii); 40 CFR 63.3130(a)(7)(i); 40 CFR 63.3130(a)(8)(v), (vi), and (vii); and 40 CFR 63.3130(a)(i)) to use terminology consistent with the recordkeeping section. Further, we are proposing that the report must also contain the number of deviations from the standard, and a list of the affected source or equipment. For deviation reports addressing deviations from an applicable emission limit in 40 CFR 63.3090, 63.3091, or 63.3092, or an operating limit in Table 1 to 40 CFR part 63, subpart IIII, we are proposing that the report also include an estimate of the quantity of each regulated pollutant emitted over any emission limit for which the source failed to meet the standard, and a description of the method used to estimate the emissions. For deviation reports addressing



deviations from work practice standards (40 CFR 63.3120(a)(6)(xiii)), we are retaining the current requirement (including reporting actions taken to correct the deviation), except that we are revising the rule language to reference the new general duty requirement in 40 CFR 63.3100(d), we are clarifying that the description of the deviation must include a list of the affected sources or equipment and the cause of the deviation, we are clarifying that “time period” includes the “time and duration,” and we are requiring that the report include the number of deviations from the work practice standards in the reporting period.

Regarding the proposed new requirement discussed above to estimate the quantity of each regulated pollutant emitted over any emission limit for which the source failed to meet the standard, and a description of the method used to estimate the emissions, examples of such methods would include product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters (*e.g.*, coating HAP content and application rates and control device efficiencies). The EPA is proposing this requirement to ensure that there is adequate information to determine compliance, to allow the EPA to determine the severity of the failure to meet an applicable standard, and to provide data that may document how the source met the general duty to minimize emissions during a failure to meet an applicable standard.

We will no longer require owners or operators to determine whether actions taken to correct a malfunction are consistent with an SSM plan, because plans would no longer be required. The proposed amendments, therefore, eliminate 40 CFR 63.3120(c) that requires reporting of whether the source deviated from its SSM plan, including required actions to communicate with the Administrator, and the cross-reference to 40 CFR 63.10(d)(5)(ii) that contains the description of the previously required SSM report format and submittal schedule

from this section. These specifications are no longer necessary because the events will be reported in otherwise required reports with similar format and submittal requirements.

Section 63.10(d)(5)(ii) describes an immediate report for startups, shutdowns, and malfunctions when a source failed to meet an applicable standard but did not follow the SSM plan. We will no longer require owners and operators to report when actions taken during a startup, shutdown, or malfunction were not consistent with an SSM plan, because plans would no longer be required.

We are proposing to remove the requirements in 40 CFR 63.3120(a)(6)(viii) that deviation reports must specify whether deviation from an operating limit occurred during a period of SSM. We are also proposing to remove the requirements in 40 CFR 63.3120(a)(6)(x) to break down the total duration of deviations into the startup and shutdown categories. As discussed above in this section, we are proposing to require reporting of the cause of each deviation. Further, the startup and shutdown categories no longer apply because these periods are proposed to be considered normal operation, as discussed in section IV.A.4.b.1 of this preamble.

*c. Technical Amendments to the ALDT NESHAP*

We propose to amend 40 CFR 63.3166(b) to add the option of conducting EPA Method 18 of appendix A-6 to 40 CFR part 60, “Measurement of Gaseous Organic Compound Emissions by Gas Chromatography,” to measure and then subtract methane emissions from measured total gaseous organic mass emissions as carbon. Facilities using add-on controls as a compliance option can use either EPA Method 25 or EPA Method 25A to measure control device destruction efficiency. Unlike EPA Method 25, EPA Method 25A does not exclude methane from the measurement of organic emissions. Because exhaust streams from coating operations may contain methane from natural gas combustion, we are proposing to allow facilities the option to

measure methane using EPA Method 18 and to subtract the methane from the emissions as part of their compliance calculations.

We propose to revise the format of references to test methods in 40 CFR part 60. The current reference in 40 CFR 63.3166(a) and (b) to EPA Methods 1, 1A, 2, 2A, 2C, 2D, 2F, 2G, 3, 3A, 3B, 4, 25, and 25A specify that each method is in “appendix A” of part 60. Appendix A of 40 CFR part 60 has been divided into appendices A-1 through A-8. We propose to revise each reference to appendix A to indicate which of the eight sections of appendix A applies to the method.

We propose to amend 40 CFR 63.3151(a)(1)(i) and (a)(4), and 40 CFR 63.3171(e)(3), which describe how to determine the mass fraction of organic HAP in each material used, to remove references to Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4). The reference to OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) is intended to specify which compounds must be included in calculating total organic HAP content of a coating material if they are present at 0.1-percent or greater by mass. We are proposing to remove this reference because 29 CFR 1910.1200(d)(4) has been amended and no longer readily defines which compounds are carcinogens. We are proposing to replace these references to OSHA-defined carcinogens and 29 CFR 1910.1200(d)(4) with a list (in proposed new Table 5 to 40 CFR part 63, subpart IIII) of those organic HAP that must be included in calculating total organic HAP content of a coating material if they are present at 0.1-percent or greater by mass.

We propose to include organic HAP in proposed Table 5 to 40 CFR part 63, subpart IIII if they were categorized in the EPA’s *Prioritized Chronic Dose-Response Values for Screening Risk Assessments* (dated May 9, 2014), as a “human carcinogen,” “probable human carcinogen,”

or “possible human carcinogen” according to *The Risk Assessment Guidelines of 1986* (EPA/600/8-87/045, August 1987),<sup>30</sup> or as “carcinogenic to humans,” “likely to be carcinogenic to humans,” or with “suggestive evidence of carcinogenic potential” according to the *Guidelines for Carcinogen Risk Assessment* (EPA/630/P-03/001F, March 2005).

We propose to revise the monitoring provisions for thermal and catalytic oxidizers to clarify that a thermocouple is part of the gas temperature monitoring device referred to in 40 CFR 63.3168(c)(3).

We propose to add a new paragraph 40 CFR 63.3130(p) and to revise 40 CFR 63.3131(a) to allow that any records required to be maintained by 40 CFR part 63, subpart IIII this part that are submitted electronically via the EPA’s CEDRI may be maintained in electronic format. We also propose to add clarification that this ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

*d. Ongoing Emissions Compliance Demonstrations Requirement*

As part of an ongoing effort to improve compliance with various federal air emission regulations, the EPA reviewed the compliance demonstration requirements in the ALDT NESHAP. Currently, if a source owner or operator chooses to comply with the standards using add-on controls, the results of an initial performance test are used to determine compliance; however, the rule does not require on-going periodic performance testing for these emission capture systems and add-on controls. We are proposing periodic testing of add-on control devices, in addition to the one-time initial emissions and capture efficiency testing and ongoing parametric monitoring to ensure ongoing compliance with the standards.

---

<sup>30</sup> See <https://www.epa.gov/fera/dose-response-assessment-assessing-health-risks-associated-exposure-hazardous-air-pollutants>.

Although ongoing monitoring of operating parameters is required by the NESHAP, as the control device ages over time, the destruction efficiency of the control device can be compromised due to various factors. The EPA published several documents that identify potential control device operational problems that could decrease control device efficiency.<sup>31</sup> These factors are discussed in more detail in the memorandum titled *Proposed Periodic Testing Requirement* dated February 1, 2019, included in the ALDT Docket.

The Institute of Clean Air Companies (ICAC), an industry trade group currently representing 50 emission control device equipment manufacturers, corroborated the fact that control equipment degrades over time in their comments on proposed revisions to the NESHAP General Provisions (72 FR 69, January 3, 2007). ICAC stated that ongoing maintenance and checks of control devices are necessary in order to ensure emissions control technology remains effective.<sup>32</sup> ICAC identified both thermal and catalytic oxidizers as effective add-on control devices for VOC reduction and destruction. Thermal oxidizers, in which “...organic compounds are converted into carbon dioxide and water...” allow “...for the destruction of VOCs and HAP up to levels greater than 99-percent...” once “...[t]he oxidation reaction...” begins, typically “...in the 1450 degrees Fahrenheit range.” That temperature may need to be elevated, depending on the organic compound to be destroyed. Along with that destruction, “...extreme heat, the corrosive nature of chemical-laden air, exposure to weather, and the wear and tear of non-stop use...” affect thermal oxidizers such that “...left unchecked, the corrosive nature of the gases

---

<sup>31</sup> See *Control Techniques for Volatile Organic Compound Emissions from Stationary Sources*, EPA/453/R-92-018, December 1992, *Control Technologies for Emissions from Stationary Sources*, EPA/625/6-91/014, June 1991, and *Survey of Control for Low Concentration Organic Vapor Gas Streams*, EPA-456/R-95-003, May 1995. These documents can be found in the Automobiles and Light-Duty Trucks, Miscellaneous Metal Parts, and Plastic Parts and Products Dockets for this action.

<sup>32</sup> See Docket Item No. EPA-HQ-OAR-2004-0094-0173, available at <https://www.regulations.gov>. A copy of the ICAC’s comments on the proposed revisions to the General Provisions is also included in the Automobiles and Light-Duty Trucks, Miscellaneous Metal Parts, and Plastic Parts and Products Dockets for this action.

treated will create equipment downtime, loss of operational efficiency, and eventually failure of the thermal oxidizer.” While catalytic oxidizers operate at lower operating temperatures – typically 440 to 750 degrees Fahrenheit – than thermal oxidizers, catalytic oxidizers also provide VOC reduction and destruction. In general, the catalyst “...needs to be checked periodically to verify the activity of the catalyst...” because that “...activity or overall ability of the catalyst to convert target emissions to other by-products will naturally diminish over time.” ICAC also mentions chemical poisoning (deactivation of the catalyst by certain compounds) or masking of the catalyst bed, which may occur due to changes in manufacturing processes, as means of catalyst degradation. Finally, ICAC identifies electrical and mechanical component maintenance as important, for if such components are not operating properly, “...the combustion temperature in the ... oxidizer could drop below the required levels and hazardous air pollutant (HAP) destruction may not be achieved...” ICAC closes by noting “...it costs more money to operate an oxidizer at peak performance, and if not maintained, performance will deteriorate yielding less destruction of HAP.”

State websites also provide on-line CAA violations and enforcement actions which include performance issues associated with control devices. A recent search resulted in identification of sources in Ohio and Massachusetts that did not achieve compliance even though they maintained the thermal oxidizer operating temperatures established during previous performance tests, which further corroborates with the ICAC comments and conclusions regarding control device degradation.

Based on the need for vigilance in maintaining equipment to stem degradation, we are proposing periodic testing of add-on control devices once every 5 years, in addition to the one-

time initial emissions and capture efficiency testing and ongoing temperature measurement to ensure ongoing compliance with the standards.

In this action, we are proposing to require periodic performance testing of add-on control devices on a regular frequency (*e.g.*, every 5 years) to ensure the equipment continues to operate properly for facilities using the emission rate with add-on controls compliance option. We estimate that 18 ALDT surface coating existing sources are already required to perform such testing every 5 years synchronized with 40 CFR part 70 air operating permit renewals and for five facilities this would be a new requirement. This proposed periodic testing requirement includes an exception to the general requirement for periodic testing for facilities using the catalytic oxidizer control option at 40 CFR 63.3167(b) and following the catalyst maintenance procedures in 40 CFR 63.3167(b)(6). This exception is due to the catalyst maintenance procedures that already require annual testing of the catalyst and other maintenance procedures that provide ongoing demonstrations that the control system is operating properly and may, thus, be considered comparable to conducting a performance test.

The proposed periodic performance testing requirement allows an exception from periodic testing for facilities using instruments to continuously measure emissions. Such continuous emissions monitoring systems (CEMS) would show actual emissions. The use of CEMS to demonstrate compliance would obviate the need for periodic oxidizer testing. Moreover, installation and operation of a CEMS with a timesharing component, such that values from more than one oxidizer exhaust could be tabulated in a recurring frequency, could prove less expensive (estimated to have an annual cost below \$15,000) than ongoing oxidizer testing.

This proposed requirement does not require periodic testing or CEMS monitoring of facilities using the compliant materials option or the emission-rate without add-on controls

compliance option because these two compliance options do not use any add-on controls or control efficiency measurements in the compliance calculations.

The proposed periodic performance testing requirement requires facilities complying with the standards using emission capture systems and add-on controls and which are not already on a 5-year testing schedule conduct the first of the periodic performance tests within 3 years of the effective date of the revised standards. Afterward, they would conduct periodic testing before they renew their operating permits, but no longer than 5 years following the previous performance test. Additionally, facilities that have already tested as a condition of their permit within the last 2 years before the effective date would be permitted to maintain their current 5-year schedule and not be required to move up the date of the next test to the 3-year date specified above. This proposed requirement would require periodic air emissions testing to measure organic HAP destruction or removal efficiency at the inlet and outlet of the add-on control device, or measurement of the control device outlet concentration of organic HAP. The emissions would be measured as total gaseous organic mass emissions as carbon using either EPA Method 25 or 25A of appendix A-7 to 40 CFR part 60, which are the methods currently required for the initial compliance demonstration.

We estimate that the cost associated with this proposed requirement, which includes a control device emissions destruction or removal efficiency test using EPA Method 25 or 25A, would be approximately \$19,000 per control device. The cost estimate is included in the memorandum titled *Estimated Costs/Impacts 40 CFR Part 63 Subparts IIII, MMMM and PPPP Monitoring Review Revisions*, in the ALDT Docket. We have estimated that five facilities subject to the ALDT NESHAP and using the add-on control option for compliance are not currently required to conduct periodic testing as a condition of their permit renewal. Periodic



performance tests ensure that any control systems used to comply with the NESHAP in the future would be properly maintained over time, thereby reducing the potential for acute emissions episodes and non-compliance.

*e. IBR of Alternative Test Methods Under 1 CFR part 51*

The EPA is proposing new and updated test methods for the ALDT NESHAP that include IBR. In accordance with requirements of 1 CFR 51.5, the EPA is proposing to incorporate by reference the following voluntary consensus standards (VCS) described in the amendments to 40 CFR 63.14:

- ASTM Method D1475-13, Standard Test Method for Density of Liquid Coatings, Inks, and Related Products, proposed to be IBR approved for 40 CFR 63.3151(b);
- ASTM Method D2369-10 (2015), Test Method for Volatile Content of Coatings, proposed to be IBR approved for 40 CFR 63.3151(a)(2);
- ASTM Method D2697-03 (2014), Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings, proposed to be IBR approved for 40 CFR 63.3161(f)(1);
- ASTM Method D5965-02 (2013), Standard Test Methods for Specific Gravity of Coating Powders, proposed to be ICR approved for 40 CFR 63.3151(b); and
- ASTM Method D6093-97 (2016), Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using Helium Gas Pycnometer, proposed to be IBR approved for 40 CFR 63.3161(f)(1).

Older versions of ASTM methods D2697, D5965, and D6093 were incorporated by reference when the ALDT NESHAP was originally promulgated (69 FR 22602, April 26, 2004).

We are proposing to replace the older versions of these methods and ASTM Method D1475 with updated versions, which requires IBR revisions. The updated version of the method replaces the older version in the same paragraph of the rule text. We are also proposing the addition of ASTM Method D2369 to the ALDT NESHAP for the first time by incorporating this method by reference in this rulemaking. Refer to section VIII.J of this preamble for further discussion of these VCS.

5. What compliance dates are we proposing?

The EPA is proposing that affected sources must comply with all of the amendments, with the exception of the proposed electronic format for submitting semiannual compliance reports, no later than 181 days after the effective date of the final rule. All affected facilities would have to continue to meet the current requirements of 40 CFR part 63, subpart IIII until the applicable compliance date of the amended rule. The final action is not expected to be a “major rule” as defined by 5 U.S.C. 804(2), so the effective date of the final rule will be the promulgation date as specified in CAA section 112(d)(10).

For existing sources, we are proposing one change that would impact ongoing compliance requirements for 40 CFR part 63, subpart IIII. As discussed elsewhere in this preamble, we are proposing to add a requirement that notifications, performance test results, and semiannual compliance reports be submitted electronically. We are proposing that the semiannual compliance report be submitted electronically using a new template, which is available for review and comment as part of this action. We are also proposing to change the requirements for SSM by removing the exemption from the requirements to meet the standard during SSM periods and by removing the requirement to develop and implement an SSM plan. Our experience with similar industries that are required to convert reporting mechanisms to

install necessary hardware and software, become familiar with the process of submitting performance test results electronically through the EPA's CEDRI, test these new electronic submission capabilities, and reliably employ electronic reporting shows that a time period of a minimum of 90 days, and, more typically, 180 days, is generally necessary to successfully accomplish these revisions. Our experience with similar industries further shows that this sort of regulated facility generally requires a time period of 180 days to read and understand the amended rule requirements; to evaluate their operations to ensure that they can meet the standards during periods of startup and shutdown as defined in the rule and make any necessary adjustments; and to update their operation, maintenance, and monitoring plan to reflect the revised requirements. The EPA recognizes the confusion that multiple different compliance dates for individual requirements would create and the additional burden such an assortment of dates would impose. From our assessment of the time frame needed for compliance with the entirety of the revised requirements, the EPA considers a period of 180 days to be the most expeditious compliance period practicable and, thus, is proposing that existing affected sources be in compliance with all of this regulation's revised requirements within 181 days of the regulation's effective date.

We solicit comment on these proposed compliance periods, and we specifically request submission of information from sources in this source category regarding specific actions that would need to be undertaken to comply with the proposed amended requirements and the time needed to make the adjustments for compliance with any of the revised requirements. We note that information provided may result in changes to the proposed compliance dates.

*B. What are the analytical results and proposed decisions for the MMPP source category?*

1. What are the results of the risk assessment and analyses?

As described above in section III of this preamble, for the MMPP source category, we conducted a risk assessment for all HAP emitted. We present results of the risk assessment briefly below and in more detail in the *Miscellaneous Metal Parts and Products Risk Assessment Report* in the MMPP Docket (Docket ID No. EPA-HQ-OAR-2019-0312).

*a. Chronic Inhalation Risk Assessment Results*

Table 4 below provides a summary of the results of the inhalation risk assessment for the source category.

**Table 4. Surface Coating of Miscellaneous Metal Parts and Products Source Category Inhalation Risk Assessment Results**

Risk Assessment	Maximum Individual Cancer Risk (in 1 million)		Estimated Population at Increased Risk of Cancer $\geq$ 1-in-1 Million		Estimated Annual Cancer Incidence (cases per year)		Maximum Chronic Noncancer TOSHI <sup>1</sup>		Maximum Screening Acute Noncancer HQ <sup>2</sup>
	Based on Actual Emissions	Based on Allowable Emissions	Based on Actual Emissions	Based on Allowable Emissions	Based on Actual Emissions	Based on Allowable Emissions	Based on Actual Emissions	Based on Allowable Emissions	Based on Actual Emissions
Source Category	20	30	18,000	24,000	0.008	0.01	0.8	1	HQ <sub>REL</sub> = 4
Whole Facility	100	-	370,000	-	0.04	-	1	-	-

<sup>1</sup> The TOSHI is the sum of the chronic noncancer HQ for substances that affect the same target organ or organ system.

<sup>2</sup> The maximum estimated acute exposure concentration was divided by available short-term threshold values to develop HQ values.

The results of the inhalation risk modeling using actual emissions data, as shown in Table 4 above, indicate that the maximum individual cancer risk based on actual emissions (lifetime) could be up to 20-in-1 million (driven by naphthalene and ethyl benzene from coating operations), the maximum chronic noncancer TOSHI value based on actual emissions could be up to 0.8 (driven by antimony from coating operations), and the maximum screening acute noncancer HQ value (off-facility site) could be up to 4 (driven by glycol ethers). The total

estimated annual cancer incidence (national) from these facilities based on actual emission levels is 0.008 excess cancer cases per year or 1 case in every 125 years.

*b. Screening Level Acute Risk Assessment Results*

Table 4 of this preamble also shows the acute risk results for the MMPP source category. The screening analysis for acute impacts was based on an industry-specific multiplier of 1.2, to estimate the peak emission rates from the average emission rates. For more detailed acute risk results refer to the *Miscellaneous Metal Parts and Products Risk Assessment Report*, in the MMPP Docket.

*c. Multipathway Risk Screening Results*

The emissions data for the MMPP source category indicate that three PB-HAP are emitted by sources within this source category: arsenic, cadmium, and lead. Of the 368 facilities in the source category, two facilities reported emissions of carcinogenic PB-HAP (arsenic) and two facilities reported emissions of non-carcinogenic PB-HAP (cadmium). The PB-HAP emissions from these facilities did not exceed the Tier 1 multipathway screening value of 1 for cancer or noncancer.

In evaluating the potential for multipathway effects from emissions of lead, we compared modeled annual lead concentrations to the NAAQS for lead ( $0.15 \mu\text{g}/\text{m}^3$ , arithmetic mean concentration over a 3-month period). The highest annual average lead concentration of  $0.059 \mu\text{g}/\text{m}^3$  is below the NAAQS level for lead, indicating a low potential for multipathway impacts of concern due to lead even assuming a shorter averaging period is analyzed.

*d. Environmental Risk Screening Results*

The emissions data for the MMPP source category indicate that four environmental HAP are emitted by sources within this source category: arsenic, cadmium, lead and HCl. Therefore,

we conducted a screening-level evaluation of the potential adverse environmental effects associated with emissions of arsenic, cadmium, lead, and HCl for the MMPP source category. In the Tier 1 screening analysis for PB-HAP (other than lead which was evaluated differently), arsenic and cadmium had no exceedances of any of the ecological benchmarks evaluated.

In evaluating the potential for adverse environmental effects from emissions of lead, we compared modeled annual lead concentrations to the secondary NAAQS for lead ( $0.15 \mu\text{g}/\text{m}^3$ , arithmetic mean concentration over a 3-month period). The highest annual average lead concentration of  $0.059 \mu\text{g}/\text{m}^3$  is below the secondary NAAQS for lead, indicating a low potential for adverse environmental impacts due to lead even assuming a shorter averaging period is analyzed. For HCl, each individual concentration (*i.e.*, each off-site data point in the modeling domain) was below the ecological benchmarks for all facilities. Therefore, we do not expect an adverse environmental effect as a result of HAP emissions from this source category.

*e. Facility-Wide Risk Results*

One hundred and one facilities have a facility-wide cancer MIR greater than or equal to 1-in-1 million. The maximum facility-wide cancer MIR is 100-in-1 million, driven by nickel emissions from welding. The total estimated cancer incidence from the whole facility is 0.01 excess cancer cases per year, or one excess case in every 100 years. Approximately 370,000 people were estimated to have cancer risks above 1-in-1 million from exposure to HAP emitted from both MACT and non-MACT sources of the 368 facilities in this source category. The maximum facility-wide TOSHI for the source category is estimated to be 1, driven by emissions of cobalt from a gel coating operation.

*f. What demographic groups might benefit from this regulation?*

To examine the potential for any environmental justice issues that might be associated with the source category, we performed a demographic analysis, which is an assessment of risks to individual demographic groups of the populations living within 5 km and within 50 km of the facilities. In the analysis, we evaluated the distribution of HAP-related cancer and noncancer risks from the MMPP source category across different demographic groups within the populations living near facilities.

The results of the demographic analysis are summarized in Table 5 of this preamble. These results, for various demographic groups, are based on the estimated risks from actual emissions levels for the population living within 50 km of the facilities.

**Table 5. Surface Coating of Miscellaneous Metal Parts and Products Source Category Demographic Risk Analysis Results**

	<b>Nationwide</b>	<b>Population with Cancer Risk at or Above 1-in-1 Million Due to Surface Coating of Miscellaneous Metal Parts and Products</b>	<b>Population with Chronic Noncancer HI Above 1 Due to Surface Coating of Miscellaneous Metal Parts and Products</b>
Total Population	317,746,049	18,000	0
White and Minority by Percent			
White	62	75	0
Minority	38	25	0
Minority Detail by Percent			
African American	12	12	0
Native American	0.8	0.6	0
Hispanic or Latino	18	9	0
Other and Multiracial	7	3	0
Income by Percent			
Below the Poverty Level	14	20	0
Above the Poverty Level	86	80	0
Education by Percent			
Over 25 Without High a School Diploma	14	18	0
Over 25 With a High School Diploma	86	82	0
Linguistically Isolated by Percent			
Linguistically Isolated	6	3	0

The results of the MMPP source category demographic analysis indicate that emissions from the source category expose approximately 18,000 people to a cancer risk at or above 1-in-1

million and no one is exposed to a chronic noncancer HI greater than 1. The percentages of the at-risk population in the following specific demographic groups are higher than their respective nationwide percentages: “White,” “Below the Poverty Level,” and “Over 25 and without a high school diploma.”

The methodology and the results of the demographic analysis are presented in a technical report, *Risk and Technology Review – Analysis of Demographic Factors for Populations Living Near Surface Coating of Miscellaneous Metal Parts and Products Source Category*, May 2019 (hereafter referred to as the *Miscellaneous Metal Parts and Products Demographic Analysis Report*), available in the MMPP Docket.

2. What are our proposed decisions regarding risk acceptability, ample margin of safety, and adverse environmental effects?

*a. Risk Acceptability*

As noted in section III.A of this preamble, we weigh all health risk factors in our risk acceptability determination, including the cancer MIR, the number of persons in various cancer and noncancer risk ranges, cancer incidence, the maximum noncancer TOSHI, the maximum acute noncancer HQ, the extent of noncancer risks, the distribution of cancer and noncancer risks in the exposed population, and risk estimation uncertainties (54 FR 38044, September 14, 1989).

For the MMPP source category, the risk analysis indicates that the cancer risks to the individual most exposed could be up to 20-in-1 million due to actual emissions and up to 30-in-1 million due to allowable emissions. These risks are considerably less than 100-in-1 million, which is the presumptive upper limit of acceptable risk. The risk analysis also shows very low cancer incidence (0.008 cases per year for actual emissions and 0.01 cases per year for allowable emissions), and we did not identify potential for adverse chronic noncancer health effects.



The acute screening analysis results in a maximum acute noncancer HQ of 4 at one facility based on use of the acute REL for ethylene glycol monomethyl ether as a surrogate for unspecified glycol ethers. Since there is not a specified acute dose-response value for unspecified glycol ethers, we applied the most protective dose-response value from the other glycol ether compounds, the acute REL for ethylene glycol monomethyl ether, to estimate risk. Given that ethylene glycol monomethyl ether is more toxic than other glycol ethers, the use of this surrogate is a health-protective choice in the EPA's risk assessment.

For acute screening analyses, to better characterize the potential health risks associated with estimated worst-case acute exposures to HAP, we examine a wider range of available acute health metrics than we do for our chronic risk assessments. This is in acknowledgement that there are generally more data gaps and uncertainties in acute reference values than there are in chronic reference values. By definition, the acute REL represents a health-protective level of exposure, with effects not anticipated below those levels, even for repeated exposures; however, the level of exposure that would cause health effects is not specifically known. As the exposure concentration increases above the acute REL, the potential for effects increases. Therefore, when an REL is exceeded and an AEGL-1 or ERPG-1 level is available (*i.e.*, levels at which mild, reversible effects are anticipated in the general population for a single exposure), we typically use them as an additional comparative measure, as they provide an upper bound for exposure levels above which exposed individuals could experience effects. However, for glycol ethers, there are no AEGL or ERPG values.

Additional uncertainties in the acute exposure assessment that the EPA conducts as part of the risk review under section 112 of the CAA include several factors. The accuracy of an acute inhalation exposure assessment depends on the simultaneous occurrence of independent

factors that may vary greatly, such as hourly emission rates, meteorology, and the presence of a person. In the acute screening assessment that we conduct under the RTR program, we include the conservative (health-protective) assumptions that peak emissions from each emission point in the source category and reasonable worst-case air dispersion conditions (*i.e.*, 99<sup>th</sup> percentile) co-occur. We then include the additional assumption that a person is located at this point at the same time. Together, these assumptions represent a reasonable exposure. In most cases, it is unlikely that a person would be located at the point of maximum exposure during the time when peak emissions and reasonable worst-case air dispersion conditions occur simultaneously. Thus, as discussed in the document titled *Residual Risk Assessment for the Surface Coating of Miscellaneous Metal Parts and Products Source Category in Support of the Risk and Technology Review 2019 Proposed Rule*, in the docket for this action, by assuming the co-occurrence of independent factors for the acute screening assessment, the results are intentionally biased high and are, thus, health-protective. We conclude that adverse effects from acute exposure to emissions of glycol ethers from this source category are not anticipated.

Considering all of the health risk information and factors discussed above, including the uncertainties discussed in section III.C.7 of this preamble, we propose that the risks from the MMPP source category are acceptable.

*b. Ample Margin of Safety Analysis*

Although we are proposing that the risks from the MMPP source category are acceptable, risk estimates for approximately 18,000 individuals in the exposed population are above 1-in-1 million at the actual emissions level and 24,000 individuals in the exposed population are above 1-in-1 million at the allowable emissions level. Consequently, we further considered whether the MACT standards for the MMPP source category provide an ample margin of safety to protect

public health. In this ample margin of safety analysis, we investigated available emissions control options that might reduce the risk from the source category. We considered this information along with all of the health risks and other health information considered in our determination of risk acceptability.

As described in section III.B of this preamble, our technology review focused on identifying developments in practices, processes, and control technologies for the MMPP source category, and we reviewed various information sources regarding emission sources that are currently regulated by the MMPP NESHAP.

Based on our review (described in section IV.B.3 of this preamble), we identified and evaluated the use of add-on control technologies for the rubber-to-metal bonding and high-performance subcategories.

For the rubber-to-metal bonding subcategory, we evaluated the option of lowering the existing source limit to an emission limit of 10 lb HAP/gallon (gal) solids. Two facilities may need to install thermal oxidizers, if alternative low-HAP coatings or other compliance options are not available. The thermal oxidizers would require a total capital investment of \$2 million (combined) for the two facilities, and total annual costs of \$410,000 (combined). Estimated emission reductions from the two facilities would be 43 tpy of HAP, and the estimated cost effectiveness would \$9,500 per ton of HAP reduced.

For the high-performance subcategory, we evaluated lowering both the existing and new source limits to the general use subcategory existing source limit of 2.6 lb HAP/gal solids. One facility in the high-performance coating subcategory may need to install a thermal oxidizer if alternative low-HAP coatings or other compliance options are not available. The cost of installing a thermal oxidizer at this one facility would require a total capital investment of \$2.3

million, and total annual costs of \$620,000. The estimated emission reduction at this one facility would be 53 tpy of HAP, and the estimated cost effectiveness would be \$11,700 per ton of HAP reduced.

We have determined that the added costs and cost effectiveness for these two coating subcategories (\$9,500 per ton of HAP reduced for the rubber-to-metal coating subcategory and \$11,700 per ton for the high performance subcategory) are not justified. We think these costs are unreasonable particularly because the risks are already low, and the risks would not be reduced in a meaningful manner by the control of these subcategories. We are proposing that additional emissions controls for this source category are not necessary to provide an ample margin of safety.

*c. Environmental Effects*

The emissions data for the MMPP source category indicate that four environmental HAP are emitted by sources within this source category: arsenic, cadmium, lead, and HCl. In the Tier 1 screening analysis for PB-HAP (other than lead which was evaluated differently), arsenic and cadmium had no exceedances of any of the ecological benchmarks evaluated. For lead, we did not estimate any exceedances of the secondary lead NAAQS. The screening-level evaluation of the potential for adverse environmental effects associated with emissions of HCl from the MMPP source category indicated that each individual concentration (*i.e.*, each off-site data point in the modeling domain) was below the ecological benchmarks for all facilities. In addition, we are unaware of any adverse environmental effects caused by HAP emitted by this source category.

Therefore, we do not expect there to be an adverse environmental effect as a result of HAP emissions from this source category and we are proposing that it is not necessary to set a

more stringent standard to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect.

3. What are the results and proposed decisions based on our technology review?

As described in section III.B of this preamble, our technology review focused on identifying developments in practices, processes, and control technologies for the MMPP source category. The EPA reviewed various information sources regarding emission sources that are currently regulated by the MMPP NESHAP to support the technology review. The information sources include the following: the RBLC; publicly available state air permit databases and facility operating permits compliance reports; regulatory actions, including technology reviews promulgated for other surface coating NESHAP subsequent to the promulgation of the MMPP NESHAP; state regulations; site visits; and industry information.

Based on our review, we identified and evaluated the use of add-on control technologies for two coating subcategories that had not been previously considered during development of the MMPP NESHAP. This analysis is described in detail in the following paragraphs. Aside from this, we did not identify any new or improved process equipment, work practices, or procedures that would further reduce emissions. For a detailed discussion of the EPA's findings, refer to the *Miscellaneous Metal Parts and Products Technology Review Memo*, in the MMPP Docket.

During the development of the 2004 MMPP NESHAP, numerical emission limits were determined for new and existing major sources within five coating subcategories for a total of 10 HAP emissions limits. The MACT emission limits were based on different data sources, depending on the coating subcategory. In the general use coating subcategory and the high-performance coating subcategory, the MACT emission limits were based on the most stringent state VOC limits and HAP-to-VOC ratios to convert the VOC limits to HAP limits. For the

general use coating subcategory, the HAP-to-VOC ratio was developed from industry survey data. For the high-performance coating subcategory, the HAP-to-VOC ratio was developed from industry information. For rubber-to-metal coating, the MACT emission limits were based on survey data on the HAP content of the coatings. For magnet wire coating, the MACT emission limits were based on survey data and also accounted for the fact that magnet wire coating uses an oven to cure the coatings that is fueled by coating solvent vapors, reducing overall emissions. For the EPFP coating subcategory, the MACT emission limits were based on data received in public comments on the proposed NESHAP.

With the exception of the emission limits for the magnet wire coating subcategory, none of the emission limits for new or existing sources in the other subcategories accounted for the use of add-on controls, and the documentation of the MACT analysis did not identify facilities that were using add-on controls.

The EPA investigated the use of emissions capture systems and add-on controls but found that the costs would be prohibitive for the incremental emissions reductions achieved. The EPA estimated that it would be technically feasible for capture systems and add-on controls could reduce emissions by at least 95 percent, but the cost for facilities in this source category could be as much as \$1 million. The EPA concluded that without information on the benefits that would be achieved by further reducing emissions beyond the floor, the additional emissions reductions did not warrant the cost of add-on controls.<sup>33</sup>

A search of the RBLC database for the MMPP surface coating category provided 42 entries representing 23 facilities with permit dates of 2000 or later. Entries in the RBLC documented facilities subject to VOC content and HAP content limits. Emission control

---

<sup>33</sup> 67 FR 52792-52793, August 13, 2002.

strategies identified in the RBLC included using electrodeposition coatings, using high efficiency and robotic spray guns, and using add-on controls, including catalytic oxidizers, RTOs, and adsorbers. The RBLC review did not identify any facilities subject to HAP limits more stringent than those in 40 CFR part 63, subpart Mmmm.

We reviewed other surface coating NESHAP promulgated subsequent to the MMPP NESHAP to determine whether any requirements exceed the MMPP MACT level of control or include technologies that were not considered during the development of the original MMPP NESHAP. These NESHAP include Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources (40 CFR part 63, subpart HHHHHH), and Nine Metal Fabrication and Finishing Area Source Categories (40 CFR part 63, subpart XXXXXX). We also reviewed the results of the technology reviews for other surface coating NESHAP promulgated after the MMPP NESHAP. These technology reviews include the NESHAP for Printing and Publishing (40 CFR part 63, subpart KK), Shipbuilding and Ship Repair (40 CFR part 63, subpart II), Wood Furniture Manufacturing (40 CFR part 63, subpart JJ), and Aerospace Manufacturing and Rework Facilities (40 CFR part 63, subpart GG). The review of these more recently promulgated NESHAP and the technology reviews of other NESHAP did not identify any control technologies that were not already considered during the development of 40 CFR part 63, subpart Mmmm, with the exception of some applications of add-on controls, which are discussed in more detail below in this section.

Using the EPA's NEI and the ECHO databases, we identified 368 major source facilities that are currently subject to the MMPP NESHAP. The EPA also collected operating permits for over 100 of these facilities. Based on these permits, we identified a number of facilities that were in the rubber-to-metal coating and high-performance coating subcategories that were using add-

on controls to reduce air emissions. We identified six facilities in the high-performance coating subcategory and four of these facilities use a thermal oxidizer to reduce emissions. We identified 15 facilities in the rubber to metal coating subcategory and nine of these use a thermal oxidizer to reduce emissions. Based on these findings, we identified the use of a thermal oxidizer as a potential development for these two subcategories because the MACT emission limits were based on only the HAP content of the coatings and not on the use of an add-on control, such as a thermal oxidizer.

We further evaluated the add-on controls as a technology development by collecting semi-annual compliance reports or inspection reports for all six facilities in the high-performance subcategory and the 15 facilities in the rubber to metal coating subcategory to confirm that the facilities were subject to these subcategory emission limits and to determine the actual emission rate these facilities were achieving. For several facilities, we determined that the facilities were using the add-on controls for complying with limits on VOC emissions, but were not accounting for the add-on controls in demonstrating compliance with the HAP limits in 40 CFR part 63, subpart MMMM.

The current existing source emission limit for the rubber-to-metal subcategory is 37.7 lb HAP/gal solids, and the new source limit is 6.8 lb HAP/gal solids. The EPA evaluated the option of lowering the existing source limit to an emission limit of 10 lb HAP/gal solids. We chose this level because several smaller facilities could meet this limit without having to install controls, based on their semi-annual compliance reports.

Eight of the 15 facilities in the rubber-to-metal subcategory have emission rates below 10 lb HAP/gal solids through use of a thermal oxidizer. One facility does not have a thermal oxidizer but can meet the 10 lb HAP/gal solids limit through the emissions averaging between



the general use and rubber-to-metal subcategories allowed in 40 CFR 63.3890(c)(2) of the current NESHAP. Four rubber-to-metal facilities do not have a thermal oxidizer but their current emission rate is less than 10 lb/gal solids.

For the remaining two facilities, installing thermal oxidizers, if alternative low-HAP coatings or other compliance options are not available, would require a total capital investment of \$2 million (combined) for the two facilities, and total annual costs of \$410,000 (combined). Estimated emission reductions from the two facilities would be 43 tpy of HAP, and the estimated cost effectiveness would be \$9,500 per ton of HAP reduced. The estimated emission reductions are based on the reported HAP emissions for these two facilities in the NEI and their semi-annual compliance reports and assumes a 95-percent emission reduction from thermal oxidation. These costs and emission reductions for the rubber-to-metal subcategory are documented in detail in the *Miscellaneous Metal Parts and Products Technology Review Memo*, in the MMPP Docket.

The current existing and new source emission limits for the high-performance subcategory are both 27.5 lb HAP/gal solids. The EPA evaluated the option of lowering both the existing and new source limits to the general use subcategory existing source limit of 2.6 lb HAP/gal solids. Five of the six facilities in the high-performance subcategory could comply with the general use subcategory limit of 2.6 lb HAP/gal solids for their high-performance coatings operations.

One facility in the high-performance coating subcategory may need to install a thermal oxidizer if alternative low-HAP coatings or other compliance options are not available. The cost of installing a thermal oxidizer at this one facility would require a total capital investment of \$2.3 million, and total annual costs of \$620,000. The estimated emission reduction this one facility would be 53 tpy of HAP, and the estimated cost effectiveness would be \$11,700 per ton of HAP

reduced. The estimated emission reduction is based on the reported HAP emissions for this facility's semi-annual compliance report and assumes a 95-percent emission reduction from thermal oxidation. These costs and emission reductions for the high performance subcategory are documented in detail in the *Miscellaneous Metal Parts and Products Technology Review Memo*, in the MMPP Docket.

However, the EPA has determined that the added costs and cost effectiveness for these two coating subcategories (\$9,500 per ton of HAP reduced for the rubber-to-metal coating subcategory and \$11,700 per ton for the high-performance subcategory) are not justified. Therefore, we are proposing no revisions to the MMPP NESHAP pursuant to CAA section 112(d)(6). For further discussion of the technology review results, refer to the *Miscellaneous Metal Parts and Products Technology Review Memo*, in the MMPP Docket.

#### 4. What other actions are we proposing for the Surface Coating of MMPP source category?

We are proposing to require electronic submittal of notifications (initial and compliance status), semiannual reports, and performance test reports for MMPP surface coating facilities. In addition, we are proposing revisions to the SSM provisions of the MACT rule in order to ensure that they are consistent with the Court decision in *Sierra Club v. EPA*, 551 F. 3d 1019 (D.C. Cir. 2008), which vacated two provisions that exempted sources from the requirement to comply with otherwise applicable CAA section 112(d) emission standards during periods of SSM. We are proposing to require periodic emissions testing of add-on control devices. We also are proposing to add optional EPA Method 18, to IBR an alternative test method, and to make various technical and editorial changes. Our analyses and proposed changes related to these issues are discussed in the sections below.

##### *a. Electronic Reporting Requirements*

The EPA is proposing that owners and operators of MMPP surface coating facilities submit electronic copies of initial notifications required in 40 CFR 63.9(b) and 63.3910(b), notifications of compliance status required in 40 CFR 63.9(h) and 63.3910(c), performance test reports required in 40 CFR 63.3920(b), and semiannual reports required in 40 CFR 63.3920(a) through the EPA's CDX, using the CEDRI. A description of the EPA's CDX and the EPA's proposed rationale and details on the addition of these electronic reporting requirements for the MMPP source category is the same as for the ALDT source category, as discussed in section IV.A.4.a of this preamble. No specific form is proposed at this time for the initial notifications required in 40 CFR 63.9(b) and notification of compliance status in 40 CFR 63.9(h). Until the EPA has completed electronic forms for these notifications, the notifications will be required to be submitted via CEDRI in PDF. After development of the final forms, we will notify sources about their availability via the CEDRI website and the CHIEF Listserv. For semiannual reports required in 40 CFR 63.3920(a), the proposed rule requires that owners or operators use the appropriate spreadsheet template to submit information to CEDRI. A draft version of the proposed template for this report is included in the docket for this rulemaking.<sup>34</sup> The EPA specifically requests comment on the content, layout, and overall design of the template.

Regarding submittal of performance test reports via the EPA's ERT, as discussed in section IV.A.4.a of this preamble for the ALDT NESHAP, the proposal to submit performance test data electronically to the EPA applies only if the EPA has developed an electronic reporting form for the test method as listed on the EPA's ERT website. For the MMPP NESHAP, all of the EPA test methods listed under 40 CFR part 63, subpart M MMMM, are currently supported by the

---

<sup>34</sup> See *Electronic Reporting Template for Surface Coating of Miscellaneous Metal Parts and Products Subpart M MMMM Semiannual Reports*, in docket ID NO. EPA-HQ-OAR-0312.

ERT, except for EPA Method 18 (an optional test method proposed in this action), which appears in the proposed text for 40 CFR 63.3966. As mentioned above in section IV.A.4.a of this preamble, the rule proposes that should an owner or operator choose to use EPA Method 18, then its results would be submitted in PDF using the attachment module of the ERT.

Also, as discussed in section IV.A.4.a of this preamble for the ALDT NESHAP, we are proposing to provide facilities with the ability to seek extensions for submitting electronic reports for circumstances beyond the control of the facility. In proposed 40 CFR 63.3920(g), we address the situation for facilities subject to the MMPP NESHAP where an extension may be warranted due to outages of the EPA's CDX or CEDRI, which may prevent access to the system and submittal of the required reports. In proposed 40 CFR 63.3920(h), we address the situation for facilities subject to the MMPP NESHAP where an extension may be warranted due to a force majeure event, which is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents compliance with the requirement to submit a report electronically as required by this rule. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazards beyond the control of the facility.

The electronic submittal of the reports addressed in this proposed rulemaking will increase the usefulness of the data contained in those reports, is in keeping with current trends in data availability and transparency, will further assist in the protection of public health and the environment, will improve compliance by facilitating the ability of regulated facilities to demonstrate compliance with requirements and by facilitating the ability of delegated state, local, tribal, and territorial air agencies and the EPA to assess and determine compliance, and will ultimately reduce burden on regulated facilities, delegated air agencies, and the EPA. Electronic

reporting also eliminates paper-based, manual processes, thereby saving time and resources, simplifying data entry, eliminating redundancies, minimizing data reporting errors, and providing data quickly and accurately to the affected facilities, air agencies, the EPA, and the public. Moreover, electronic reporting is consistent with the EPA's plan to implement Executive Order 13563 and is in keeping with the EPA's Agency-wide policy developed in response to the White House's Digital Government Strategy. For more information on the benefits of electronic reporting, see the memorandum titled *Electronic Reporting Requirements for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules*, available in Docket ID No. EPA-HQ-OAR-2019-0312.

*b. SSM Requirements*

(1.) Proposed Elimination of the SSM Exemption

The EPA is proposing to eliminate the SSM exemption in the MMPP NESHAP. The EPA's proposed rationale for the elimination of the SSM exemption for the MMPP source category is the same as for the ALDT source category, which is discussed in section IV.A.4.b.1 of this preamble. We are also proposing several revisions to Table 2 to Subpart M of 40 CFR part 63 (*Applicability of General Provisions to Subpart M of Part 63*, hereafter referred to as the "General Provisions table to subpart M") as is explained in more detail below in section IV.B.4.b.2 of this preamble. For example, we are proposing to eliminate the incorporation of the General Provisions' requirement that the source develop an SSM plan. We are also proposing to eliminate and revise certain recordkeeping and reporting requirements related to the SSM exemption as further described below. The EPA has attempted to ensure that the provisions we are proposing to eliminate are inappropriate, unnecessary, or redundant in the absence of the SSM exemption. We are specifically seeking comment on the specific proposed

deletions and revisions and also whether additional provisions should be revised to achieve the stated goal.

In proposing these rule amendments, the EPA has taken into account startup and shutdown periods and, for the same reasons explained in section IV.A.4.b.1 of this preamble for the ALDT source category, has not proposed alternate standards for those periods in the MMPP NESHAP. Startups and shutdowns are part of normal operations for the MMPP source category. As currently specified in 40 CFR 63.3892(b), any coating operation(s) for which you use the emission rate with add-on controls option must meet the applicable operating limits in Table 1 to 40 CFR part 63, subpart M “at all times,” except for solvent recovery systems for which you conduct liquid-liquid material balances according to 40 CFR 63.3961(j). (Solvent recovery systems for which you conduct a liquid-liquid material balance require a monthly calculation of the solvent recovery device’s collection and recovery efficiency for volatile organic matter.)

Also, as currently specified in 40 CFR 63.3900(a)(2), any coating operation(s) for which you use the emission rate with add-on controls option must be in compliance “at all times” with the applicable emission limit in 40 CFR 63.3890. During startup and shutdown periods, in order for a facility (using add-on controls to meet the standards) to meet the emission and operating standards, the control device for a coating operation needs to be turned on and operating at specified levels before the facility begins coating operations, and the control equipment needs to continue to be operated until after the facility ceases coating operations. In some cases, the facility needs to run thermal oxidizers on supplemental fuel before VOC levels are sufficient for the combustion to be (nearly) self-sustaining. Note that we are also proposing new related language in 40 CFR 63.3900(b) to require that the owner or operator operate and maintain the

coating operation, including pollution control equipment, at all times to minimize emissions. *See* section IV.A.4.b.2 of this preamble for further discussion of this proposed revision.

Although no statutory language compels the EPA to set standards for malfunctions, the EPA has the discretion to do so where feasible, as discussed previously in section IV.A.4.b.1 of this preamble for the ALDT source category.

It is unlikely that a malfunction would result in a violation of the standards during MMPP surface coatings operations for facilities using the compliant material option or the emission rate without add-on controls option. Facilities using these options have demonstrated that the organic HAP contents of the coating materials do not exceed the emission limits in 40 CFR 63.3890(a) or (b), either on a coating-by-coating basis or by using averaging among coatings.

A malfunction event is more likely for MMPP coating facilities that use the emission rate with add-on controls option. For this option, facilities must demonstrate that the average emission rate does not exceed the emission limits in 40 CFR 63.3890(a) or (b), and the facility is complying with the control device operating limits listed in Table 1 to 40 CFR part 63, subpart MMMM of the MMPP NESHAP. The operating limits are specific to the type of control device and established by the facility during its initial performance test.

In the unlikely event that a source fails to comply with the applicable CAA section 112(d) standards as a result of a malfunction event, the EPA would determine an appropriate response based on, among other things, the good faith efforts of the source to minimize emissions during malfunction periods, including preventative and corrective actions, as well as root cause analyses to ascertain and rectify excess emissions. Refer to section IV.A.4.b.1 of this preamble for further discussion of the EPA's actions in response to a source failing to comply

with the applicable CAA section 112(d) standards as a result of a malfunction event for the ALDT source category, which applies to this source category.

(2.) Proposed Revisions to the General Provisions Applicability Table

*40 CFR 63.3900(b) General duty.* We are proposing to revise the General Provisions table to subpart MMMM (Table 2) entry for 40 CFR 63.6(e)(1)(i) by changing the “yes” in column 3 to a “no.” Section 63.6(e)(1)(i) describes the general duty to minimize emissions. Some of the language in that section is no longer necessary or appropriate in light of the elimination of the SSM exemption. We are proposing instead to add general duty regulatory text at 40 CFR 63.3900(b) that reflects the general duty to minimize emissions while eliminating the reference to periods covered by an SSM exemption. The current language in 40 CFR 63.6(e)(1)(i) characterizes what the general duty entails during periods of SSM. With the elimination of the SSM exemption, there is no need to differentiate between normal operations, startup and shutdown, and malfunction events in describing the general duty. Therefore, the language the EPA is proposing for 40 CFR 63.3900(b) does not include that language from 40 CFR 63.6(e)(1).

We are also proposing to revise the General Provisions table to subpart MMMM (Table 2) entry for 40 CFR 63.6(e)(1)(ii) by changing the “yes” in column 3 to a “no.” Section 63.6(e)(1)(ii) imposes requirements that are not necessary with the elimination of the SSM exemption or are redundant with the general duty requirement being added at 40 CFR 63.3900(b).

*SSM plan.* We are proposing to revise the General Provisions table to subpart MMMM (Table 2) entry for 40 CFR 63.6(e)(3) by changing the “yes” in column 3 to a “no.” Generally, these paragraphs require development of an SSM plan and specify SSM recordkeeping and



reporting requirements related to the SSM plan. We are also proposing to remove from 40 CFR part 63, subpart SSSS, the current provisions requiring the SSM plan in 40 CFR 63.5180(f) and requiring reporting related to the SSM plan in 40 CFR 63.5180(f)(1). As noted, the EPA is proposing to remove the SSM exemptions. Therefore, affected units will be subject to an emission standard during such events. The applicability of a standard during such events will ensure that sources have ample incentive to plan for and achieve compliance, and, thus, the SSM plan requirements are no longer necessary.

*Compliance with standards.* We are proposing to revise the General Provisions table to subpart MMMM (Table 2) entry for 40 CFR 63.6(f)(1) by changing the “yes” in column 3 to a “no.” The current language of 40 CFR 63.6(f)(1) exempts sources from non-opacity standards during periods of SSM. As discussed above, the Court in *Sierra Club* vacated the exemptions contained in this provision and held that the CAA requires that some CAA section 112 standards apply continuously. Consistent with *Sierra Club*, the EPA is proposing to revise standards in this rule to apply at all times.

*40 CFR 63.3964 Performance testing.* We are proposing to revise the General Provisions table to subpart MMMM (Table 2) entry for 40 CFR 63.7(e)(1) by changing the “yes” in column 3 to a “no.” Section 63.7(e)(1) describes performance testing requirements. The EPA is instead proposing to add a performance testing requirement at 40 CFR 63.3964(a)(1). The performance testing requirements we are proposing to add differ from the General Provisions performance testing provisions in several respects. The regulatory text does not include the language in 40 CFR 63.7(e)(1) that restated the SSM exemption and language that precluded startup and shutdown periods from being considered “representative” for purposes of performance testing. Also, the proposed performance testing provisions will not allow performance testing during

startup or shutdown. As in 40 CFR 63.7(e)(1), performance tests conducted under this subpart should not be conducted during malfunctions because conditions during malfunctions are often not representative of normal operating conditions. Section 63.7(e) requires that the owner or operator maintain records of the process information necessary to document operating conditions during the test and include in such records an explanation to support that such conditions represent normal operation. The EPA is proposing to add language to 40 CFR 63.3964(a)(1) clarifying that the owner or operator must make such records available to the Administrator upon request.

*Monitoring.* We are proposing to revise the General Provisions table to subpart M (Table 2) entry for 40 CFR 63.8(c)(1) by changing the “yes” in column 3 to a “no.” The cross-references to the general duty and SSM plan requirements in those subparagraphs are not necessary in light of other requirements of 40 CFR 63.8 that require good air pollution control practices (40 CFR 63.8(c)(1)) and that set out the requirements of a quality control program for monitoring equipment (40 CFR 63.8(d)). Further, we are proposing to revise 40 CFR 63.3968(a) to add a requirement to maintain the monitoring equipment at all times in accordance with 40 CFR 63.3900(b) and keep the necessary parts readily available for routine repairs of the monitoring equipment, consistent with the requirements in 40 CFR 63.8(c)(1)(ii). The reference to 40 CFR 63.8(c)(1)(ii) is no longer needed since it is redundant to the requirement in 40 CFR 63.3968(a).

We are proposing to revise the General Provisions table to subpart M (Table 2) entry for 40 CFR 63.8(c)(6) by changing the “yes” in column 3 to a “no.” The reference to 40 CFR 63.8(c)(6) is no longer needed since it is redundant to the requirement in 40 CFR 63.5170

that specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply.

We are proposing to revise the General Provisions table to subpart MMMM (Table 2) entry for 40 CFR 63.8(c)(8) by changing the “yes” in column 3 to a “no.” The reference to 40 CFR 63.8(c)(8) is no longer needed since it is redundant to the requirements in 40 CFR 63.3920(a) that requires reporting of CPMS out-of-control periods.

We are proposing to revise the General Provisions table to subpart MMMM (Table 2) entry for 40 CFR 63.8(d)-(e) by changing the “yes” in column 3 to a “no.” The requirements for quality control program and performance evaluation of CMS are not required under 40 CFR part 63, subpart MMMM.

We are proposing to revise the General Provisions table to subpart MMMM (Table 2) entry for 40 CFR 63.8(g) by changing the “yes” in column 3 to a “no.” The reference to 40 CFR 63.8(g) is no longer needed since it is redundant to the requirement in 40 CFR 63.3967 and 63.3968 that specify monitoring data reduction.

*40 CFR 63.5190 Recordkeeping.* We are proposing to revise the General Provisions table to subpart MMMM (Table 2) entry for 40 CFR 63.10(b)(2)(i) by changing the “yes” in column 3 to a “no.” Section 63.10(b)(2)(i) describes the recordkeeping requirements during startup and shutdown. These recording provisions are no longer necessary because the EPA is proposing that recordkeeping and reporting applicable to normal operations will apply to startup and shutdown. In the absence of special provisions applicable to startup and shutdown, such as a startup and shutdown plan, there is no reason to retain additional recordkeeping for startup and shutdown periods.

We are proposing to revise the General Provisions table to subpart M MMM (Table 2) entry for 40 CFR 63.10(b)(2)(ii) by changing the “yes” in column 3 to a “no.” Section 63.10(b)(2)(ii) describes the recordkeeping requirements during a malfunction, requiring a record of “the occurrence and duration of each malfunction.” A similar record is already required in 40 CFR 63.3930(j), which requires a record of “the date, time, and duration of each deviation,” which the EPA is retaining. The regulatory text in 40 CFR 63.3930(j) differs from the General Provisions in that the General Provisions requires the creation and retention of a record of the occurrence and duration of each malfunction of process, air pollution control, and monitoring equipment; whereas 40 CFR 63.3930(j) applies to any failure to meet an applicable standard and is requiring that the source record the date, time, and duration of the failure rather than the “occurrence.” The EPA is also proposing to add to 40 CFR 63.3930(j) a requirement that sources also keep records that include a list of the affected source or equipment and actions taken to minimize emissions, an estimate of the quantity of each regulated pollutant emitted over the emission limit for which the source failed to meet the standard, and a description of the method used to estimate the emissions. Examples of such methods would include product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters (*e.g.*, coating HAP content and application rates and control device efficiencies). The EPA proposes to require that sources keep records of this information to ensure that there is adequate information to allow the EPA to determine the severity of any failure to meet a standard, and to provide data that may document how the source met the general duty to minimize emissions when the source has failed to meet an applicable standard.

We are proposing to revise the General Provisions table to subpart M MMM (Table 2) entry for 40 CFR 63.10(b)(2)(iv) by changing the “yes” in column 3 to a “no.” When applicable,

the provision requires sources to record actions taken during SSM events when actions were inconsistent with their SSM plan. The requirement is no longer appropriate because SSM plans will no longer be required. The requirement previously applicable under 40 CFR 63.10(b)(2)(iv)(B) to record actions to minimize emissions and record corrective actions is now applicable by reference to 40 CFR 63.3930(j)(4).

We are proposing to revise the General Provisions table to subpart M (Table 2) entry for 40 CFR 63.10(b)(2)(v) by changing the “yes” in column 3 to a “no.” When applicable, the provision requires sources to record actions taken during SSM events to show that actions taken were consistent with their SSM plan. The requirement is no longer appropriate because SSM plans will no longer be required.

We are proposing to revise the General Provisions table to subpart M (Table 2) entry for 40 CFR 63.10(b)(2)(x)-(xiii) by changing the “yes” in column 3 to a “no.” When applicable, the provision requires sources to record actions taken during SSM events to show that actions taken were consistent with their SSM plan. The requirement is no longer appropriate because SSM plans will no longer be required.

*40 CFR 63.3920 Reporting.* We are proposing to revise the General Provisions table to subpart M (Table 2) entry for 40 CFR 63.10(d)(5) by changing the “yes” in column 3 to a “no.” Section 63.10(d)(5) describes the reporting requirements for startups, shutdowns, and malfunctions. To replace the General Provisions reporting requirement, the EPA is proposing to add reporting requirements to 40 CFR 63.3920(a). The replacement language differs from the General Provisions requirement in that it eliminates periodic SSM reports as a stand-alone report. We are proposing language that requires sources that fail to meet an applicable standard at any time to report the information concerning such events in the semi-annual compliance report

already required under this rule. Subpart MMMM of 40 CFR part 63 currently requires reporting of the date, time period, and cause of each deviation. We are clarifying in the rule that, if the cause of a deviation from a standard is unknown, this should be specified in the report. We are also proposing to change “date and time period” or “date and time” to “date, time, and duration” (*see* proposed revisions to 40 CFR 63.3920(a)(7)). Further, we are proposing that the report must also contain the number of deviations from the standard and a list of the affected sources or equipment. For deviation reports addressing deviations from an applicable emission limit in 40 CFR 63.3890 or operating limit in Table 1 to 40 CFR part 63, subpart MMMM, we are proposing that the report also include an estimate of the quantity of each regulated pollutant emitted over any emission limit for which the source failed to meet the standard, and a description of the method used to estimate the emissions.

### (3.) Other SSM Changes

Regarding the proposed new requirement discussed above to estimate the quantity of each regulated pollutant emitted over any emission limit for which the source failed to meet the standard, and a description of the method used to estimate the emissions, examples of such methods would include product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters (*e.g.*, coating HAP content and application rates and control device efficiencies). The EPA is proposing this requirement to ensure that there is adequate information to determine compliance, to allow the EPA to determine the severity of the failure to meet an applicable standard, and to provide data that may document how the source met the general duty to minimize emissions during a failure to meet an applicable standard.

We will no longer require owners or operators to determine whether actions taken to

correct a malfunction are consistent with an SSM plan, because plans would no longer be required. The proposed amendments, therefore, eliminate 40 CFR 63.3920(c) that requires reporting of whether the source deviated from its SSM plan, including required actions to communicate with the Administrator, and the cross-reference to 40 CFR 63.10(d)(5) that contains the description of the previously required SSM report format and submittal schedule from this section. These specifications are no longer necessary because the events will be reported in otherwise required reports with similar format and submittal requirements.

We are proposing to remove the requirements in 40 CFR 63.3920(a)(7) that deviation reports must specify whether a deviation from an operating limit occurred during a period of SSM. We are also proposing to remove the requirements in 40 CFR 63.3920(a)(7) to break down the total duration of deviations into the startup and shutdown categories. As discussed above in this section, we are proposing to require reporting of the cause of each deviation. Further, the startup and shutdown categories no longer apply because these periods are proposed to be considered normal operation, as discussed in section IV.A.4.b.1 of this preamble for the ALDT source category, which also applies to this source category.

*c. Technical Amendments to the MMPP NESHAP*

We propose to amend 40 CFR 63.3966(b) to add the option of conducting EPA Method 18 of appendix A to 40 CFR part 60, “Measurement of Gaseous Organic Compound Emissions by Gas Chromatography,” to measure and then subtract methane emissions from measured total gaseous organic mass emissions as carbon. Facilities using the emission rate with add-on control compliance option can use either EPA Method 25 or EPA Method 25A to measure control device destruction efficiency. Unlike EPA Method 25, Method 25A does not exclude methane from the measurement of organic emissions. Because exhaust streams from coating operations

may contain methane from natural gas combustion, we are proposing to allow facilities the option to measure methane using EPA Method 18 and to subtract the methane from the emissions as part of their compliance calculations. We also propose to revise the format of references to test methods in 40 CFR part 60. The current references in 40 CFR 63.5160(d)(1) to EPA Methods 1, 1A, 2, 2A, 2C, 2D, 2F, 2G, 3, 3A, 3B, 4, 25, and 25A specify that each method is in “appendix A” of 40 CFR part 60. Appendix A of 40 CFR part 60 has been divided into appendices A-1 through A-8. We propose to revise each reference to appendix A to indicate which of the eight sections of appendix A applies to the method.

We propose to amend 40 CFR 63.3941(a)(1)(i) and (a)(4), which describe how to demonstrate compliance with the emission limitations using the compliant material option, and the definition of “non-HAP coating” in 40 CFR 63.3981 to remove references to OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4). The reference to OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) is intended to specify which compounds must be included in calculating total organic HAP content of a coating material if they are present at 0.1percent or greater by mass. We propose to remove this reference because 29 CFR 1910.1200(d)(4) has been amended and no longer readily defines which compounds are carcinogens. We propose to replace these references to OSHA-defined carcinogens at 29 CFR 1910.1200(d)(4) with a list (in proposed new Table 5 to 40 CFR part 63, subpart MMMM) of those organic HAP that must be included in calculating total organic HAP content of a coating material if they are present at 0.1-percent or greater by mass.

We propose to include organic HAP in proposed Table 5 to 40 CFR part 63, subpart MMMM if they were categorized in the EPA’s *Prioritized Chronic Dose-Response Values for Screening Risk Assessments* (dated May 9, 2014), as a “human carcinogen,” “probable human



carcinogen,” or “possible human carcinogen” according to *The Risk Assessment Guidelines of 1986* (EPA/600/8-87/045, August 1987),<sup>35</sup> or as “carcinogenic to humans,” “likely to be carcinogenic to humans,” or with “suggestive evidence of carcinogenic potential” according to the *Guidelines for Carcinogen Risk Assessment* (EPA/630/P-03/001F, March 2005).

Current 40 CFR 63.3931 specifies how records must be maintained. We propose to add clarification to this provision at 40 CFR 63.3931(a) that specifies the allowance to retain electronic records applies to all records that were submitted as reports electronically via the EPA’s CEDRI. We also propose to add text to the same provision clarifying that this ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

*d. Ongoing Emissions Compliance Demonstrations*

As part of an ongoing effort to improve compliance with various federal air emission regulations, the EPA reviewed the compliance demonstration requirements in the MMPP NESHAP. Currently, if a source owner or operator chooses to comply with the standards using add-on controls, the results of an initial performance test are used to determine compliance; however, the rule does not require on-going periodic performance testing for these emission capture systems and add-on controls. In this action, we are proposing to require periodic testing of add-on control devices, in addition to the one-time initial emissions and capture efficiency testing, and ongoing temperature measurement, to ensure ongoing compliance with the standards.

---

<sup>35</sup> See <https://www.epa.gov/fera/dose-response-assessment-assessing-health-risks-associated-exposure-hazardous-air-pollutants>.

As described more fully in section IV.A.4.d of this preamble for the ALDT source category, the EPA documented potential operational problems associated with control devices in several publications;<sup>36</sup> the ICAC, in their comments on a separate rulemaking on the proposed revisions related to the NESHAP General Provisions (72 FR 69, January 3, 2007), commented that ongoing maintenance and checks of control devices are necessary in order to ensure emissions control technology, including both thermal and catalytic oxidizers, remains effective;<sup>37</sup> and state websites list CAA enforcement information that further corroborates the potential problems identified by the EPA and ICAC comments and conclusions.

Given the need for vigilance in maintaining equipment to stem degradation, the EPA is proposing to require periodic testing of add-on control devices, in addition to the one-time initial emissions and capture efficiency testing and ongoing temperature measurement, to ensure ongoing compliance with the MMPP NESHAP.

In this action, the EPA is proposing to require periodic performance testing of add-on control devices on a regular frequency (*e.g.*, every 5 years) to ensure the equipment continues to operate properly for facilities using the emission rate with add-on controls compliance option. We note that the majority of state operating permits for existing MMPP surface coating sources already require such testing every 5 years synchronized with 40 CFR part 70 air operating permit renewals. This proposed periodic testing requirement includes an exception to the general requirement for periodic testing for facilities using the catalytic oxidizer control option at 40

---

<sup>36</sup> See *Control Techniques for Volatile Organic Compound Emissions from Stationary Sources*, EPA/453/R-92-018, December 1992, *Control Technologies for Emissions from Stationary Sources*, EPA/625/6-91/014, June 1991, and *Survey of Control for Low Concentration Organic Vapor Gas Streams*, EPA-456/R-95-003, May 1995. These documents can be found in the ALDT, MMPP, and PPP Dockets for this action.

<sup>37</sup> See Docket Item No. EPA-HQ-OAR-2004-0094-0173, available at <https://www.regulations.gov/>. A copy of the ICAC's comments on the proposed revisions to the General Provisions is also included in the ALDT, MMPP, and PPP Dockets for this action.

CFR 63.3967(b) and following the catalyst maintenance procedures in 40 CFR 63.3967(b)(4).

This exception is due to the catalyst maintenance procedures that already require annual testing of the catalyst and other maintenance procedures that provide ongoing demonstrations that the control system is operating properly and may, thus, be considered comparable to conducting a performance test.

The proposed periodic performance testing requirement allows an exception from periodic testing for facilities using instruments to continuously measure emissions. Such CEMS would show actual emissions. The use of CEMS to demonstrate compliance would obviate the need for periodic oxidizer testing. Moreover, installation and operation of a CEMS with a timesharing component, such that values from more than one oxidizer exhaust could be tabulated in a recurring frequency, could prove less expensive (estimated to have an annual cost below \$15,000) than ongoing oxidizer testing.

This proposed requirement would not require periodic testing or CEMS monitoring of facilities using the “as purchased” or “as applied” compliant coatings options because these compliance options do not use any add-on controls or control efficiency measurements in the compliance calculations.

The proposed periodic performance testing requirement would require that facilities complying with the standards using emission capture systems and add-on controls and which are not already on a 5-year testing schedule to conduct the first of the periodic performance tests within 3 years of the effective date of the revised standards. Afterward, they would conduct the periodic testing before they renew their operating permits, but no longer than 5 years following the previous performance test. Additionally, facilities that have already tested as a condition of their permit within the last 2 years before the effective date would be permitted to maintain their

current 5-year schedule and not be required to move up the date of the next test to the 3-year date specified above. This proposed requirement would require periodic air emissions testing to measure organic HAP destruction or removal efficiency at the inlet and outlet of the add-on control device, or measurement of the control device outlet concentration of organic HAP. The emissions would be measured as total gaseous organic mass emissions as carbon using either EPA Method 25 or 25A of appendix A-7 to 40 CFR part 60, which are the methods currently required for the initial compliance demonstration.

We estimate that the cost to perform a control device emissions destruction or removal efficiency test using EPA Method 25 or 25A would be approximately \$19,000 per control device. The cost estimate is included in the memorandum titled *Draft Costs/Impacts of the 40 CFR Part 63 Subparts IIII, MMMM, and PPPP Monitoring Review Revisions*, in the MMPP Docket. We have reviewed the operating permits for facilities subject to the several other surface coating NESHAP, and we found that affected sources currently using emission capture systems and add-on controls are often, but not always, required to conduct periodic control device performance tests as a condition of their 40 CFR part 70 operating permits. We estimate that seven MMPP surface coating facilities currently are not required to conduct periodic testing of their control devices as a condition of their permit renewal. Periodic performance tests ensure that all control systems used to comply with the NESHAP would be properly maintained over time, thereby reducing the potential for acute emissions episodes and non-compliance.

We are requesting comment on adding periodic testing of add-on control devices to the MMPP NESHAP and on the suggested 5-year schedule for the periodic testing.

*e. IBR of Alternative Test Methods under 1 CFR part 51*

The EPA is proposing new and updated test methods for the MMPP NESHAP that include IBR. In accordance with requirements of 1 CFR 51.5, the EPA is proposing to add the following optional EPA methods and incorporate by reference the VCS described in the amendments to 40 CFR 63.14:

- EPA Method 18 of appendix A to 40 CFR part 60, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography, proposed to be IBR approved for 40 CFR 63.3966(b)(4);
- ASTM Method D1475-13, Standard Test Method for Density of Liquid Coatings, Inks, and Related Products, proposed to be IBR approved for 40 CFR 63.3941(b)(4), 63.3941(c), and 63.3951(c);
- ASTM Method D2111-10 (2015), Standard Test Methods for Specific Gravity of Halogenated Organic Solvents and Their Admixtures, proposed to be IBR approved for 40 CFR 63.3951(c);
- ASTM Method D2369-10 (2015), Test Method for Volatile Content of Coatings, proposed to be IBR approved for 40 CFR 63.3961(j)(3);
- ASTM Method D2697-03 (2014), Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings, proposed to be IBR approved for 40 CFR 63.3941(b)(1);
- ASTM Method D5965-02 (2013), Standard Test Methods for Specific Gravity of Coating Powders, proposed to be IBR approved for 40 CFR 3951(c); and

- ASTM Method D6093-97 (2016), Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using Helium Gas Pycnometer, proposed to be IBR approved for 40 CFR 63.3941(b)(1).

Older versions of ASTM methods D1475, D2697, D5965, and D6093 were incorporated by reference when the MMPP NESHAP was originally promulgated (69 FR 130, January 2, 2004). We are proposing to replace the older versions of these methods with updated versions, which requires IBR revisions. The updated version of the method replaces the older version in the same paragraph of the rule text. We are also proposing the addition of EPA Method 18 and incorporating by reference ASTM methods D2111 and D2369 to the MMPP NESHAP for the first time in this rulemaking. Refer to section VIII.J of this preamble for further discussion of these VCS.

#### 5. What compliance dates are we proposing?

The EPA is proposing that affected sources must comply with all of the amendments, with the exception of the proposed electronic format for submitting semiannual compliance reports, no later than 181 days after the effective date of the final rule. All affected facilities would have to continue to meet the current requirements of 40 CFR part 63, subpart MMMM until the applicable compliance date of the amended rule. The final action is not expected to be a “major rule” as defined by 5 U.S.C. 804(2), so the effective date of the final rule will be the promulgation date as specified in CAA section 112(d)(10).

For existing sources, we are proposing two changes that would impact ongoing compliance requirements for 40 CFR part 63, subpart MMMM. As discussed elsewhere in this preamble, we are proposing to add a requirement that notifications, performance test results, and semiannual compliance reports be submitted electronically. We are proposing that the

semiannual compliance report be submitted electronically using a new template, which is available for review and comment as part of this action. We are also proposing to change the requirements for SSM by removing the exemption from the requirements to meet the standard during SSM periods and by removing the requirement to develop and implement an SSM plan. Our experience with similar industries that are required to convert reporting mechanisms to install necessary hardware and software, become familiar with the process of submitting performance test results electronically through the EPA's CEDRI, test these new electronic submission capabilities, and reliably employ electronic reporting shows that a time period of a minimum of 90 days, and, more typically, 180 days is generally necessary to successfully accomplish these revisions. Our experience with similar industries further shows that this sort of regulated facility generally requires a time period of 180 days to read and understand the amended rule requirements; to evaluate their operations to ensure that they can meet the standards during periods of startup and shutdown as defined in the rule and make any necessary adjustments; and to update their operation, maintenance, and monitoring plan to reflect the revised requirements. The EPA recognizes the confusion that multiple different compliance dates for individual requirements would create and the additional burden such an assortment of dates would impose. From our assessment of the time frame needed for compliance with the entirety of the revised requirements, the EPA considers a period of 180 days to be the most expeditious compliance period practicable and, thus, is proposing that existing affected sources be in compliance with all of this regulation's revised requirements within 181 days of the regulation's effective date.

We solicit comment on these proposed compliance periods, and we specifically request submission of information from sources in this source category regarding specific actions that

would need to be undertaken to comply with the proposed amended requirements and the time needed to make the adjustments for compliance with any of the revised requirements. We note that information provided may result in changes to the proposed compliance dates.

*C. What are the analytical results and proposed decisions for the Surface Coating of Plastic Parts and Products source category?*

1. What are the results of the risk assessment and analyses?

As described above in section III of this preamble, for the PPP source category, we conducted a risk assessment for all HAP emitted. We present results of the risk assessment briefly below and in more detail in the *Surface Coating of Plastic Parts and Products Risk Assessment Report*, in the PPP Docket (Docket ID No. EPA-HQ-OAR-2019-0313).

*a. Chronic Inhalation Risk Assessment Results*

Table 6 of this preamble provides a summary of the results of the inhalation risk assessment for the source category.

**Table 6. Surface Coating of Plastic Parts and Products Source Category Inhalation Risk Assessment Results**

Risk Assessment	Maximum Individual Cancer Risk (in 1 million)		Estimated Population at Increased Risk of Cancer $\geq 1$ -in-1 Million		Estimated Annual Cancer Incidence (cases per year)		Maximum Chronic Noncancer TOSHI <sup>1</sup>		Maximum Screening Acute Noncancer HQ <sup>2</sup>
	Based on Actual Emissions	Based on Allowable Emissions	Based on Actual Emissions	Based on Allowable Emissions	Based on Actual Emissions	Based on Allowable Emissions	Based on Actual Emissions	Based on Allowable Emissions	Based on Actual Emissions
Source Category	10	10	600	700	0.001	0.001	1	1	HQ <sub>REL</sub> = 4
Whole Facility	70	-	29,000	-	0.006	-	1	-	-

<sup>1</sup> The TOSHI is the sum of the chronic noncancer HQ for substances that affect the same target organ or organ system.

<sup>2</sup> The maximum estimated acute exposure concentration was divided by available short-term threshold values to develop HQ values.



The results of the inhalation risk modeling using actual emissions data, as shown in Table 6 of this preamble, indicate that the maximum individual cancer risk based on actual emissions (lifetime) could be up to 10-in-1 million (driven by ethyl benzene, naphthalene, and formaldehyde from coating operations), the maximum chronic noncancer TOSHI value based on actual emissions could be up to 1 (driven by hexamethylene-1,6-diisocyanate from coating operations), and the maximum screening acute noncancer HQ value (off-facility site) could be up to 4 (driven by glycol ethers). The total estimated annual cancer incidence (national) from these facilities based on actual emission levels is 0.001 excess cancer cases per year or 1 case in every 1,000 years.

*b. Screening Level Acute Risk Assessment Results*

Table 6 of this preamble also shows the acute risk results for the PPP source category. The screening analysis for acute impacts was based on an industry-specific multiplier of 1.2, to estimate the peak emission rates from the average emission rates. For more detailed acute risk results refer to the *Surface Coating of Plastic Parts and Products Risk Assessment Report*, in the PPP Docket.

*c. Multipathway Risk Screening Results*

There are no PB-HAP emitted by facilities in the PPP source category. Therefore, we do not expect any human health multipathway risks as a result of emissions from this source category.

*d. Environmental Risk Screening Results*

The emissions data for the PPP source category indicate that no environmental HAP are emitted by sources within this source category. Therefore, we do not expect an adverse environmental effect as a result of HAP emissions from this source category.

*e. Facility-Wide Risk Results*

Twenty-two facilities have a facility-wide cancer MIR greater than or equal to 1-in-1 million. The maximum facility-wide cancer MIR is 70-in-1 million, driven by nickel and formaldehyde from a co-located boiler. The total estimated cancer incidence from the whole facility is 0.006 excess cancer cases per year, or one excess case in every 200 years.

Approximately 29,000 people were estimated to have cancer risks above 1-in-1 million from exposure to HAP emitted from both MACT and non-MACT sources of the 125 facilities in this source category. The maximum facility-wide TOSHI for the source category is estimated to be 1, driven by emissions of nickel and formaldehyde from a co-located boiler.

*f. What demographic groups might benefit from this regulation?*

To examine the potential for any environmental justice issues that might be associated with the source category, we performed a demographic analysis, which is an assessment of risks to individual demographic groups of the populations living within 5 km and within 50 km of the facilities. In the analysis, we evaluated the distribution of HAP-related cancer and noncancer risks from the PPP source category across different demographic groups within the populations living near facilities.<sup>38</sup>

The results of the demographic analysis are summarized in Table 7 of this preamble. These results, for various demographic groups, are based on the estimated risks from actual emissions levels for the population living within 50 km of the facilities.

---

38 Demographic groups included in the analysis are: White, African American, Native American, other races and multiracial, Hispanic or Latino, children 17 years of age and under, adults 18 to 64 years of age, adults 65 years of age and over, adults without a high school diploma, people living below the poverty level, people living above the poverty level, and linguistically isolated people.

**Table 7. Surface Coating of Plastic Parts and Products Source Category Demographic Risk Analysis Results**

	<b>Nationwide</b>	<b>Population with Cancer Risk at or Above 1-in-1 Million Due to Surface Coating of Plastic Parts and Products</b>	<b>Population with Chronic Noncancer HI Above 1 Due to Surface Coating of Plastic Parts and Products</b>
Total Population	317,746,049	500	0
White and Minority by Percent			
White	62	92	0
Minority	38	8	0
Minority Detail by Percent			
African American	12	4	0
Native American	0.8	0.1	0
Hispanic or Latino	18	3	0
Other and Multiracial	7	1	0
Income by Percent			
Below the Poverty Level	14	19	0
Above the Poverty Level	86	81	0
Education by Percent			
Over 25 Without High a School Diploma	14	14	0
Over 25 With a High School Diploma	86	86	0
Linguistically Isolated by Percent			
Linguistically Isolated	6	0	0

The results of the PPP source category demographic analysis indicate that emissions from the source category expose approximately 500 people to a cancer risk at or above 1-in-1 million and no one is exposed to a chronic noncancer HI greater than 1. The percentages of the at-risk population in the following specific demographic groups are higher than their respective nationwide percentages: “White,” and “Below the Poverty Level.”

The methodology and the results of the demographic analysis are presented in a technical report, *Risk and Technology Review – Analysis of Demographic Factors for Populations Living Near Surface Coating of Plastic Parts and Products Source Category Operations*, April 2019 (hereafter referred to as the *Plastic Parts and Products Demographic Analysis Report*), available in the PPP Docket.

2. What are our proposed decisions regarding risk acceptability, ample margin of safety, and adverse environmental effects?

*a. Risk Acceptability*

As noted in section III.A of this preamble, we weigh all health risk factors in our risk acceptability determination, including the cancer MIR, the number of persons in various cancer and noncancer risk ranges, cancer incidence, the maximum noncancer TOSHI, the maximum acute noncancer HQ, the extent of noncancer risks, the distribution of cancer and noncancer risks in the exposed population, and risk estimation uncertainties (54 FR 38044, September 14, 1989).

For the PPP source category, the risk analysis indicates that the cancer risks to the individual most exposed could be up to 10-in-1 million due to actual emissions and allowable emissions. These risks are considerably less than 100-in-1 million, which is the presumptive upper limit of acceptable risk. The risk analysis also shows very low cancer incidence (0.001 cases per year for actual and allowable emissions), and we did not identify any potential for adverse chronic noncancer health effects.

The acute screening analysis results in a maximum acute noncancer HQ of 4 at one facility based on use of the acute REL for ethylene glycol monomethyl ether as a surrogate for unspeciated glycol ethers. Since there is not a specified acute dose-response value for unspeciated glycol ethers, we applied the most protective dose-response value from the other glycol ether compounds, the acute REL for ethylene glycol monomethyl ether, to estimate risk. Given that ethylene glycol monomethyl ether is more toxic than other glycol ethers, the use of this surrogate is a health-protective choice in the EPA's risk assessment.

For acute screening analyses, to better characterize the potential health risks associated with estimated worst-case acute exposures to HAP, we examine a wider range of available acute

health metrics than we do for our chronic risk assessments. This is in acknowledgement that there are generally more data gaps and uncertainties in acute reference values than there are in chronic reference values. By definition, the acute REL represents a health-protective level of exposure, with effects not anticipated below those levels, even for repeated exposures; however, the level of exposure that would cause health effects is not specifically known. As the exposure concentration increases above the acute REL, the potential for effects increases. Therefore, when an REL is exceeded and an AEGL-1 or ERPG-1 level is available (*i.e.*, levels at which mild, reversible effects are anticipated in the general population for a single exposure), we typically use them as an additional comparative measure, as they provide an upper bound for exposure levels above which exposed individuals could experience effects. However, for glycol ethers, there are no AEGL or ERPG values.

Additional uncertainties in the acute exposure assessment that the EPA conducts as part of the risk review under section 112 of the CAA include several factors. The accuracy of an acute inhalation exposure assessment depends on the simultaneous occurrence of independent factors that may vary greatly, such as hourly emission rates, meteorology, and the presence of a person. In the acute screening assessment that we conduct under the RTR program, we include the conservative (health-protective) assumptions that peak emissions from each emission point in the source category and reasonable worst-case air dispersion conditions (*i.e.*, 99<sup>th</sup> percentile) co-occur. We then include the additional assumption that a person is located at this point at the same time. Together, these assumptions represent a reasonable exposure. In most cases, it is unlikely that a person would be located at the point of maximum exposure during the time when peak emissions and reasonable worst-case air dispersion conditions occur simultaneously. Thus, as discussed in the document titled *Residual Risk Assessment for the Surface Coating of Plastic*

*Parts and Products Source Category in Support of the Risk and Technology Review 2019*

*Proposed Rule*, in the PPP docket for this action, by assuming the co-occurrence of independent factors for the acute screening assessment, the results are intentionally biased high and are, thus, health-protective. We conclude that adverse effects from acute exposure to emissions of glycol ethers from this source category are not anticipated.

Considering all of the health risk information and factors discussed above, including the uncertainties discussed in section III.C.7 of this preamble, we propose that the risks from the PPP source category are acceptable.

*b. Ample Margin of Safety Analysis*

Although we are proposing that the risks from the PPP source category are acceptable, risk estimates for approximately 500 individuals in the exposed population are above 1-in-1 million at the actual emissions level and 700 individuals in the exposed population are above 1-in-1 million at the allowable emissions level. Consequently, we further considered whether the MACT standards for the PPP source category provide an ample margin of safety to protect public health. In this ample margin of safety analysis, we investigated available emissions control options that might reduce the risk from the source category. We considered this information along with all of the health risks and other health information considered in our determination of risk acceptability.

As described in section III.B of this preamble, our technology review focused on identifying developments in practices, processes, and control technologies for the PPP source category, and we reviewed various information sources regarding emission sources that are currently regulated by the PPP NESHAP. Based on our review, we did not identify any cost-effective measures to further reduce HAP. Therefore, considering all of the available health

information along with the absence of additional measures for reducing HAP, we are proposing that additional emissions controls for this source category are not necessary and that the current standards provide an ample margin of safety.

*c. Environmental Effects*

The emissions data for the PPP source category indicate that no environmental HAP are emitted by sources within this source category. In addition, we are unaware of any adverse environmental effects caused by HAP emitted by this source category. Therefore, we do not expect there to be an adverse environmental effect as a result of HAP emissions from this source category and we are proposing that it is not necessary to set a more stringent standard to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect.

3. What are the results and proposed decisions based on our technology review?

As described in section III.B of this preamble, our technology review focused on identifying developments in practices, processes, and control technologies for the PPP source category. The EPA reviewed various information sources regarding emission sources that are currently regulated by the PPP NESHAP to support the technology review. The information sources included the following: the RBLC; publicly available state air permit databases; regulatory actions, including technology reviews promulgated for other surface coating NESHAP subsequent to the PPP NESHAP; state regulations; facility operating permits; site visits; and industry information.

Based on our review, we did not identify any add-on control technologies, process equipment, work practices, or procedures that had not been previously considered during development of the PPP NESHAP, and we did not identify any new or improved add-on control

technologies that would result in additional emission reductions. A brief summary of the EPA's findings in conducting the technology review of plastic part surface coating operations follows. For a detailed discussion of the EPA's findings, refer to the *Plastic Parts and Products Technology Review Memo*, in the PPP Docket.

During the development of the 2004 PPP NESHAP, numerical emission limits were determined for new and existing major sources within four coating subcategories for a total of eight HAP emissions limits. The emission limits were based on industry survey responses and the industry's use of low- or no-HAP coatings and thinners and add-on capture and control technologies.

Using the EPA's NEI and the ECHO databases, we identified 125 major source facilities that are currently subject to the PPP NESHAP. A search of the RBLC database for improvements in plastic parts and product coating technologies provided 20 facilities with permit dates of 2000 or later. The results of the RBLC search included facilities subject to VOC and HAP content limits, and using high volume/low pressure spray guns, robotic electrostatic application, thermal oxidizers, catalytic oxidizers, and adsorbers. All of these control technologies were in use by the plastic parts and product coating industry during development of the PPP NESHAP and were already considered in the development of the PPP NESHAP. Therefore, we concluded that the results of the RBLC search are consistent with current PPP NESHAP requirements and did not identify any improvements in add-on control technology or processes and work practices that are not already reflected in the rule.

We also collected permit information from about 45 major source surface coating facilities subject to the PPP NESHAP. (Many of these facilities were also subject to 40 CFR part 63, subparts IIII or MMMM.) The review of these permits did not identify a facility subject to



HAP limits more stringent than those in the PPP NESHAP and did not identify any control technologies or work practices that were not already considered in the development of the NESHAP.

We reviewed other surface coating NESHAP promulgated subsequent to the PPP NESHAP to determine whether any requirements exceed the PPP MACT level of control or include technologies that were not considered during the development of the original PPP NESHAP. These NESHAP include Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources (40 CFR part 63, subpart HHHHHH), and Nine Metal Fabrication and Finishing Area Source Categories (40 CFR part 63, subpart XXXXXX). We also reviewed the results of the technology reviews for other surface coating NESHAP promulgated after the PPP NESHAP. These technology reviews include the NESHAP for Printing and Publishing (40 CFR part 63, subpart KK), Shipbuilding and Ship Repair (40 CFR part 63, subpart II), Wood Furniture Manufacturing (40 CFR part 63, subpart JJ), and Aerospace Manufacturing and Rework Facilities (40 CFR part 63, subpart GG). The review of these more recently promulgated NESHAP and the technology reviews of other NESHAP did not identify any control technologies that were not already considered during the development of the 2004 PPP NESHAP.

The developments considered in these other technology reviews included the use of emission capture systems and thermal oxidizers to reduce emissions. Because the PPP NESHAP already includes a compliance option involving the use of a PTE and an add-on control device, and because these measures were considered in the development of the PPP NESHAP, we concluded that these measures do not represent a development in control technology under CAA section 112(d)(6). We also identified and considered alternatives to conventional solvent borne

coatings during MACT development (*e.g.*, waterborne coatings, low-HAP/high-solids coatings, low energy radiation cured coating) and the presence of facilities using these coatings is reflected in the current MACT standards. We found no other improvements in add-on control technology or other equipment during review of the RBLC, the state operating permits, and subsequent NESHAP that were not already identified and considered during development of the PPP NESHAP.

Finally, we identified no developments in work practices or procedures for the PPP source category that were not previously identified and considered during MACT development.

Based on these findings, we conclude that there have not been any developments in add-on control technology or other equipment not identified and considered during MACT development, nor any improvements in add-on controls, nor any significant changes in the cost (including cost effectiveness) of the add-on controls. Therefore, we are proposing no revisions to the PPP NESHAP pursuant to CAA section 112(d)(6). For further discussion of the technology review results, refer to the *Plastic Parts and Products Technology Review Memo*, in the PPP Docket.

4. What other actions are we proposing for the Surface Coating of Plastic Parts and Products source category?

We are proposing to require electronic submittal of notifications (initial and compliance status), semiannual reports, and performance test reports for PPP surface coating facilities. In addition, we are proposing revisions to the SSM provisions of the MACT rule in order to ensure that they are consistent with the Court decision in *Sierra Club v. EPA*, 551 F. 3d 1019 (D.C. Cir. 2008), which vacated two provisions that exempted sources from the requirement to comply with otherwise applicable CAA section 112(d) emission standards during periods of SSM. We are

proposing to require periodic emissions testing of add-on control devices. We also are proposing to add optional EPA Method 18, to IBR an alternative test method, and to make various technical and editorial changes. Our analyses and proposed changes related to these issues are discussed in the sections below.

*a. Electronic Reporting Requirements*

The EPA is proposing that owners and operators of PPP surface coating facilities submit electronic copies of initial notifications required in 40 CFR 63.9(b) and 63.4510(b), notifications of compliance status required in 40 CFR 63.9(h) and 63.4510(c), performance test reports required in 40 CFR 63.4520(b), and semiannual reports required in 40 CFR 63.4520(a) through the EPA's CDX, using the CEDRI. A description of the EPA's CDX and the EPA's proposed rationale and details on the addition of these electronic reporting requirements for the PPP source category is the same as for the ALDT source category, as discussed in section IV.A.4.a of this preamble. No specific form is proposed at this time for the initial notifications required in 40 CFR 63.9(b) and notifications of compliance status in 40 CFR 63.9(h). Until the EPA has completed electronic forms for these notifications, the notifications will be required to be submitted via CEDRI in PDF. After development of the final forms, we will notify sources about their availability via the CEDRI website and the CHIEF Listserv. For semiannual reports required in 40 CFR 63.4520(a), the proposed rule requires that owners or operators use the appropriate spreadsheet template to submit information to CEDRI. A draft version of the proposed template for this report is included in the docket for this rulemaking.<sup>39</sup> The EPA specifically requests comment on the content, layout, and overall design of the template.

---

<sup>39</sup> See *Electronic Reporting Template for Surface Coating of Plastic Parts and Products Subpart PPPP Semiannual Reports*, in Docket ID NO. EPA-HQ-OAR-2019-0313.

Regarding submittal of performance test reports via the EPA's ERT, as discussed in section IV.A.4.a of this preamble for the ALDT NESHAP, the proposal to submit performance test data electronically to the EPA applies only if the EPA has developed an electronic reporting form for the test method as listed on the EPA's ERT website. For the PPP NESHAP, all of the EPA test methods listed under 40 CFR part 63, subpart PPPP, are currently supported by the ERT, except for EPA Method 18 (an optional test method proposed in this action), which appears in the proposed text for 40 CFR 63.4566. As mentioned above in section IV.A.4.a of this preamble, the rule proposes that should an owner or operator choose to use EPA Method 18, then its results would be submitted in PDF using the attachment module of the ERT.

Also, as discussed in section IV.A.4.a of this preamble for the ALDT NESHAP, we are proposing to provide facilities with the ability to seek extensions for submitting electronic reports for circumstances beyond the control of the facility. In proposed 40 CFR 63.4520(g), we address the situation for facilities subject to the PPP NESHAP where an extension may be warranted due to outages of the EPA's CDX or CEDRI, which may prevent access to the system and submittal of the required reports. In proposed 40 CFR 63.4520(h), we address the situation for facilities subject to the PPP NESHAP where an extension may be warranted due to a force majeure event, which is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents compliance with the requirement to submit a report electronically as required by this rule. Examples of such events are acts of nature, acts of war and terrorism, or equipment failure or safety hazards beyond the control of the facility.

The electronic submittal of the reports addressed in this proposed rulemaking will increase the usefulness of the data contained in those reports, is in keeping with current trends in

data availability and transparency, will further assist in the protection of public health and the environment, will improve compliance by facilitating the ability of regulated facilities to demonstrate compliance with requirements and by facilitating the ability of delegated state, local, tribal, and territorial air agencies and the EPA to assess and determine compliance, and will ultimately reduce burden on regulated facilities, delegated air agencies, and the EPA. Electronic reporting also eliminates paper-based, manual processes, thereby saving time and resources, simplifying data entry, eliminating redundancies, minimizing data reporting errors, and providing data quickly and accurately to the affected facilities, air agencies, the EPA, and the public. Moreover, electronic reporting is consistent with the EPA's plan to implement Executive Order 13563 and is in keeping with the EPA's Agency-wide policy developed in response to the White House's Digital Government Strategy. For more information on the benefits of electronic reporting, *see* the memorandum titled *Electronic Reporting Requirements for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules*, available in Docket ID No. EPA-HQ-OAR-2019-0313.

*b. SSM Requirements*

(1.) Proposed Elimination of the SSM Exemption

The EPA is proposing to eliminate the SSM exemption in the PPP NESHAP. The EPA's proposed rationale for the elimination of the SSM exemption for the PPP source category is the same as for the ALDT source category, which is discussed in section IV.A.4.b.1 of this preamble. We are also proposing several revisions to Table 2 to subpart PPPP of 40 CFR part 63 (Applicability of General Provisions to Subpart PPPP of Part 63, hereafter referred to as the "General Provisions table to subpart PPPP") as is explained in more detail below in section IV.C.4.b.2 of this preamble. For example, we are proposing to eliminate the incorporation of the

General Provisions’ requirement that the source develop an SSM plan. Further, we are proposing to eliminate and revise certain recordkeeping and reporting requirements related to the SSM exemption as further described below. The EPA has attempted to ensure that the provisions we are proposing to eliminate are inappropriate, unnecessary, or redundant in the absence of the SSM exemption. We are specifically seeking comment on the specific proposed deletions and revisions and also whether additional provisions should be revised to achieve the stated goal.

In proposing these rule amendments, the EPA has taken into account startup and shutdown periods and, for the same reasons explained in section IV.A.4.b.1 of this preamble for the ALDT source category, has not proposed alternate standards for those periods in the PPP NESHAP. Startups and shutdowns are part of normal operations for the PPP source category. As currently specified in 40 CFR 63.4500(a), any coating operation(s) for which you use the emission rate with add-on controls option must meet the applicable operating limits in Table 1 to 40 CFR part 63, subpart PPPP “at all times,” except for solvent recovery systems for which you conduct liquid-liquid material balances according to 40 CFR 63.4561(j). (Solvent recovery systems for which you conduct a liquid-liquid material balance require a monthly calculation of the solvent recovery device’s collection and recovery efficiency for volatile organic matter.)

Also, as currently specified in 40 CFR 63.4500(a)(2), any coating operation(s) for which you use the emission rate with add-on controls option must be in compliance “at all times” with the applicable emission limit in 40 CFR 63.4490. During startup and shutdown periods, in order for a facility (using add-on controls to meet the standards) to meet the emission and operating standards, the control device for a coating operation needs to be turned on and operating at specified levels before the facility begins coating operations, and the control equipment needs to continue to be operated until after the facility ceases coating operations. In some cases, the

facility needs to run thermal oxidizers on supplemental fuel before VOC levels are sufficient for the combustion to be (nearly) self-sustaining. Note that we are also proposing new related language in 40 CFR 63.4500(b) to require that the owner or operator operate and maintain the coating operation, including pollution control equipment, at all times to minimize emissions. *See* section IV.A.4.b.2 of this preamble for further discussion of this proposed revision.

Although no statutory language compels the EPA to set standards for malfunctions, the EPA has the discretion to do so where feasible, as discussed previously in section IV.A.4.b.1 of this preamble for the ALDT source category.

It is unlikely that a malfunction would result in a violation of the standards during PPP surface coatings operations for facilities using the compliant material option or the emission rate without add-on controls option. Facilities using these options have demonstrated that the organic HAP contents of the coating materials do not exceed the emission limits in 40 CFR 63.4490(a) or (b), either on a coating-by-coating basis or by using averaging among coatings.

A malfunction event is more likely for PPP coating facilities that use the emission rate with add-on controls option. For this option, facilities must demonstrate that the average emission rate does not exceed the emission limits in 40 CFR 63.4490(a) or (b), and the facility is complying with the control device operating limits listed in Table 1 to 40 CFR part 63, subpart PPPP of the PPP NESHAP. The operating limits are specific to the type of control device and established by the facility during its initial performance test.

In the unlikely event that a source fails to comply with the applicable CAA section 112(d) standards as a result of a malfunction event, the EPA would determine an appropriate response based on, among other things, the good faith efforts of the source to minimize emissions during malfunction periods, including preventative and corrective actions, as well as

root cause analyses to ascertain and rectify excess emissions. Refer to section IV.A.4.b.1 of this preamble for further discussion of the EPA's actions in response to a source failing to comply with the applicable CAA section 112(d) standards as a result of a malfunction event for the ALDT source category, which applies to this source category.

(2.) Proposed Revisions to the General Provisions Applicability Table

*40 CFR 63.4500(b) General duty.* We are proposing to revise the General Provisions table to subpart PPPP (Table 2) entry for 40 CFR 63.6(e)(1)(i) by changing the “yes” in column 3 to a “no.” Section 63.6(e)(1)(i) describes the general duty to minimize emissions. Some of the language in that section is no longer necessary or appropriate in light of the elimination of the SSM exemption. We are proposing instead to add general duty regulatory text at 40 CFR 63.4500(b) that reflects the general duty to minimize emissions while eliminating the reference to periods covered by an SSM exemption. The current language in 40 CFR 63.6(e)(1)(i) characterizes what the general duty entails during periods of SSM. With the elimination of the SSM exemption, there is no need to differentiate between normal operations, startup and shutdown, and malfunction events in describing the general duty. Therefore, the language the EPA is proposing for 40 CFR 63.4500(b) does not include that language from 40 CFR 63.6(e)(1).

We are also proposing to revise the General Provisions table to subpart PPPP (Table 2) entry for 40 CFR 63.6(e)(1)(ii) by changing the “yes” in column 3 to a “no.” Section 63.6(e)(1)(ii) imposes requirements that are not necessary with the elimination of the SSM exemption or are redundant with the general duty requirement being added at 40 CFR 63.4500(b).



*SSM plan.* We are proposing to revise the General Provisions table to subpart PPPP (Table 2) entry for 40 CFR 63.6(e)(3) by changing the “yes” in column 3 to a “no.” Generally, these paragraphs require development of an SSM plan and specify SSM recordkeeping and reporting requirements related to the SSM plan. We are also proposing to remove from 40 CFR part 63, subpart PPPP, the current provisions requiring the SSM plan in 40 CFR 63.4500(c) and requiring reporting related to the SSM plan in 40 CFR 63.4520(c). As noted, the EPA is proposing to remove the SSM exemptions. Therefore, affected units will be subject to an emission standard during such events. The applicability of a standard during such events will ensure that sources have ample incentive to plan for and achieve compliance, and, thus, the SSM plan requirements are no longer necessary.

*Compliance with standards.* We are proposing to revise the General Provisions table to subpart PPPP (Table 2) entry for 40 CFR 63.6(f)(1) by changing the “yes” in column 3 to a “no.” The current language of 40 CFR 63.6(f)(1) exempts sources from non-opacity standards during periods of SSM. As discussed above, the Court in *Sierra Club* vacated the exemptions contained in this provision and held that the CAA requires that some CAA section 112 standards apply continuously. Consistent with *Sierra Club*, the EPA is proposing to revise standards in this rule to apply at all times.

*40 CFR 63.4564 Performance testing.* We are proposing to revise the General Provisions table to subpart PPPP (Table 2) entry for 40 CFR 63.7(e)(1) by changing the “yes” in column 3 to a “no.” Section 63.7(e)(1) describes performance testing requirements. The EPA is instead proposing to add a performance testing requirement at 40 CFR 63.4564(a)(1). The performance testing requirements we are proposing to add differ from the General Provisions performance testing provisions in several respects. The regulatory text does not include the language in 40

CFR 63.7(e)(1) that restated the SSM exemption and language that precluded startup and shutdown periods from being considered “representative” for purposes of performance testing. Also, the proposed performance testing provisions will not allow performance testing during startup or shutdown. As in 40 CFR 63.7(e)(1), performance tests conducted under this subpart should not be conducted during malfunctions because conditions during malfunctions are often not representative of normal operating conditions. Section 63.7(e) requires that the owner or operator maintain records of the process information necessary to document operating conditions during the test and include in such records an explanation to support that such conditions represent normal operation. The EPA is proposing to add language clarifying that the owner or operator must make such records available to the Administrator upon request.

*Monitoring.* We are proposing to revise the General Provisions table to subpart PPPP (Table 2) entry for 40 CFR 63.8(a)(4) by changing the “yes” in column 3 to a “no.” Section 63.8(a)(4) describes additional monitoring requirements for control devices. Subpart PPPP of 40 CFR part 63 does not have monitoring requirements for flares.

We are proposing to revise the General Provisions table to subpart PPPP (Table 2) entry for 40 CFR 63.8(c)(1) by changing the “yes” in column 3 to a “no.” The cross-references to the general duty and SSM plan requirements in those subparagraphs are not necessary in light of other requirements of 40 CFR 63.8 that require good air pollution control practices (40 CFR 63.8(c)(1)) and that set out the requirements of a quality control program for monitoring equipment (40 CFR 63.8(d)). Further, we are proposing to revise 40 CFR 63.4568(a) to add a requirement to maintain the monitoring equipment at all times in accordance with 40 CFR 63.4500(b) and keep the necessary parts readily available for routine repairs of the monitoring

equipment, consistent with the requirements in 40 CFR 63.8(c)(1)(ii). The reference to 40 CFR 63.8(c)(1)(ii) is no longer needed since it is redundant to the requirement in 40 CFR 63.4568(a).

*40 CFR 63.4530 Recordkeeping.* We are proposing to revise the General Provisions table to subpart P (Table 2) entry for 40 CFR 63.10(b)(2)(i) by changing the “yes” in column 3 to a “no.” Section 63.10(b)(2)(i) describes the recordkeeping requirements during startup and shutdown. These recording provisions are no longer necessary because the EPA is proposing that recordkeeping and reporting applicable to normal operations will apply to startup and shutdown. In the absence of special provisions applicable to startup and shutdown, such as a startup and shutdown plan, there is no reason to retain additional recordkeeping for startup and shutdown periods.

We are proposing to revise the General Provisions table to subpart P (Table 2) entry for 40 CFR 63.10(b)(2)(ii) by changing the “yes” in column 3 to a “no.” Section 63.10(b)(2)(ii) describes the recordkeeping requirements during a malfunction, requiring a record of “the occurrence and duration of each malfunction.” A similar record is already required in 40 CFR 63.4530(h), which requires a record of “the date, time, and duration of each deviation,” which the EPA is retaining. The regulatory text in 40 CFR 63.4530(h) differs from the General Provisions in that the General Provisions requires the creation and retention of a record of the occurrence and duration of each malfunction of process, air pollution control, and monitoring equipment; whereas 40 CFR 63.4530(h) applies to any failure to meet an applicable standard and is requiring that the source record the date, time, and duration of the failure rather than the “occurrence.” The EPA is also proposing to add to 40 CFR 63.4530(h) a requirement that sources also keep records that include a list of the affected source or equipment and actions taken to minimize emissions, an estimate of the quantity of each regulated pollutant emitted over the

emission limit for which the source failed to meet the standard, and a description of the method used to estimate the emissions. Examples of such methods would include product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters (*e.g.*, coating HAP content and application rates and control device efficiencies). The EPA proposes to require that sources keep records of this information to ensure that there is adequate information to allow the EPA to determine the severity of any failure to meet a standard, and to provide data that may document how the source met the general duty to minimize emissions when the source has failed to meet an applicable standard.

We are proposing to revise the General Provisions table to subpart PPPP (Table 2) entry for 40 CFR 63.10(b)(2)(iv) by changing the “yes” in column 3 to a “no.” When applicable, the provision requires sources to record actions taken during SSM events when actions were inconsistent with their SSM plan. The requirement is no longer appropriate because SSM plans will no longer be required. The requirement previously applicable under 40 CFR 63.10(b)(2)(iv)(B) to record actions to minimize emissions and record corrective actions is now applicable by reference to 40 CFR 63.4530(h)(4).

We are proposing to revise the General Provisions table to subpart PPPP (Table 2) entry for 40 CFR 63.10(b)(2)(v) by changing the “yes” in column 3 to a “no.” When applicable, the provision requires sources to record actions taken during SSM events to show that actions taken were consistent with their SSM plan. The requirement is no longer appropriate because SSM plans will no longer be required.

We are proposing to revise the General Provisions table to subpart PPPP (Table 2) entry for 40 CFR 63.10(b)(2)(x)-(xiii) by changing the “yes” in column 3 to a “no.” When applicable, the provision requires sources to record actions taken during SSM events to show that actions

taken were consistent with their SSM plan. The requirement is no longer appropriate because SSM plans will no longer be required.

*40 CFR 63.4520 Reporting.* We are proposing to revise the General Provisions table to subpart PPPP (Table 2) entry for 40 CFR 63.10(d)(5) by changing the “yes” in column 3 to a “no.” Section 63.10(d)(5) describes the reporting requirements for startups, shutdowns, and malfunctions. To replace the General Provisions reporting requirement, the EPA is proposing to add reporting requirements to 40 CFR 63.4520(a)(7). The replacement language differs from the General Provisions requirement in that it eliminates periodic SSM reports as a stand-alone report. We are proposing language that requires sources that fail to meet an applicable standard at any time to report the information concerning such events in the semi-annual compliance report already required under this rule. Subpart PPPP of 40 CFR part 63 currently requires reporting of the date, time period, and cause of each deviation. We are clarifying in the rule that, if the cause of a deviation from a standard is unknown, this should be specified in the report. We are also proposing to change “date and time period” or “date and time” to “date, time, and duration” (*see* proposed revisions to 40 CFR 63.4520(a)(7)(vi), 63.4520(a)(7)(viii), and 63.4520(a)(7)(xiii)). Further, we are proposing that the report must also contain the number of deviations from the standard and a list of the affected sources or equipment. For deviation reports addressing deviations from an applicable emission limit in 40 CFR 63.4490 or operating limit in Table 1 to 40 CFR part 63, subpart PPPP, we are proposing that the report also include an estimate of the quantity of each regulated pollutant emitted over any emission limit for which the source failed to meet the standard, and a description of the method used to estimate the emissions.

Regarding the proposed new requirement discussed above to estimate the quantity of each regulated pollutant emitted over any emission limit for which the source failed to meet the

standard, and a description of the method used to estimate the emissions, examples of such methods would include product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters (*e.g.*, coating HAP content and application rates and control device efficiencies). The EPA is proposing this requirement to ensure that there is adequate information to determine compliance, to allow the EPA to determine the severity of the failure to meet an applicable standard, and to provide data that may document how the source met the general duty to minimize emissions during a failure to meet an applicable standard.

We will no longer require owners or operators to determine whether actions taken to correct a malfunction are consistent with an SSM plan, because plans would no longer be required. The proposed amendments, therefore, eliminate 40 CFR 63.4520(c) that requires reporting of whether the source deviated from its SSM plan, including required actions to communicate with the Administrator, and the cross-reference to 40 CFR 63.10(d)(5) that contains the description of the previously required SSM report format and submittal schedule from this section. These specifications are no longer necessary because the events will be reported in otherwise required reports with similar format and submittal requirements.

We are proposing to remove the requirements in 40 CFR 63.4520(a)(7)(viii) that deviation reports must specify whether a deviation from an operating limit occurred during a period of SSM. We are also proposing to remove the requirements in 40 CFR 63.4520(a)(7)(viii) to break down the total duration of deviations into the startup and shutdown categories. As discussed above in this section, we are proposing to require reporting of the cause of each deviation. Further, the startup and shutdown categories no longer apply because these periods are

proposed to be considered normal operation, as discussed in section IV.A.4.b.1 of this preamble for the ALDT source category, which also applies to this source category.

*c. Technical Amendments to the Plastic Parts and Products NESHAP*

We propose to amend 40 CFR 63.4566(b)(4) to add the option of conducting EPA Method 18 of appendix A to 40 CFR part 60, “Measurement of Gaseous Organic Compound Emissions by Gas Chromatography,” to measure and then subtract methane emissions from measured total gaseous organic mass emissions as carbon. Facilities using the emission rate with add-on control compliance option can use either EPA Method 25 or EPA Method 25A to measure control device destruction efficiency. Unlike EPA Method 25, EPA Method 25A does not exclude methane from the measurement of organic emissions. Because exhaust streams from coating operations may contain methane from natural gas combustion, we are proposing to allow facilities the option to measure methane using EPA Method 18 and to subtract the methane from the emissions as part of their compliance calculations. We also propose to revise the format of references to test methods in 40 CFR part 60. The current references in 40 CFR 63.4566(a) to EPA Methods 1, 1A, 2, 2A, 2C, 2D, 2F, 2G, 3, 3A, 3B, 4, 25, and 25A specify that each method is in “appendix A” of 40 CFR part 60. Appendix A of 40 CFR part 60 has been divided into appendices A-1 through A-8. We propose to revise each reference to appendix A to indicate which of the eight sections of appendix A applies to the method.

We propose to amend 40 CFR 63.4541(a)(1)(i) and 63.4541(a)(4), which describe how to demonstrate compliance with the emission limitations using the compliant material option, and the definition of “non-HAP coating” in 40 CFR 63.4581, to remove references to OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4). The reference to OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) is intended to specify which compounds

must be included in calculating total organic HAP content of a coating material if they are present at 0.1 percent or greater by mass. We propose to remove this reference because 29 CFR 1910.1200(d)(4) has been amended and no longer readily defines which compounds are carcinogens. We propose to replace these references to OSHA-defined carcinogens at 29 CFR 1910.1200(d)(4) with a list (in proposed new Table 5 to 40 CFR part 63, subpart PPPP) of those organic HAP that must be included in calculating total organic HAP content of a coating material if they are present at 0.1-percent or greater by mass.

We propose to include organic HAP in proposed Table 5 to 40 CFR part 63, subpart PPPP if they were categorized in the EPA's *Prioritized Chronic Dose-Response Values for Screening Risk Assessments* (dated May 9, 2014), as a "human carcinogen," "probable human carcinogen," or "possible human carcinogen" according to *The Risk Assessment Guidelines of 1986* (EPA/600/8-87/045, August 1987),<sup>40</sup> or as "carcinogenic to humans," "likely to be carcinogenic to humans," or with "suggestive evidence of carcinogenic potential" according to the *Guidelines for Carcinogen Risk Assessment* (EPA/630/P-03/001F, March 2005).

Current 40 CFR 63.4530 specifies records that must be maintained. We propose to add clarification to this provision at 40 CFR 63.4530(a) that specifies the allowance to retain electronic records applies to all records that were submitted as reports electronically via the EPA's CEDRI. We also propose to add text to the same provision clarifying that this ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

---

<sup>40</sup> See <https://www.epa.gov/fera/dose-response-assessment-assessing-health-risks-associated-exposure-hazardous-air-pollutants>.



We propose to clarify and harmonize the general requirement in 40 CFR 63.4500(b) with the reporting requirement in 40 CFR 63.4520(a)(5), 63.4520(a)(6), and 63.4520(a)(7), and the recordkeeping requirement in 40 CFR 63.4530(h)(4).

*d. Ongoing Emissions Compliance Demonstrations*

As part of an ongoing effort to improve compliance with various federal air emission regulations, the EPA reviewed the compliance demonstration requirements in the PPP NESHAP. Currently, if a source owner or operator chooses to comply with the standards using add-on controls, the results of an initial performance test are used to determine compliance; however, the rule does not require on-going periodic performance testing for these emission capture systems and add-on controls. In this action, we are proposing to require periodic testing of add-on control devices, in addition to the one-time initial emissions and capture efficiency testing, and ongoing temperature measurement, to ensure ongoing compliance with the standards.

As described more fully in section IV.A.4.d of this preamble for the ALDT source category, the EPA documented potential operational problems associated with control devices in several publications;<sup>41</sup> the ICAC, in their comments on a separate rulemaking on the proposed revisions related to the NESHAP General Provisions (72 FR 69, January 3, 2007), commented that ongoing maintenance and checks of control devices are necessary in order to ensure emissions control technology, including both thermal and catalytic oxidizers, remains effective;<sup>42</sup>

---

<sup>41</sup> See *Control Techniques for Volatile Organic Compound Emissions from Stationary Sources*, EPA/453/R-92-018, December 1992, *Control Technologies for Emissions from Stationary Sources*, EPA/625/6-91/014, June 1991, and *Survey of Control for Low Concentration Organic Vapor Gas Streams*, EPA-456/R-95-003, May 1995. These documents can be found in the Automobiles and Light-Duty Trucks, Miscellaneous Metal Parts, and Plastic Parts and Products Dockets for this action.

<sup>42</sup> See Docket Item No. EPA-HQ-OAR-2004-0094-0173, available at [www.regulations.gov](http://www.regulations.gov). A copy of the ICAC's comments on the proposed revisions to the General Provisions is also included in the Automobiles and Light-Duty Trucks, Miscellaneous Metal Parts, and Plastic Parts and Products Dockets for this action.

and state websites list CAA enforcement information that further corroborates the potential problems identified by the EPA and ICAC comments and conclusions.

Given the need for vigilance in maintaining equipment to stem degradation, the EPA is proposing to require periodic testing of add-on control devices, in addition to the one-time initial emissions and capture efficiency testing and ongoing temperature measurement, to ensure ongoing compliance with the PPP NESHAP.

In this action, the EPA is requiring periodic performance testing of add-on control devices on a regular frequency (*e.g.*, every 5 years) to ensure the equipment continues to operate properly for facilities using the emission rate with add-on controls compliance option. We note that about half of the state operating permits for existing plastic parts coating sources already require such testing every 5 years synchronized with 40 CFR part 70 air operating permit renewals. This proposed periodic testing requirement includes an exception to the general requirement for periodic testing for facilities using the catalytic oxidizer control option at 40 CFR 63.4567(b) and following the catalyst maintenance procedures in 40 CFR 63.4567(b)(4). This exception is due to the catalyst maintenance procedures that already require annual testing of the catalyst and other maintenance procedures that provide ongoing demonstrations that the control system is operating properly and may, thus, be considered comparable to conducting a performance test.

The proposed periodic performance testing requirement allows an exception from periodic testing for facilities using instruments to continuously measure emissions. Such CEMS would show actual emissions. The use of CEMS to demonstrate compliance would obviate the need for periodic oxidizer testing. Moreover, installation and operation of a CEMS with a timesharing component, such that values from more than one oxidizer exhaust could be tabulated

in a recurring frequency, could prove less expensive (estimated to have an annual cost below \$15,000) than ongoing oxidizer testing.

This proposed requirement would not require periodic testing or CEMS monitoring of facilities using the compliant material or the emission rate without add-on controls options because these compliance options do not use any add-on controls or control efficiency measurements in the compliance calculations.

The proposed periodic performance testing requirement would require that facilities complying with the standards using emission capture systems and add-on controls and which are not already on a 5-year testing schedule to conduct the first of the periodic performance tests within 3 years of the effective date of the revised standards. Afterward, they would conduct the periodic testing before they renew their operating permits, but no longer than 5 years following the previous performance test. Additionally, facilities that have already tested as a condition of their permit within the last 2 years before the effective date would be permitted to maintain their current 5-year schedule and not be required to move up the date of the next test to the 3-year date specified above. This proposed requirement would require periodic air emissions testing to measure organic HAP destruction or removal efficiency at the inlet and outlet of the add-on control device. The emissions would be measured as total gaseous organic mass emissions as carbon using either EPA Method 25 or 25A of appendix A-7 to 40 CFR part 60, which are the methods currently required for the initial compliance demonstration.

We estimate that the cost to perform a control device emissions destruction or removal efficiency test using EPA Method 25 or 25A would be approximately \$19,000 per control device. The cost estimate is included in the memorandum titled *Draft Costs/Impacts of the 40 CFR Part 63 Subparts IIII, MMMM and PPPP Monitoring Review Revisions*, in the ALDT,

MMPP, and PPP Dockets. We have reviewed the operating permits for facilities subject to the several other surface coating NESHAP, and we found that affected sources currently using emission capture systems and add-on controls are often, but not always, required to conduct periodic control device performance tests as a condition of their 40 CFR part 70 operating permits. We estimate that three PPP surface coating facilities currently are not required to conduct periodic testing of their control devices as a condition of their permit renewal. Periodic performance tests ensure that all control systems used to comply with the NESHAP would be properly maintained over time, thereby reducing the potential for acute emissions episodes and non-compliance.

We are requesting comment on adding periodic testing of add-on control devices to the PPP NESHAP and on the suggested 5-year schedule for the periodic testing.

*e. IBR of Alternative Test Methods under 1 CFR part 51*

The EPA is proposing new and updated test methods for the PPP NESHAP that include IBR. In accordance with requirements of 1 CFR 51.5, the EPA is proposing to add the following optional EPA method and incorporate by reference the VCS described in the amendments to 40 CFR 63.14:

- EPA Method 18 of appendix A to 40 CFR part 60, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography, proposed for 40 CFR 63.4566(b)(4);
- ASTM Method D1475-13, Standard Test Method for Density of Liquid Coatings, Inks, and Related Products, proposed to be IBR approved for 40 CFR 63.4551(c);
- ASTM Method D2111-10 (2015), Standard Test Methods for Specific Gravity of Halogenated Organic Solvents and Their Admixtures, proposed to be IBR approved for 40 CFR 63.4551(c); and

- ASTM Method D2369-10 (2015), Test Method for Volatile Content of Coatings, proposed to be IBR approved for 40 CFR 63.4541(a)(2) and 63.4561(j)(3).

An older version of ASTM Method D1475 was incorporated by reference when the PPP NESHAP was originally promulgated (69 FR 20968, April 19, 2004). We are proposing to replace the older version of this method with an updated version, which requires IBR revisions. The updated version of the method replaces the older version in the same paragraph of the rule text. We are also proposing the addition of EPA Method 18 and incorporating by reference ASTM Methods D2111 and D2369 to the PPP NESHAP for the first time in this rulemaking. Refer to section VIII.J of this preamble for further discussion of these VCS.

#### 5. What compliance dates are we proposing?

The EPA is proposing that affected sources must comply with all of the amendments, with the exception of the proposed electronic format for submitting semiannual compliance reports, no later than 181 days after the effective date of the final rule. All affected facilities would have to continue to meet the current requirements of 40 CFR part 63, subpart PPPP until the applicable compliance date of the amended rule. The final action is not expected to be a “major rule” as defined by 5 U.S.C. 804(2), so the effective date of the final rule will be the promulgation date as specified in CAA section 112(d)(10).

For existing sources, we are proposing two changes that would impact ongoing compliance requirements for 40 CFR part 63, subpart PPPP. As discussed elsewhere in this preamble, we are proposing to add a requirement that notifications, performance test results, and semiannual compliance reports be submitted electronically. We are proposing that the semiannual compliance report be submitted electronically using a new template, which is available for review and comment as part of this action. We are also proposing to change the

requirements for SSM by removing the exemption from the requirements to meet the standard during SSM periods and by removing the requirement to develop and implement an SSM plan. Our experience with similar industries that are required to convert reporting mechanisms to install necessary hardware and software, become familiar with the process of submitting performance test results electronically through the EPA's CEDRI, test these new electronic submission capabilities, and reliably employ electronic reporting shows that a time period of a minimum of 90 days, and, more typically, 180 days is generally necessary to successfully accomplish these revisions. Our experience with similar industries further shows that this sort of regulated facility generally requires a time period of 180 days to read and understand the amended rule requirements; to evaluate their operations to ensure that they can meet the standards during periods of startup and shutdown as defined in the rule and make any necessary adjustments; and to update their operation, maintenance, and monitoring plan to reflect the revised requirements. The EPA recognizes the confusion that multiple different compliance dates for individual requirements would create and the additional burden such an assortment of dates would impose. From our assessment of the time frame needed for compliance with the entirety of the revised requirements, the EPA considers a period of 180 days to be the most expeditious compliance period practicable and, thus, is proposing that existing affected sources be in compliance with all of this regulation's revised requirements within 181 days of the regulation's effective date.

We solicit comment on these proposed compliance periods, and we specifically request submission of information from sources in this source category regarding specific actions that would need to be undertaken to comply with the proposed amended requirements and the time

needed to make the adjustments for compliance with any of the revised requirements. We note that information provided may result in changes to the proposed compliance dates.

#### D. Proposed Corrections to Earlier Subparts.

We are proposing the following corrections to three subparts that were amended in a final rule notice published in the **Federal Register** on March 15, 2019 (84 FR 9590). The proposed corrections are to the NESHAP for Surface Coating of Large Appliances (40 CFR part 63, subpart NNNN); the NESHAP for Printing, Coating, and Dyeing of Fabrics and Other Textiles (40 CFR part 63, subpart OOOO); and the NESHAP for Surface Coating of Metal Furniture (40 CFR part 63, subpart RRRR). Note that these proposed corrections are not published in the amendatory rule text in the **Federal Register** (*see* 84 FR 9590) and are discussed below.

We are proposing to correct 40 CFR 63.4168 of subpart NNNN. The original instructions to 40 CFR 63.4168 in the final rule were, “Section 63.4168 is amended by revising paragraphs (a)(4) and (5) and (c)(2) and (3) to read as follows...” (84 FR 9618). The instructions should have said, “Section 63.4168 is amended by revising paragraphs (a)(4) and (5) and (c)(2) and *the introductory text of* (c)(3) to read as follows...” As a result, the subparagraphs 40 CFR 63.4168(c)(3)(i) through (iii), which were not intended to be affected by this action, were deleted in the CFR. We are proposing to insert these paragraphs back into the CFR. Please submit any comments on this proposed correction to the docket for the Surface Coating of Large Appliances (Docket ID No. EPA-HQ-OAR-2017-0670).

We are proposing to correct 40 CFR 63.4371 of subpart OOOO. The instructions in the final rule were to revise the definition of “Deviation,” but the amendatory text contained revised definitions of “Deviation” and “No organic HAP.” The current definition of “No organic HAP” in the CFR contains a reference that is no longer accurate. The instruction to revise the definition

of “No organic HAP” was inadvertently deleted; and, the new definition was not inserted. We are proposing to insert this new definition as indicated in the amendatory language in the final rule (84 FR 9631, March 15, 2019). Please submit any comments on this proposed correction to the docket for the Printing, Coating, and Dyeing of Fabrics and Other Textiles (Docket ID No. EPA-HQ-OAR-2017-0668).

We are proposing to correct 40 CFR 63.4965 of subpart RRRR. The original instructions to 40 CFR 63.4965 in the final rule were, “Section 63.4965 is amended by revising paragraphs (a)(1) through (4) and paragraph (b) to read as follows...” (84 FR 9641). The instructions should have said, “Section 63.4965 is amended by revising paragraphs (a)(1) through (4) and *the introductory text of paragraph (b)* to read as follows...” As a result, the subparagraphs 40 CFR 63.4965(b)(1) through (3), which were not intended to be affected by this action, were deleted in the CFR. We are proposing to insert these paragraphs back into the CFR. Please submit any comments on this proposed correction to the docket for the Surface Coating of Metal Furniture (Docket ID No. EPA-HQ-OAR-2017-0669).

## **V. Summary of Cost, Environmental, and Economic Impacts**

### *A. What are the affected sources?*

Currently, we estimate 43 major source facilities are subject to the ALDT NESHAP and operating in the United States. The affected source under the NESHAP is the collection of all coating operations; all storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored or mixed; all manual and automated equipment and containers used for conveying coatings, thinners, and cleaning materials; and all storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation. A coating operation is defined as the 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 40 CFR part 63, subpart IIII.

Currently, we estimate 368 major source facilities are subject to the MMPP NESHAP and operating in the United States. The affected source under the NESHAP is the collection of all coating operations; all storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored or mixed; all manual and automated equipment and containers used for conveying coatings, thinners, and cleaning materials; and all storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation. A coating operation is defined as the equipment used to apply cleaning materials to a substrate to prepare it for coating application (surface preparation) or to remove dried coating; to apply coating to a substrate (coating application) and to dry or cure the coating after application; or to clean coating operation equipment (equipment cleaning). A single coating operation may include any combination of these types of equipment, but always includes at least the point at which a given quantity of coating or cleaning material is applied to a given part and all subsequent points in the affected source where organic HAP are emitted from the specific quantity of coating or cleaning material on the specific part. There may be multiple coating

operations in an affected source. Coating application with handheld, non-refillable aerosol containers, touch-up markers, or marking pens is not a coating operation for the purposes of 40 CFR part 63, subpart MMMM.

Currently, we estimate 125 major source facilities are subject to the PPP NESHAP and operating in the United States. The affected source under the NESHAP is the collection of coating operations; all storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored or mixed; all manual and automated equipment and containers used for conveying coatings, thinners, and cleaning materials; and all storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation. A coating operation is defined as the equipment used to apply cleaning materials to a substrate to prepare it for coating application (surface preparation) or to remove dried coating; to apply coating to a substrate (coating application) and to dry or cure the coating after application; or to clean coating operation equipment (equipment cleaning). A single coating operation may include any combination of these types of equipment, but always includes at least the point at which a given quantity of coating or cleaning material is applied to a given part and all subsequent points in the affected source where organic HAP are emitted from the specific quantity of coating or cleaning material on the specific part. There may be multiple coating operations in an affected source. Coating application with handheld, non-refillable aerosol containers, touch-up markers, or marking pens is not a coating operation for the purposes of 40 CFR part 63, subpart PPPP.

*B. What are the air quality impacts?*

At the current level of control, estimated emissions of volatile organic HAP from the 43 facilities in the ALDT source category are approximately 1,700 tpy. Current estimated emissions

of volatile organic HAP from the 368 facilities in the MMPP source category are approximately 2,700 tpy. Current estimated emissions of volatile organic HAP from the 125 facilities in the PPP source category are approximately 760 tpy.

The proposed amendments require that all major sources in the ALDT, MMPP, and PPP source categories comply with the relevant emission standards at all times, including periods of SSM. We were unable to quantify the emissions that occur during periods of SSM or the specific emissions reductions that would occur as a result of this action. However, eliminating the SSM exemption has the potential to reduce emissions by requiring facilities to meet the applicable standard during SSM periods.

Indirect or secondary air emissions impacts are impacts that would result from the increased electricity usage associated with the operation of control devices (*e.g.*, increased secondary emissions of criteria pollutants from power plants). Energy impacts consist of the electricity and steam needed to operate control devices and other equipment. The proposed amendments would have no effect on the energy needs of the affected facilities in any of the three source categories and would, therefore, have no indirect or secondary air emissions impacts.

*C. What are the cost impacts?*

We estimate that each facility in these three source categories will experience costs as a result of these proposed amendments that are estimated as part of the reporting and recordkeeping costs. Each facility will experience costs to read and understand the rule amendments. Costs associated with elimination of the SSM exemption were estimated as part of the reporting and recordkeeping costs and include time for re-evaluating previously developed SSM record systems. Costs associated with the requirement to electronically submit notifications

and semi-annual compliance reports using CEDRI were estimated as part of the reporting and recordkeeping costs and include time for becoming familiar with CEDRI and the reporting template for semi-annual compliance reports. The recordkeeping and reporting costs are presented in section V.III.C of this preamble.

We are also proposing a requirement for performance testing no less frequently than every 5 years for sources in each source category using the add-on controls compliance options. We estimate that five major source facilities subject to the ALDT NESHAP would incur costs to conduct periodic testing because they are currently using the emission rate with add-on controls compliance option. This total does not include facilities in the source category that have add-on controls and are currently required to perform periodic performance testing as a condition of their state operating permit. The cost for a facility to conduct a destruction or removal efficiency performance test using EPA Method 25 or 25A is estimated to be about \$19,000, and the total cost for all five facilities subject to the ALDT NESHAP in a single year would be \$95,000. Similarly, we estimate that seven major source facilities subject to the MMPP NESHAP would incur costs to conduct periodic testing because they are currently using the emission rate with add-on controls compliance option, at a total cost in a single year of \$133,000. Finally, we estimate that three major source facilities subject to the PPP NESHAP, at a cost in a single year of \$57,000. For further information on the potential costs, *see* the memorandum titled *Draft Costs/Impacts of the 40 CFR Part 63 Subparts IIII, MMMM, and PPPP Monitoring Review Revisions*, June 2019, in the ALDT, MMPP, and PPP Dockets.

#### *D. What are the economic impacts?*

The economic impact analysis is designed to inform decision makers about the potential economic consequences of a regulatory action. For the current proposals, the EPA estimated the

cost of becoming familiar with the rule and re-evaluating previously developed SSM record systems and performing periodic emissions testing at certain facilities with add-on controls that are not already required to perform testing. To assess the maximum potential impact, the largest cost expected to be experienced in any one year is compared to the total sales for the ultimate owner of the affected facilities to estimate the total burden for each facility.

For the proposed revisions to the ALDT NESHAP, the total cost is estimated to be approximately \$110,000 for the 43 affected entities in the first year of the rule, and an additional \$120,000 in testing and reporting costs for five facilities in the third year of the rule and every 5 years thereafter. The 43 affected facilities are owned by 14 different parent companies, and the total costs associated with the proposed requirements range from 0.000002 to 0.0056 percent of annual sales revenue per ultimate owner. These costs are not expected to result in a significant market impact, regardless of whether they are passed on to the purchaser or absorbed by the firms.

For the proposed revisions to the MMPP NESHAP, the total cost is estimated to be approximately \$960,000 for the 368 affected entities in the first year of the rule, and an additional \$170,000 in testing and reporting costs for seven facilities in the third year of the rule and every 5 years thereafter. The 368 affected facilities are owned by 265 different parent companies, and the total costs associated with the proposed requirements range from 0.000002 to 0.25 percent of annual sales revenue per ultimate owner. These costs are not expected to result in a significant market impact, regardless of whether they are passed on to the purchaser or absorbed by the firms.

For the proposed revisions to the PPP NESHAP, the total cost is estimated to be approximately \$330,000 for the 125 affected entities in the first year of the rule, and an

additional \$74,000 in testing and reporting costs for three facilities in the third year of the rule and every 5 years thereafter. The 125 affected facilities are owned by 94 different parent companies, and the total costs associated with the proposed requirements range from 0.000008 to 0.22 percent of annual sales revenue per ultimate owner. These costs are not expected to result in a significant market impact, regardless of whether they are passed on to the purchaser or absorbed by the firms.

The EPA also prepared a small business screening assessment to determine whether any of the identified affected entities are small entities, as defined by the U.S. Small Business Administration. One of the facilities potentially affected by the proposed revisions to the ALDT NESHAP is a small entity. However, the annualized costs associated with the proposed requirement is 0.0056 percent of annual sales revenue for the owner of that facility. Of the facilities potentially affected by the proposed revisions to the MMPP NESHAP, 110 are small entities. However, the annualized costs associated with the proposed requirements for the 103 ultimate owners of these 110 affected small entities range from 0.001 to 0.25 percent of annual sales revenues per ultimate owner. Of the facilities potentially affected by the proposed revisions to the PPP NESHAP, 35 are small entities. However, the annualized costs associated with the proposed requirements for the 35 ultimate owners of these 35 affected small entities range from 0.0009 to 0.22 percent of annual sales revenues per ultimate owner. Therefore, there are no significant economic impacts on a substantial number of small entities from these proposed amendments.

*E. What are the benefits?*

As stated above in section V.B. of this preamble, we were unable to quantify the specific emissions reductions associated with eliminating the SSM exemption, although this proposed change has the potential to reduce emissions of volatile organic HAP.

Because these proposed amendments are not considered economically significant, as defined by Executive Order 12866, we did not monetize the benefits of reducing these emissions. This does not mean that there are no benefits associated with the potential reduction in volatile organic HAP from this rule.

## **VI. Request for Comments**

We solicit comments on this proposed action. In addition to general comments on this proposed action, we are also interested in additional data that may improve the risk assessments and other analyses. We are specifically interested in receiving any improvements to the data used in the site-specific emissions profiles used for risk modeling. Such data should include supporting documentation in sufficient detail to allow characterization of the quality and representativeness of the data or information. Section VII of this preamble provides more information on submitting data.

## **VII. Submitting Data Corrections**

The site-specific emissions profiles used in the source category risk and demographic analyses and instructions are available for download on the RTR website at <https://www.epa.gov/stationary-sources-air-pollution/surface-coating-automobiles-and-light-duty-trucks-national-emission>, for the ALDT NESHAP; <https://www.epa.gov/stationary-sources-air-pollution/surface-coating-miscellaneous-metal-parts-and-products-national> for the MMPP NESHAP; and <https://www.epa.gov/stationary-sources-air-pollution/surface-coating-plastic>

*parts-and-products-national-emission* for the PPP NESHAP. The data files include detailed information for each HAP emissions release point for the facilities in these source categories.

If you believe that the data are not representative or are inaccurate, please identify the data in question, provide your reason for concern, and provide any “improved” data that you have, if available. When you submit data, you must provide documentation of the basis for the revised values to support your suggested changes. To submit comments on the data downloaded from the RTR website, complete the following steps:

1. Within this downloaded file, enter suggested revisions to the data fields appropriate for that information.

2. Fill in the commenter information fields for each suggested revision (*i.e.*, commenter name, commenter organization, commenter email address, commenter phone number, and revision comments).

3. Gather documentation for any suggested emissions revisions (*e.g.*, performance test reports, material balance calculations).

4. Send the entire downloaded file with suggested revisions in Microsoft® Access format and all accompanying documentation to the ALDT, MMPP, or PPP Docket, as applicable (through the method described in the **ADDRESSES** section of this preamble).

5. If you are providing comments on a single facility or multiple facilities, you need only submit one file for all facilities. The file should contain all suggested changes for all sources at that facility (or facilities). We request that all data revision comments be submitted in the form of updated Microsoft® Excel files that are generated by the Microsoft® Access file. These files are provided on the RTR website at <https://www.epa.gov/stationary-sources-air-pollution/surface-coating-automobiles-and-light-duty-trucks-national-emission>, for the ALDT NESHAP;



<https://www.epa.gov/stationary-sources-air-pollution/surface-coating-miscellaneous-metal-parts-and-products-national> for the MMPP NESHAP; and <https://www.epa.gov/stationary-sources-air-pollution/surface-coating-plastic-parts-and-products-national-emission> for the PPP NESHAP.

## **VIII. Statutory and Executive Order Reviews**

Additional information about these statutes and Executive Orders can be found at <https://www.epa.gov/laws-regulations/laws-and-executive-orders>.

### *A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review*

This action is not a significant regulatory action and was, therefore, not submitted to OMB for review.

### *B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs*

This action is not expected to be an Executive Order 13771 regulatory action because this action is not significant under Executive Order 12866.

### *C. Paperwork Reduction Act (PRA)*

The information collection activities in this proposal have been submitted for approval to OMB under the PRA, as discussed for each source category covered by this proposal in sections VIII.C.1 through 3.

#### **1. Surface Coating of Automobiles and Light-Duty Trucks**

The Information Collection Request (ICR) document that the EPA prepared has been assigned EPA ICR number 2045.07. You can find a copy of the ICR in the ALDT Docket (Docket ID No. EPA-HQ-OAR-2019-0314), and it is briefly summarized here.

As part of the RTR for the ALDT NESHAP, the EPA is not proposing to revise the emission limit requirements. The EPA is proposing to revise the SSM provisions of the rule and proposing the use of electronic data reporting for future performance test data submittals, notifications, and reports. This information is being collected to assure compliance with 40 CFR part 63, subpart IIII.

*Respondents/affected entities:* Facilities performing surface coating of automobiles and light-duty trucks.

*Respondent's obligation to respond:* Mandatory (40 CFR part 63, subpart IIII).

*Estimated number of respondents:* In the 3 years after the amendments are final, approximately 43 respondents per year would be subject to the NESHAP and no additional respondents are expected to become subject to the NESHAP during that period.

*Frequency of response:* The total number of responses in year 1 is 129 and in year 3 is 15. Year 2 would have no responses.

*Total estimated burden:* The average annual burden to the ALDT surface coating facilities over the 3 years if the amendments are finalized is estimated to be 410 hours (per year). The average annual burden to the Agency over the 3 years after the amendments are final is estimated to be 19 hours (per year). Burden is defined at 5 CFR 1320.3(b).

*Total estimated cost:* The average annual cost to the ALDT surface coating facilities is \$47,000 in labor costs and in the first 3 years after the amendments are final. The average annual capital and operation and maintenance (O&M) costs is \$32,000. The total average annual Agency cost over the first 3 years after the amendments are final is estimated to be \$910.

## 2. Surface Coating of Miscellaneous Metal Parts and Products

The ICR document that the EPA prepared has been assigned EPA ICR number 2056.07. You can find a copy of the ICR in the MMPP Docket (Docket ID No. EPA-HQ-OAR-2019-0312), and it is briefly summarized here.

As part of the RTR for the MMPP NESHAP, the EPA is not proposing to revise the emission limit requirements. The EPA is proposing to revise the SSM provisions of the rule and proposing the use of electronic data reporting for future performance test data submittals, notifications, and reports. This information is being collected to assure compliance with 40 CFR part 63, subpart MMMM.

*Respondents/affected entities:* Facilities performing surface coating of miscellaneous metal parts and products.

*Respondent's obligation to respond:* Mandatory (40 CFR part 63, subpart MMMM).

*Estimated number of respondents:* In the 3 years after the amendments are final, approximately 368 respondents per year will be subject to the NESHAP and no additional respondents are expected to become subject to the NESHAP during that period.

*Frequency of response:* The total number of responses in year 1 is 1,104 and in year 3 is 14. Year 2 would have no responses.

*Total estimated burden:* The average annual burden to the MMPP surface coating facilities over the 3 years if the amendments are finalized is estimated to be 2,934 hours (per year). The average annual burden to the Agency over the 3 years after the amendments are final is estimated to be 27 hours (per year) for the Agency. Burden is defined at 5 CFR 1320.3(b).

*Total estimated cost:* The average annual cost to the MMPP surface coating facilities is \$334,000 in labor costs in the first 3 years after the amendments are final. The average annual

capital and O&M cost is \$44,000. The average annual Agency cost over the first 3 years after the amendments are final is estimated to be \$1,300.

### 3. Surface Coating of Plastic Parts and Products

The ICR document that the EPA prepared has been assigned EPA ICR number 2044.07. You can find a copy of the ICR in the PPP Docket (Docket ID No. EPA-HQ-OAR-2019-0313), and it is briefly summarized here.

As part of the RTR for the PPP NESHAP, the EPA is not proposing to revise the emission limit requirements. The EPA is proposing to revise the SSM provisions of the rule and proposing the use of electronic data reporting for future performance test data submittals, notifications, and reports. This information is being collected to assure compliance with 40 CFR part 63, subpart PPPP.

*Respondents/affected entities:* Facilities performing surface coating of plastic parts and products.

*Respondent's obligation to respond:* Mandatory (40 CFR part 63, subpart PPPP).

*Estimated number of respondents:* In the 3 years after the amendments are final, approximately 125 respondents per year will be subject to the NESHAP and no additional respondents are expected to become subject to the NESHAP during that period.

*Frequency of response:* The total number of responses in year 1 is 375 and in year 3 is 9. Year 2 would have no responses.

*Total estimated burden:* The average annual burden to the PPP surface coating facilities over the 3 years if the amendments are finalized is estimated to be 1,007 hours (per year). The average annual burden to the Agency over the 3 years after the amendments are final is estimated to be 18 hours (per year) for the Agency. Burden is defined at 5 CFR 1320.3(b).

*Total estimated cost:* The average annual cost to the PPP surface coating facilities is \$115,000 in labor costs in the first 3 years after the amendments are final. The average annual capital and O&M cost is \$19,000. The average annual Agency cost over the first 3 years after the amendments are final is estimated to be \$870.

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 the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

Submit your comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the EPA using the dockets identified at the beginning of this rule. You may also send your ICR-related comments to OMB's Office of Information and Regulatory Affairs via email to [OIRA\\_submission@omb.eop.gov](mailto:OIRA_submission@omb.eop.gov), Attention: Desk Officer for the EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after receipt, OMB must receive comments no later than **[Insert date 30 days after date of publication in the Federal Register]**. The EPA will respond to any ICR-related comments in the final rule.

*D. Regulatory Flexibility Act (RFA)*

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. The economic impact associated with the proposed requirements in this action for the affected small entities is described in section V.D. above.

*E. Unfunded Mandates Reform Act (UMRA)*

This action does not contain an unfunded mandate of \$100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments.

The action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

*F. Executive Order 13132: Federalism*

This action 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.

*G. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments*

This action does not have tribal implications as specified in Executive Order 13175. No tribal facilities are known to be engaged in any of the industries that would be affected by this action (ALDT surface coating, MMPP surface coating, and PPP surface coating). Thus, Executive Order 13175 does not apply to this action.

*H. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks*

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action's health and risk assessments are contained in sections III.A and C, IV.A.1 and 2, IV.B.1 and 2, and IV.C.1 and 2 of this preamble and are further documented in the *Automobiles and Light-Duty Trucks Risk Assessment Report*, in the ALDT Docket, *Miscellaneous Metal Parts and Products Risk Assessment Report*, in the MMPP Docket and the *Plastic Parts and Products Risk Assessment Report*, in the PPP Docket.

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

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

*J. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR part 51*

This rulemaking involves technical standards. We are proposing to amend the ALDT NESHAP, the MMPP NESHAP, and the PPP NESHAP in this action to provide owners and operators with the option of using two new methods. We are proposing to add EPA Method 18 of appendix A to 40 CFR part 60, “Measurement of Gaseous Organic Compound Emissions by Gas Chromatography” to measure and subtract methane emissions from measured total gaseous organic mass emissions as carbon. We are also proposing to amend each of these NESHAP to incorporate by reference ASTM Method D2369-10 (2015), “Test Method for Volatile Content of Coatings” into these three NESHAP as an alternative to EPA Method 24 for the determination of the volatile matter content in surface coatings. ASTM Method D2369-10 (2015) is a test method that allows for more accurate results for multi-component chemical resistant coatings.

We are proposing to amend the MMPP NESHAP and the PPP NESHAP to incorporate by reference ASTM Method D2111-10 (2015), “Standard Test Methods for Specific Gravity of Halogenated Organic Solvents and Their Admixtures,” as an alternative to ASTM Method D1475-13. ASTM Method D2111-10 (2015) is a test method that allows measurement of specific gravity at different temperatures that are chosen by the analyst.

We are proposing to amend all three NESHAP to update ASTM Method D1475-98, “Standard Test Method for Density of Liquid Coatings, Inks, and Related Products,” by incorporating by reference ASTM Method D1475-13. The updated version, ASTM Method D1475-13, clarifies units of measure and reduces the number of determinations required.

We are proposing to amend the ALDT NESHAP and the MMPP NESHAP to update ASTM Method D2697-86 (1998), “Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings,” by incorporating by reference ASTM Method D2697-03 (2014), which is the updated version of the previously approved method, and to update ASTM Method D6093-97 (2003), “Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using Helium Gas Pycnometer,” by incorporating by reference ASTM Method D6093-97 (2016), which is the updated version of the previously approved method. ASTM Method D2697-03 (2014) is a test method that can be used to determine the volume of nonvolatile matter in clear and pigmented coatings and ASTM Method D6093-97 (2016) is a test method that can be used to determine the percent volume of nonvolatile matter in clear and pigmented coatings.

We are proposing to amend the ALDT NESHAP and the MMPP NESHAP to update ASTM Method D5965, “Standard Test Methods for Specific Gravity of Coating Powders,” by incorporating by reference ASTM Method D5965-02 (2013), which is the updated version of the previously approved method.

The ASTM standards are available from the American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428–2959. See <http://www.astm.org/>.

The EPA is not proposing ASTM Method D1963-85 (1996), “Standard Test Method for Specific Gravity of Drying Oils, Varnishes, Resins, and Related Materials at 25/25 C,” as an alternative for the determination of the specific gravity because ASTM has withdrawn the method without replacement. The EPA is also not proposing California Air Resources Board Method 310, “Determination of Volatile Organic Compounds in Consumer Products and



Reactive Organic Compounds in Aerosol Coating Products,” as an alternative to EPA Method 24 because the EPA has approved the method only for consumer products and aerosol coatings, which do not apply to the rulemakings or source categories addressed in this action.

Although we identified another 14 VCS for ALDT, MMPP, and PPP as being possible alternatives for methods included in these rules, we are not proposing to add these VCS in these rulemakings. See the memoranda titled *Voluntary Consensus Standard Results for Surface Coating of Automobiles and Light-duty Trucks*, June 2019, *Voluntary Consensus Standard Results for Surface Coating of Miscellaneous Metal Parts and Products*, June 2019, and *Voluntary Consensus Standard Results for Surface Coating of Plastic Parts and Products*, June 2019, in the ALDT Docket, MMPP Docket, and the PPP Docket, respectively, for the reasons for these determinations.

Under 40 CFR 63.7(f) and 40 CFR 63.8(f) of subpart A of the General Provisions, a source may apply to the EPA for permission to use alternative test methods or alternative monitoring requirements in place of any required testing methods, performance specifications, or procedures in the final rule or any amendments.

The EPA welcomes comments on this aspect of the proposed rulemaking and, specifically, invites the public to identify potentially applicable VCS and to explain why such standards should be used in this regulation.

*K. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.*

The EPA believes that this action does **not** have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994).

The documentation for this decision is contained in sections IV.A.1 and 2, sections IV.B.1 and 2, and IV.C.1 and 2 of this preamble and the technical reports titled *Risk and Technology Review – Analysis of Demographic Factors for Populations Living Near Surface Coating of Automobiles and Light-Duty Trucks Source Category Operations*, March 2019, *Risk and Technology Review – Analysis of Demographic Factors for Populations Living Near Surface Coating of Miscellaneous Metal Parts and Products Source Category Operations*, May 2019, and *Risk and Technology Review – Analysis of Demographic Factors for Populations Living Near Surface Coating of Plastic Parts and Products Source Category Operations*, April 2019, available in the ALDT Docket, MMPP Docket, and the PPP Docket, respectively.

As discussed in sections IV.A.1, IV.B.1, and IV.C.1 of this preamble, we performed a demographic analysis for each source category, which is an assessment of risks to individual demographic groups, of the population close to the facilities (within 50 km and within 5 km). In this analysis, we evaluated the distribution of HAP-related cancer risks and noncancer hazards from the ALDT, MMPP, and PPP source categories across different social, demographic, and economic groups within the populations living near operations identified as having the highest risks.

The results of the ALDT source category demographic analysis indicate that approximately 15,000 people are exposed to a cancer risk at or above 1-in-1 million and no one is exposed to a chronic noncancer HI greater than 1. The overall percent of the population that is minorities is similar nationally (38 percent) and for the category population with cancer risk greater than or equal to 1-in-1 million (40 percent). However, the category population with cancer risk greater than or equal to 1-in-1 million has a greater percent Hispanic population (27 percent) as compared to the national percent Hispanic population (18 percent).

The proximity results (irrespective of risk) indicate that the overall percentage of the population that is minority is higher (48 percent) within 5 km of ALDT facilities than the nationwide percentage (38 percent). This is driven by a higher percentage of “African American” (27 percent) within 5 km of facilities in this category than the nationwide percentage (12 percent).

The results of the MMPP source category demographic analysis indicate that approximately 18,000 people are exposed to a cancer risk at or above 1-in-1 million and no one is exposed to a chronic noncancer HI greater than 1. The percentages of the at-risk population in the following specific demographic groups are higher than their respective nationwide percentages: “White,” “Below the Poverty Level,” and “Over 25 and Without a High School Diploma.”

The proximity results (irrespective of risk) indicate that the overall percentage of the population that is minority is higher (45 percent) within 5 km of MMPP facilities than the nationwide percentage (38 percent). This is driven by a higher percentage of “African American” (18 percent) within 5 km of facilities in this category than the nationwide percentage (12 percent).

The results of the PPP source category demographic analysis indicate that approximately 500 people are exposed to a cancer risk at or above 1-in-1 million and no one is exposed to a chronic noncancer HI greater than 1. The percentages of the at-risk population in the following specific demographic groups are higher than their respective nationwide percentages: “White” and “Below the Poverty Level.”

The proximity results (irrespective of risk) indicate that the population percentages for all demographic categories located within 5 km of PPP facilities are very similar to their respective nationwide percentages.

We do not expect this proposal to achieve significant reductions in HAP emissions. The EPA anticipates that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994) because it does not significantly affect the level of protection provided to human health or the environment. The documentation for this decision is contained in section IV of this preamble and the technical reports titled *Risk and Technology Review – Analysis of Demographic Factors for Populations Living Near Surface Coating of Automobiles and Light-Duty Trucks Category Operations*, June 2019, *Risk and Technology Review – Analysis of Demographic Factors for Populations Living Near Surface Coating of Miscellaneous Metal Parts and Products Source Category Operations*, June 2019, and *Risk and Technology Review – Analysis of Demographic Factors for Populations Living Near Surface Coating of Plastic Parts and Products Source Category Operations*, June 2019, which are available in the ALDT Docket, MMPP Docket, and the PPP Docket, respectively.

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

Environmental protection, Air pollution control, Hazardous substances, Appendix A, Incorporation by reference, Reporting and recordkeeping requirements, Surface Coating of Automobiles and Light-Duty Trucks, Surface Coating of Miscellaneous Metal Parts and Products, Surface Coating of Plastic Parts and Products.

AUG 16 2019

Dated: \_\_\_\_\_

A handwritten signature in black ink, appearing to read "Andrew R. Wheeler", written over a horizontal line.

Andrew R. Wheeler,  
Administrator.

For the reasons stated in the preamble, the Environmental Protection Agency proposes to amend part 63 of title 40, chapter I, of the Code of Federal Regulations as follows:

**PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR  
POLLUTANTS FOR SOURCE CATEGORIES**

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

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

**Subpart A—General Provisions**

2. Section 63.14 is amended by revising paragraphs (h)(12), (13), (21), (26), (29), (30), (66), (76), (78), (79), and (81) to read as follows:

**§ 63.14 Incorporations by reference**

\* \* \* \* \*

(h) \* \* \*

(12) ASTM Method D1475-98 (Reapproved 2003), “Standard Test Method for Density of Liquid Coatings, Inks, and Related Products,” IBR approved for §§, and 63.4141(b) and (c).

(13) ASTM Method D1475-13, Standard Test Method for Density of Liquid Coatings, Inks, and Related Products, approved November 1, 2013, IBR approved for §§63.3151(b), 63.3941(b) and (c), 63.3951(c), 63.4141(b) and (c), 63.4551(c), 63.4741(b) and (c), 63.4751(c), and 63.4941(b) and (c).

\* \* \* \* \*

(21) ASTM Method D2111-10 (Reapproved 2015), Standard Test Methods for Specific Gravity and Density of Halogenated Organic Solvents and Their Admixtures, approved June 1, 2015, IBR approved for §§63.3951(c), 63.4141(b) and (c), 63.4551(c), and 63.4741(a).

\* \* \* \* \*

(26) ASTM Method D2369-10 (Reapproved 2015), Standard Test Method for Volatile Content of Coatings, approved June 1, 2015, IBR approved for §§63.3151(a), 63.3961(j), 63.4141(a) and (b), 63.4161(h), 63.4321(e), 63.4341(e), 63.4351(d), 63.4541(a), 63.4561(j), 63.4741(a), 63.4941(a) and (b), and 63.4961(j).

\* \* \* \* \*

(29) ASTM Method D2697-86 (Reapproved 1998), Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings, IBR approved for §§63.3521(b), 63.4141(b), 63.4741(b), 63.4941(b), and 63.5160(c).

(30) ASTM Method D2697-03 (Reapproved 2014), Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings, approved July 1, 2014, IBR approved for §§63.3161(f), 63.3941(b), 63.4141(b), 63.4741(a) and (b), and 63.4941(b).

\* \* \* \* \*

(66) ASTM Method D5066-91 (Reapproved 2017), 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).

\* \* \* \* \*

(76) ASTM Method D5965-02 (2013), Standard Test Methods for Specific Gravity of Coating Powders, IBR approved for §§63.3151(b) and 63.3951(c).

\* \* \* \* \*

(78) ASTM Method 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 §§63.3521 and 63.5160(c).

(79) ASTM Method D6093-97 (Reapproved 2016), Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer, Approved December 1, 2016, IBR approved for §§63.3161(f), 63.3941(b), 63.4141(b), 63.4741(a) and (b), and 63.4941(b).

\* \* \* \* \*

(81) ASTM Method D6266-00a (Reapproved 2017), 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).

\* \* \* \* \*

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

3. Section 63.3092 is amended by revising paragraph (a)(2) to read as follows:

**§ 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?**

\* \* \*

(a) \* \* \*

(2) 0.10 percent by weight of any organic HAP in Table 5 of this subpart.

\* \* \* \* \*

4. Section 63.3093 is amended by revising paragraph (b) to read as follows:

**§ 63.3093 What operating limits must I meet?**

\* \* \* \* \*



(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 performance tests according to the requirements in § 63.3167. You must meet the operating limits at all times after you establish them.

\* \* \* \* \*

5. Section 63.3100 is amended by revising paragraphs (b), (d), and (f) to read as follows:

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

\* \* \* \* \*

(b) Before **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, 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. On and after **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, 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.

\* \* \* \* \*

(d) Before **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, 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). On and after **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, at all times, the owner or operator

must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the affected source.

\* \* \* \* \*

(f) Before **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, if your affected source uses emission capture systems and add-on control devices, you must develop 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. On and after **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, the SSMP is not required.

6. Section 63.3120 is amended by:

- a. Revising paragraphs (a)(4), (a)(5) introductory text, (a)(5)(iv), (a)(6) introductory text, (a)(6)(iii), (a)(6)(vi), (a)(6)(vii), (a)(6)(viii), (a)(6)(x), (a)(6)(xiii), (a)(6)(xiv);
- b. Adding paragraphs (a)(5)(v) and (a)(6)(xv);
- c. Revising paragraphs (a)(7) introductory text, (a)(7)(i), (a)(7)(iii);
- d. Adding paragraph (a)(7)(iv);

e. Revising paragraphs (a)(8) introductory text, (a)(8)(ii), (a)(8)(v) through (vii), (a)(8)(ix), (a)(8)(xii), (a)(9) introductory text, (a)(9)(i) and (ii), and (c) introductory text; and

f. Adding paragraphs (d) through (h).

The revisions and additions read as follows:

**§ 63.3120 What reports must I submit?**

(a) \* \* \*

(4) *No deviations*. If there were no deviations from the emission limits, 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 applicable 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*. Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], 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. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], 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 (v) of this section.

\* \* \* \* \*

(iv) The reason for the deviation (including unknown cause, if applicable).

(v) On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the number of deviations and, for each deviation, a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over the applicable emission limit in § 63.3090(c) and (d) or § 63.3091(c) and (d), and a description of the method used to estimate the emissions.

(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). Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], if there was a deviation from the applicable emission limits in § 63.3090(a) or (b) or § 63.3091(a) or (b) or the applicable operating limit(s) in Table 1 to this subpart, the semiannual compliance report must contain the information in paragraphs (a)(6)(i) through (xiv) of this section. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], if there was a deviation from the applicable emission limits in § 63.3090(a) or (b) or § 63.3091(a) or (b) or the applicable operating limit(s) in Table 1 to this subpart, the semiannual compliance report must contain the information in paragraphs (a)(6)(i) through (xv) of this section.

\* \* \* \* \*

(iii) The date and time that each malfunction of the capture system or add-on control devices used to control emissions from these operations started and stopped.

\* \* \* \* \*

(vi) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the date and time that each CPMS was inoperative, except for zero (low-level) and high-level checks. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], for each instance that the CPMS was inoperative, except for zero (low-level) and high-level checks, the date, time, and duration that the CPMS was inoperative; the cause (including unknown cause) for the CPMS being inoperative; and descriptions of corrective actions taken.

(vii) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the date and time period that each CPMS was out of control, including the information in § 63.8(c)(8). On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], for each instance that the CPMS was out of control, as specified in § 63.8(c)(7), the date, time, and duration that the CPMS was out-of-control; the cause (including unknown cause) for the CPMS being out-of-control; and descriptions of corrective actions taken.

(viii) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], 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. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the date, time, and duration of each deviation from an operating limit in Table 1 to this subpart; and the date, time, and duration of each bypass of an add-on control device.

\* \* \* \* \*

(x) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], 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. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], 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 control equipment problems, process problems, other known causes, and other unknown causes.

\* \* \* \* \*

(xiii) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], 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. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], for deviations from the work practice standards, the number of deviations, and, for each deviation, the information in paragraphs (a)(6)(xiii)(A) and (B) of this section.

(A) A description of the deviation, the date, time, and duration of the deviation; and the actions you took to minimize emissions in accordance with § 63.3100(d).

(B) A list of the affected sources or equipment for which a deviation occurred, the cause of the deviation (including unknown cause, if applicable), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(xiv) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], a statement of the cause of each deviation. On and after [**date 181 days after date**

**of publication of final rule in the FEDERAL REGISTER]**, for deviations from an emission limitation in § 63.3090(a) or (b) or § 63.3091(a) or (b) or operating limit in Table 1 of this subpart, a statement of the cause of each deviation (including unknown cause, if applicable).

(xv) On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, for each deviation from an emission limitation in § 63.3090(a) or (b), or § 63.3091(a) or (b), or operating limit in Table 1 to this subpart, a list of the affected sources or equipment for which a deviation occurred, an estimate of the quantity of each regulated pollutant emitted over any emission limit in § 63.3090(a) or (b) or § 63.3091(a) or (b), and a description of the method used to estimate the emissions.

(7) *Deviations: separate electrodeposition primer organic HAP content limit.* Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, 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. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, 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 (iv) of this section.

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

\* \* \* \* \*

(iii) A statement of the cause of each deviation (including unknown case, if applicable).

(iv) On and after [date 181 days after date of publication of final rule in the **FEDERAL REGISTER**], the number of deviations, a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit in § 63.3092(a), and a description of the method used to estimate the emissions.

(8) *Deviations: separate electrodeposition primer bake oven capture and control limitations.* Before [date 181 days after date of publication of final rule in the **FEDERAL REGISTER**], if you used the separate electrodeposition primer bake oven capture and control limitations in § 63.3092(b), and there was a deviation from the limitations in § 63.3092(b) or the applicable operating limit in Table 1 to this subpart, the semiannual compliance report must contain the information in paragraphs (a)(8)(i) through (xii) of this section. On and after [date 181 days after date of publication of final rule in the **FEDERAL REGISTER**], if you used the separate electrodeposition primer bake oven capture and control limitations in § 63.3092(b), and there was a deviation from the limitations in § 63.3092(b) or the applicable operating limit in Table 1 to this subpart, the semiannual compliance report must contain the information in paragraphs (a)(8)(i) through (xiv) of this section.

\* \* \* \* \*

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

\* \* \* \* \*

(v) Before [date 181 days after date of publication of final rule in the **FEDERAL REGISTER**], the date and time that each CPMS was inoperative, except for zero (low-level) and high-level checks. On and after [date 181 days after date of publication of final rule in the **FEDERAL REGISTER**], for each instance that the CPMS was inoperative, except for zero



(low-level) and high-level checks, the date, time, and duration that the CPMS was inoperative; the cause (including unknown cause) for the CPMS being inoperative; and descriptions of corrective actions taken.

(vi) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the date, time, and duration that each CPMS was out of control, including the information in § 63.8(c)(8). On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], for each instance that the CPMS was out of control, as specified in § 63.8(c)(7), the date, time, and duration that the CPMS was out-of-control; the cause (including unknown cause) for the CPMS being out-of-control; and descriptions of corrective actions taken.

(vii) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], 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. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the date, time, and duration of each deviation from an operating limit in Table 1 to this subpart; and the date, time, and duration of each bypass of an add-on control device.

\* \* \* \* \*

(ix) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], 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. On and after [**date 181 days**

**after date of publication of final rule in the FEDERAL REGISTER**], 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 control equipment problems, process problems, other known causes, and other unknown causes.

\* \* \* \* \*

(xii) A statement of the cause of each deviation (including unknown cause, if applicable).

(9) *Deviations: work practice plans.* Before **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, 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. On and after **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, if there were deviations from an applicable work practice plan developed in accordance with § 63.3094(b) or (c), the semiannual compliance report must contain the number of deviations, and, for each deviation, the information in paragraphs (a)(9)(i) through (iii) of this section.

(i) Before **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, the time period during which each deviation occurred. On and after **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, the date, time, and duration of the deviation.

(ii) Before **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, the nature of each deviation. On and after **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, the nature of the deviation, including a list of the affected sources or equipment for which the deviation occurred, and the cause of the deviation (including unknown cause, if applicable).

\* \* \* \* \*

(c) *Startup, shutdown, and malfunction reports.* Before **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, 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. On and after **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, the reports specified in paragraphs (c)(1) and (2) of this section are not required.

\* \* \* \* \*

(d) On and after **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, you must submit the results of the performance test required in paragraph (b) of this section following the procedure specified in paragraphs (d)(1) through (3) of this section.

(1) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website ([https:// www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert](https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert)) at the time of the test, you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>)). Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

(2) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test, you must submit the results of the

performance test to the Administrator at the appropriate address listed in § 63.13, unless the Administrator agrees to or specifies an alternate reporting method.

(3) If you claim that some of the performance test information being submitted under paragraph (c)(1) of this section is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraph (c)(1) of this section.

(e) On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the owner or operator shall submit the initial notifications required in § 63.9(b) and the notification of compliance status required in § 63.9(h) and § 63.3110(c) to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX (<https://cdx.epa.gov/>)). The owner or operator must upload to CEDRI an electronic copy of each applicable notification in portable document format (PDF). The applicable notification must be submitted by the deadline specified in this subpart, regardless of the method in which the reports are submitted. Owners or operators who claim that some of the information required to be submitted via CEDRI is CBI shall submit a complete report generated using the appropriate form in CEDRI or an alternate electronic file consistent with the extensible markup language (XML) schema listed on the EPA's CEDRI website, including information claimed to be CBI, on a compact disc, flash

drive, or other commonly used electronic storage medium to the EPA. The electronic medium shall be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(f) On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], or once the reporting template has been available on the CEDRI website for 1 year, whichever date is later, the owner or operator shall submit the semiannual compliance report required in paragraph (a) of this section to the EPA via the CEDRI. The CEDRI interface can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The owner or operator must use the appropriate electronic template on the CEDRI Web for this subpart or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri>). If the reporting form for the semiannual compliance report specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate addresses listed in § 63.13. Once the form has been available in CEDRI for 1 year, you must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted. Owners or operators who claim that some of the information required to be submitted via CEDRI is CBI shall submit a complete report generated using the appropriate form in CEDRI or an alternate electronic file consistent with the XML schema listed on the EPA's CEDRI website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium

shall be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(g) If you are required to electronically submit a report through the CEDRI in the EPA's CDX, and due to a planned or actual outage of either the EPA's CEDRI or CDX systems within the period of time beginning 5 business days prior to the date that the submission is due, you will be or are precluded from accessing CEDRI or CDX and submitting a required report within the time prescribed, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description identifying the date, time and length of the outage; a rationale for attributing the delay in reporting beyond the regulatory deadline to the EPA system outage; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(h) If you are required to electronically submit a report through CEDRI in the EPA's CDX and a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning 5 business days prior to the date

the submission is due, the owner or operator may assert a claim of force majeure for failure to timely comply with the reporting requirement. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.*, hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.*, large scale power outage). If you intend to assert a claim of force majeure, you must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

7. Section 63.3130 is amended by revising paragraphs (g) and (h) and adding paragraph (p) to read as follows:

**§ 63.3130 What records must I keep?**

\* \* \* \* \*

(g) Before [date 181 days after date of publication of final rule in the **FEDERAL REGISTER**], 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. On and after [date 181 days after date of publication of final rule in the **FEDERAL REGISTER**], for each deviation from an emission limitation, operating limit, or work practice plan reported under § 63.3120(a)(5) through (9), a record of the information specified in paragraphs (g)(1) through (4) of this section, as applicable.

(1) The date, time, and duration of the deviation, and for each deviation, the information as reported under § 63.3120(a)(5) through (9).

(2) A list of the affected sources or equipment for which the deviation occurred and the cause of the deviation, as reported under § 63.3120(a)(5) through (9).

(3) An estimate of the quantity of each regulated pollutant emitted over any applicable emission limit in §63.3090 (a) through (d) or 63.3091(a) through (d) or any applicable operating limit in Table 1 to this subpart, and a description of the method used to calculate the estimate, as reported under § 63.3120(a)(5) through (9).

(4) A record of actions taken to minimize emissions in accordance with § 63.3100(d) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(h) Before [date 181 days after date of publication of final rule in the **FEDERAL REGISTER**], the records required by § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. On and after [date 181 days after date of publication of final rule in the **FEDERAL REGISTER**], the provisions of this paragraph no longer apply.

\* \* \* \* \*



(p) On and after [date 181 days after date of publication of final rule in the **FEDERAL REGISTER**], any records required to be maintained by this subpart that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

8. Section 63.3131 is amended by revising paragraph (a) to read as follows:

**§ 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. On and after [date 181 days after date of publication of final rule in the **FEDERAL REGISTER**], any records required to be maintained by this subpart that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

\* \* \* \* \*

9. Section 63.3151 is amended by revising paragraphs (a)(1)(i), (a)(2), (a)(4), and (b) to read as follows.

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

\* \* \* \* \*

(a) \* \* \*

(1) \* \* \*

(i) Count each organic HAP in Table 5 to this subpart that is present at 0.1 percent by mass or more and at 1.0 percent by mass or more for other compounds. For example, if toluene (not listed in Table 5 to this subpart) 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).

\* \* \* \*

(2) *EPA Method 24 (appendix A-7 to 40 CFR part 60)*. For coatings, you may use EPA Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. As an alternative to using EPA Method 24, you may use ASTM Method D2369-10 (2015), "Test Method for Volatile Content of Coatings" (incorporated by reference, *see* § 63.14).

\* \* \* \*

(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 in Table 5 to this subpart that is present at 0.1 percent by mass or more and at 1.0 percent by mass or more for other compounds. For example, if toluene (not listed in Table 5 of this subpart) 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.

\* \* \* \*

(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 D1475-13 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 (2013), “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 D1475-13 test results or ASTM Method D5965-02 (2013), 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.

\* \* \* \* \*

10. Section 63.3160 is amended by revising the section heading and paragraph (b)(1) to read as follows:

**§ 63.3160 By what date must I conduct initial performance tests and other initial compliance demonstrations?**

\* \* \* \* \*

(b) \* \* \*

(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 an initial 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.

\* \* \* \* \*

11. Section 63.3161 is amended by revising paragraphs (a), (f)(1), (g), and (k)(3) to read as follows:

**§ 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) and the applicable operating limits and work practice standards in §§ 63.3093 and 63.3094.

\* \* \* \* \*

(f) \* \* \*

(1) *ASTM Method D2697-03 (2014) or ASTM Method D6093-97 (2016)*. You may use ASTM Method D2697-03 (2014), “Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings” (incorporated by reference, *see* § 63.14), or ASTM Method D6093-97 (2016), “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.

\* \* \* \* \*

(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 2017), “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. For blackout, chip resistant edge primer, interior color, in-line repair, lower body anti-chip coatings, or underbody anti-chip coatings, you may assume 40 percent transfer efficiency for air atomized spray, 55 percent transfer efficiency for electrostatic spray and high volume-low pressure spray, and 80 percent transfer efficiency for airless spray.

\* \* \* \* \*

(k) \* \* \*

(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 EPA Method 24 of 40 CFR part 60, appendix A-7, 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 EPA Method 24 of 40 CFR part 60, appendix A-7, 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.

\* \* \* \* \*

12. Section 63.3163 is amended by revising the section heading and paragraph (c) introductory text, adding paragraph (c)(3), and revising paragraphs (f) and (h) to read as follows:

**§ 63.3163 How do I conduct periodic performance tests and demonstrate continuous compliance with the emission limitations?**

\* \* \* \* \*

(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, and you must conduct performance tests as specified in paragraph (c)(3) of this section.

\* \* \* \* \*

(3) Except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.3161(k) for controlled coating operations, you must conduct periodic performance tests and establish the operating limits required by § 63.3093 within 5 years following the previous performance test. You must conduct the first periodic performance test

before **[date 3 years after date of publications of final rule in the FEDERAL REGISTER]**, unless you are already required to complete periodic performance tests as a requirement of renewing your facility's operating permit under 40 CFR part 70 or 40 CFR part 71 and have conducted a performance test on or after **[date 2 years before date of publications of final rule in the FEDERAL REGISTER]**. Thereafter you must conduct a performance test no later than 5 years following the previous performance test. Operating limits must be confirmed or reestablished during each performance test. For any control device for which you are using the catalytic oxidizer control option at § 63.3167(b) and following the catalyst maintenance procedures in § 63.3167(b)(6), you are not required to conduct periodic control device performance testing as specified by this paragraph. For any control device for which instruments are used to continuously measure organic compound emissions, you are not required to conduct periodic control device performance testing as specified by this paragraph.

\* \* \* \* \*

(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), § 63.3090(b) or § 63.3091(b), or § 63.3092(a) or § 63.3092(b), you achieved the operating limits required by § 63.3093, and you achieved the work practice standards required by § 63.3094 during each compliance period.

\* \* \* \* \*

(h) Before **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, 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 § 63.6(e)(1). 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). On and after **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, the provisions of this paragraph no longer apply.

\* \* \* \* \*

13. Section 63.3164 is amended by revising paragraphs (a) introductory text and (a)(1) to read as follows:

**§ 63.3164 What are the general requirements for performance tests?**

(a) You must conduct each applicable performance test required by §§ 63.3160, 63.3163, and 63.3171 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. Before **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, 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. On and after **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, operations during periods of startup,



shutdown, or nonoperation do not constitute representative conditions for purposes of conducting a performance test. The owner or operator may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

\* \* \* \* \*

14. Section 63.3165 is amended by revising the introductory text and paragraphs (e) introductory text, the definition of “ $W_{voc,i}$ ” in Equation 6 of paragraph (e)(2), the definition of “ $W_{voc,i}$ ” in Equation 7 of paragraph (e)(3), and the definition of “ $W_{s,i}$ ” in Equation 8 of paragraph (e)(4) to read as follows:

**§ 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 and § 63.3163. 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.

\* \* \* \* \*

*(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 (2017), “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.

\* \* \* \* \*

(2) \* \* \*

$W_{voc,i}$  = 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 EPA Method 24 (appendix A-7 to 40 CFR part 60) or the guidelines for combining analytical VOC content and formulation solvent content presented in Section 9 of "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) \* \* \*

$W_{voc,i}$  = 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 EPA Method 24 (appendix A-7 to 40 CFR part 60) or the guidelines for combining analytical VOC content and formulation solvent content presented in Section 9 of “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) \* \* \*

$W_{s,i}$  = 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 EPA Method 24 (appendix A-7 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).

\* \* \* \* \*

15. Section 63.3166 is amended by revising the introductory text and paragraphs (a)(1) through (4) and (b) introductory text, and adding paragraph (b)(4) to read as follows:

**§ 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, 63.3163, or 63.3171. You must conduct three test runs as specified in § 63.7(e)(3), and each test run must last at least 1 hour.

(a) \* \* \*

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

(2) Use EPA Method 2, 2A, 2C, 2D, or 2F of appendix A-1, or 2G of appendix A-2 to 40 CFR part 60, as appropriate, to measure gas volumetric flow rate.

(3) Use EPA Method 3, 3A, or 3B of appendix A-2 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 EPA Method 3B.

(4) Use EPA Method 4 of appendix A-3 to 40 CFR part 60 to determine stack gas moisture.

\* \* \* \* \*

(b) Measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-on control device simultaneously, using either EPA Method 25 or 25A of appendix A-7 to 40 CFR part 60, as specified in paragraphs (b)(1) through (4) of this section. You must use the same method for both the inlet and outlet measurements.

\* \* \* \* \*

(4) You may use EPA Method 18 of appendix A-6 to 40 CFR part 60 to subtract methane emissions from measured total gaseous organic mass emissions as carbon.

\* \* \* \* \*

16. Section 63.3167 is amended by revising the section heading, introductory text, and paragraph (f)(1) to read as follows:

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

During the performance tests required by §§ 63.3160, 63.3163, and 63.3171 (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.

\* \* \* \*

(f) \* \* \*

(1) During the capture efficiency determination required by §§ 63.3160 and 63.3163 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.

\* \* \* \*

17. Section 63.3168 is amended by revising paragraphs (a)(4) through (7) and (c)(3) introductory text to read as follows:

**§ 63.3168 What are the requirements for continuous parameter monitoring system installation, operation, and maintenance?**

(a) \* \* \*

(4) You must maintain the CPMS at all times in accordance with §63.3100(d) and have readily available necessary parts for routine repairs of the monitoring equipment.

(5) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], 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). On and after [**date 181 days after date of publication of final rule in the FEDERAL**

**REGISTER]**, 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 in accordance with § 63.3100(d).

(6) Before **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, 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. On and after **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, startups and shutdowns are normal operation for this source category. Emissions from these activities are to be included when determining if the standards specified in §§ 63.3090, 63.3091, 63.3092, 63.4292, and 63.4293 are being attained. 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. Before **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, 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. On and after [date 181 days after date of publication of final rule in the FEDERAL REGISTER], except for periods of required quality assurance or control activities, any period during which the CPMS fails to operate and record data continuously as required by paragraph (a)(1) of this section, or generates data that cannot be included in calculating averages as specified in paragraph (a)(7) of this section constitutes a deviation from the monitoring requirements.

\* \* \* \* \*

(c) \* \* \*

(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. For the purposes of this paragraph (c)(3), a thermocouple is part of the temperature sensor.

\* \* \* \* \*

18. Section 63.3171 is amended by revising paragraphs (a) and (e)(3) to read as follows:

**§ 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); the organic HAP emissions from the electrodeposition primer operation must meet the applicable emissions limitations in §



63.3092(a) or (b); and you must meet the applicable operating limits and work practice standards in §§ 63.3093 and 63.3094.

\* \* \* \* \*

(e) \* \* \*

(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 in Table 5 to this subpart that is present at 0.1 percent by mass, 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.

\* \* \* \* \*

19. Section 63.3176 is amended by revising the definition of “Deviation” to read as follows:

**§ 63.3176 What definitions apply to this subpart?**

\* \* \* \* \*

*Deviation* means:

(a) Before [date 181 days after date of publication of final rule in the FEDERAL REGISTER], any instance in which an affected source subject to this subpart or an owner or operator of such a source:

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

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

(3) Fails to meet any emission limit or operating limit or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart; and

(b) On and after [date 181 days after date of publication of final rule in the **FEDERAL REGISTER**], any instance in which an affected source subject to this subpart or an owner or operator of such a source:

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

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

\* \* \* \* \*

20. Table 2 to subpart IIII of part 63 is revised to read as follows:

**Table 2 to Subpart IIII of Part 63—Applicability of General Provisions to Subpart IIII of Part 63**

You must comply with the applicable General Provisions requirements according to the following table

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.

<b>Citation</b>	<b>Subject</b>	<b>Applicable to subpart III</b>	<b>Explanation</b>
§ 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 III.
§ 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	Units and Abbreviations	Yes	
§ 63.4(a)(1)-(2)	Prohibited Activities	Yes	
§ 63.4(b)-(c)	Circumvention/Fragmentation	Yes	
§ 63.5(a)	Preconstruction Review Applicability	Yes	
§ 63.5(b)(1), (3), (4), (6)	Requirements for Existing, Newly Constructed, and Reconstructed Sources	Yes	
§ 63.5(d)(1)(i)-(ii)(F), (d)(1)(ii)(H), (d)(1)(ii)(J), (d)(1)(iii), (d)(2)-(4)	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)-(5), (b)(7)	Compliance Dates for New and Reconstructed Sources	Yes	Section 63.3083 specifies the compliance dates.

Citation	Subject	Applicable to subpart III	Explanation
§ 63.6(c)(1), (2), (5)	Compliance Dates for Existing Sources	Yes	Section 63.3083 specifies the compliance dates.
§ 63.6(e)(1)(i)-(ii)	Operation and Maintenance	Yes before [date 181 days after date of publication of final rule in the FEDERAL REGISTER] No on and after [date 181 days after date of publication of final rule in the FEDERAL REGISTER]	See § 63.3100(d) for general duty requirement.
§ 63.6(e)(1)(iii)	Operation and Maintenance	Yes	
§ 63.6(e)(3)(i), (e)(3)(iii)-(ix)	SSMP	Yes before [date 181 days after date of publication of final rule in the FEDERAL REGISTER] No on and after [date 181 days after date of publication of final rule in the FEDERAL REGISTER]	
§ 63.6(f)(1)	Compliance Except During Startup, Shutdown, and Malfunction	Yes before [date 181 days after date of publication of final rule in the FEDERAL REGISTER] No on and after [date 181 days	

Citation	Subject	Applicable to subpart III	Explanation
		<b>after date of publication of final rule in the FEDERAL REGISTER]</b>	
§ 63.6(f)(2)-(3)	Methods for Determining Compliance	Yes	
§ 63.6(g)	Use of an Alternative Standard	Yes	
§ 63.6(h)	Compliance With Opacity/Visible Emission Standards	No	Subpart III does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).
§ 63.6(i)(1)-(14)	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) except (a)(2)(i)-(viii)	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)-(4)	Performance Tests Required By the Administrator, Force Majeure	Yes	

Citation	Subject	Applicable to subpart III	Explanation
§ 63.7(b)-(d)	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(e)(1)	Conduct of performance tests	Yes before [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ] No on and after [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ]	<i>See</i> § 63.3164.
§ 63.7(e)(2)-(4)	Conduct of performance tests	Yes	
§ 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.
§ 63.8(a)(1)-(2)	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

Citation	Subject	Applicable to subpart III	Explanation
			requirements for monitoring are specified in § 63.3168.
§ 63.8(a)(4)	Additional Monitoring Requirements	No	Subpart III does not have monitoring requirements for flares.
§ 63.8(b)	Conduct of Monitoring	Yes	
§ 63.8(c)(1)	Continuous Monitoring Systems (CMS) Operation and Maintenance	Yes before [date 181 days after date of publication of final rule in the FEDERAL REGISTER] No on and after [date 181 days after date of publication of final rule in the FEDERAL REGISTER]	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.
63.8(c)(2)-(3)	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.

<b>Citation</b>	<b>Subject</b>	<b>Applicable to subpart III</b>	<b>Explanation</b>
§ 63.89(c)(5)	COMS	No	Subpart III 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	Yes	
§ 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 III does not require the use of continuous emissions monitoring systems (CEMS).
§ 63.8(f)(1)-(5)	Use of an Alternative Monitoring Method	Yes	
§ 63.8(f)(6)	Alternative to Relative Accuracy Test	No	Subpart III does not require the use of CEMS.
§ 63.8(g)	Data Reduction	No	Sections 63.3167 and 63.3168 specify monitoring data reduction.
§ 63.9(a)	Notification Requirements	Yes	
§ 63.9(b)(1)-(2)	Initial Notifications	Yes	
§ 63.9(b)(4)(i), (b)(4)(v), (b)(5)	Application for Approval of Construction or Reconstruction	Yes	
§ 63.9(c)	Request for Extension of Compliance	Yes	



Citation	Subject	Applicable to subpart IIII	Explanation
§ 63.9(d)	Special Compliance Requirement Notification	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)	Additional Notifications When Using CMS	No	Subpart IIII does not require the use of CEMS.
§ 63.9(h)(1)-(3)	Notification of Compliance Status	Yes	Section 63.3110 specifies the dates for submitting the notification of compliance status.
§ 63.9(h)(5)-(6)	Clarifications	Yes	
§ 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)-(ii)	Recordkeeping of Occurrence and Duration of Startups and Shutdowns and of Failures to Meet Standards	Yes before <b>[date 181 days after date of publication of final rule in the FEDERAL REGISTER]</b>	See 63.3130(g).

Citation	Subject	Applicable to subpart III	Explanation
		No on and after [date 181 days after date of publication of final rule in the FEDERAL REGISTER]	
§ 63.10(b)(2)(iii)	Recordkeeping Relevant to Maintenance of Air Pollution Control and Monitoring Equipment	Yes	
§ 63.10(b)(2)(iv)-(v)	Actions Taken to Minimize Emissions During SSM	Yes before [date 181 days after date of publication of final rule in the FEDERAL REGISTER] No on and after [date 181 days after date of publication of final rule in the FEDERAL REGISTER]	See § 63.3130(g)(4) for a record of actions taken to minimize emissions during a deviation from the standard.
§ 63.10(b)(2)(vi)	Recordkeeping for CMS Malfunctions	Yes before [date 181 days after date of publication of final rule in the FEDERAL REGISTER] No on and after [date 181 days after date of publication of final rule in the FEDERAL REGISTER]	See § 63.3130(g) for records of periods of deviation from the standard, including instances where a CMS is inoperative or out-of-control.
§ 63.10(b)(2)(vii)-(xi)	Records	Yes	

Citation	Subject	Applicable to subpart III	Explanation
§ 63.10(b)(2)(xii)	Records	Yes	
§ 63.10(b)(2)(xiii)		No	Subpart III does not require the use of CEMS.
§ 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)	Additional Recordkeeping Requirements for Sources with CMS	No	See § 63.3130(g) for records of periods of deviation from the standard, including instances where a CMS is inoperative or out-of-control.
§ 63.10(c)(10)-(14)		Yes	
§ 63.10(c)(15)	Records Regarding the SSM Plan	Yes before <b>[date 181 days after date of publication of final rule in the FEDERAL REGISTER]</b> No on and after <b>[date 181 days after date of publication of final rule in the FEDERAL REGISTER]</b>	
§ 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).

Citation	Subject	Applicable to subpart III	Explanation
§ 63.10(d)(3)	Reporting Opacity or Visible Emissions Observations	No	Subpart III 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 before [date 181 days after date of publication of final rule in the FEDERAL REGISTER] No on and after [date 181 days after date of publication of final rule in the FEDERAL REGISTER]	See 63.3120(a)(6).
§ 63.10(e)(1)-(2)	Additional CMS Reports	No	Subpart III does not require the use of CEMS.
§ 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 III does not specify requirements for opacity or COMS.
§ 63.10(f)	Recordkeeping/Reporting Waiver	Yes	
§ 63.11	Control Device Requirements/Flares	No	Subpart III 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	

21. Table 5 to subpart IIII of part 63 is added to read as follows:

**Table 5 to Subpart IIII of Part 63—List of Hazardous Air Pollutants That Must Be Counted Toward Total Organic HAP Content if Present at 0.1 Percent or More by Mass**

Chemical Name	CAS No.
1,1,2,2-Tetrachloroethane	79-34-5
1,1,2-Trichloroethane	79-00-5
1,1-Dimethylhydrazine	57-14-7
1,2-Dibromo-3-chloropropane	96-12-8
1,2-Diphenylhydrazine	122-66-7
1,3-Butadiene	106-99-0
1,3-Dichloropropene	542-75-6
1,4-Dioxane	123-91-1
2,4,6-Trichlorophenol	88-06-2
2,4/2,6-Dinitrotoluene (mixture)	25321-14-6
2,4-Dinitrotoluene	121-14-2
2,4-Toluene diamine	95-80-7
2-Nitropropane	79-46-9
3,3'-Dichlorobenzidine	91-94-1
3,3'-Dimethoxybenzidine	119-90-4
3,3'-Dimethylbenzidine	119-93-7
4,4'-Methylene bis(2-chloroaniline)	101-14-4
Acetaldehyde	75-07-0
Acrylamide	79-06-1
Acrylonitrile	107-13-1
Allyl chloride	107-05-1
alpha-Hexachlorocyclohexane (a-HCH)	319-84-6
Aniline	62-53-3
Benzene	71-43-2
Benzidine	92-87-5
Benzotrichloride	98-07-7
Benzyl chloride	100-44-7

beta-Hexachlorocyclohexane (b-HCH)	319-85-7
Bis(2-ethylhexyl)phthalate	117-81-7
Bis(chloromethyl)ether	542-88-1
Bromoform	75-25-2
Captan	133-06-2
Carbon tetrachloride	56-23-5
Chlordane	57-74-9
Chlorobenzilate	510-15-6
Chloroform	67-66-3
Chloroprene	126-99-8
Cresols (mixed)	1319-77-3
DDE	3547-04-4
Dichloroethyl ether	111-44-4
Dichlorvos	62-73-7
Epichlorohydrin	106-89-8
Ethyl acrylate	140-88-5
Ethylene dibromide	106-93-4
Ethylene dichloride	107-06-2
Ethylene oxide	75-21-8
Ethylene thiourea	96-45-7
Ethylidene dichloride (1,1-Dichloroethane)	75-34-3
Formaldehyde	50-00-0
Heptachlor	76-44-8
Hexachlorobenzene	118-74-1
Hexachlorobutadiene	87-68-3
Hexachloroethane	67-72-1
Hydrazine	302-01-2
Isophorone	78-59-1
Lindane (hexachlorocyclohexane, all isomers)	58-89-9
m-Cresol	108-39-4
Methylene chloride	75-09-2
Naphthalene	91-20-3
Nitrobenzene	98-95-3

Nitrosodimethylamine	62-75-9
o-Cresol	95-48-7
o-Toluidine	95-53-4
Parathion	56-38-2
p-Cresol	106-44-5
p-Dichlorobenzene	106-46-7
Pentachloronitrobenzene	82-68-8
Pentachlorophenol	87-86-5
Propoxur	114-26-1
Propylene dichloride	78-87-5
Propylene oxide	75-56-9
Quinoline	91-22-5
Tetrachloroethene	127-18-4
Toxaphene	8001-35-2
Trichloroethylene	79-01-6
Trifluralin	1582-09-8
Vinyl bromide	593-60-2
Vinyl chloride	75-01-4
Vinylidene chloride	75-35-4

\* \* \* \* \*

**Subpart MMMM—National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products**

22. Section 63.3900 is amended by revising paragraphs (a)(2)(i), (a)(2)(ii), (b), and (c) to read as follows:

**§ 63.3900 What are my general requirements for complying with this subpart?**

(a) \* \* \*

(2) \* \* \*

(i) Before [date 181 days after publication of final rule in the **FEDERAL REGISTER**], the coating operation(s) must be in compliance with the applicable emission limit in § 63.3890 at all times except during periods of startup, shutdown, and malfunction. On or after

[**date 181 days after publication of final rule in the FEDERAL REGISTER**] you must be in compliance with the applicable emission limits in §63. 3890 and the operating limits in Table 1 of this subpart at all times.

(ii) Before [**date 181 days after publication of final rule in the FEDERAL REGISTER**], the coating operation(s) must be in compliance with the operating limits for emission capture systems and add-on control devices required by § 63.3892 at all times except during periods of startup, shutdown, and malfunction, and except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.3961(j). On or after [**date 181 days after publication of final rule in the FEDERAL REGISTER**] the coating operation(s) must be in compliance with the operating limits for emission capture systems and add-on control devices required by § 63.3892 at all times, except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.3961(j).

\* \* \* \* \*

(b) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], 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). On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], at all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in



compliance with operation and maintenance requirements will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the affected source.

(c) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], if your affected source uses an emission capture system and add-on control device, you must develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in § 63.6(e)(3). The plan must address the startup, shutdown, and corrective actions in the event of a malfunction of the emission capture system or the add-on control device. The plan must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the SSMP is not required.

23. Section 63.3920 is amended by:

- a. Revising paragraphs (a)(5) introductory text, (a)(5)(i), and (a)(5)(iv);
- b. Adding paragraph (a)(5)(v);
- c. Revising paragraphs (a)(6) introductory text and (a)(6)(iii);
- d. Adding paragraph (a)(6)(iv);
- e. Revising paragraphs (a)(7) introductory text, (a)(7)(iii), (vi) through (viii), (x), (xiii), and (xiv);
- f. Adding paragraph (a)(7)(xv);
- g. Revising paragraph (c) introductory text; and
- h. Adding paragraphs (d) through (h).

The revisions and additions read as follows:

**§ 63.3920 What reports must I submit?**

(a) \* \* \*

(5) *Deviations: Compliant material option.* If you used the compliant material option and there was a deviation from the applicable organic HAP content requirements in § 63.3890, the semiannual compliance report must contain the information in paragraphs (a)(5)(i) through (v) of this section.

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

\* \* \* \* \*

(iv) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], a statement of the cause of each deviation. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], a statement of the cause of each deviation (including unknown cause, if applicable).

(v) On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the number of deviations and, for each deviation, a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any applicable emission limit in § 63.3890, a description of the method used to estimate the emissions, and the actions you took to minimize emissions in accordance with §63.3900(b).

(6) *Deviations: Emission rate without add-on controls option.* If you used the emission rate without add-on controls option and there was a deviation from the applicable emission limit

in § 63.3890, the semiannual compliance report must contain the information in paragraphs (a)(6)(i) through (iv) of this section.

\* \* \* \* \*

(iii) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], a statement of the cause of each deviation. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], a statement of the cause of each deviation (including unknown cause, if applicable).

(iv) On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the number of deviations and, for each deviation, the date, time, duration, a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any applicable emission limit in § 63.3890, a description of the method used to estimate the emissions, and the actions you took to minimize emissions in accordance with § 63.3900(b).

(7) *Deviations: Emission rate with add-on controls option.* If you used the emission rate with add-on controls option and there was a deviation from the applicable emission limit in § 63.3890 or the applicable operating limit(s) in Table 1 to this subpart (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere), before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the semiannual compliance report must contain the information in paragraphs (a)(7)(i) through (xiv) of this section. This includes periods of startup, shutdown, and malfunction during which deviations occurred. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the semiannual compliance report must contain the information in paragraphs (a)(7)(i) through (xii), (a)(7)(xiv), and (a)(7)(xv) of this section. If you use the

emission rate with add-on controls option and there was a deviation from the applicable work practice standards in § 63.3893(b), the semiannual compliance report must contain the information in paragraph (a)(7)(xiii) of this section.

\* \* \* \* \*

(iii) The date and time that each malfunction of the capture system or add-on control devices started and stopped.

\* \* \* \* \*

(vi) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the date and time that each CPMS was inoperative, except for zero (low-level) and high-level checks. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the number of instances that the CPMS was inoperative, and for each instance, except for zero (low-level) and high-level checks, the date, time, and duration that the CPMS was inoperative; the cause (including unknown cause) for the CPMS being inoperative; and the actions you took to minimize emissions in accordance with § 63.3900(b).

(vii) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the date, time, and duration that each CPMS was out-of-control, including the information in § 63.8(c)(8). On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the number of instances that the CPMS was out of control as specified in § 63.8(c)(7) and, for each instance, the date, time, and duration that the CPMS was out-of-control; the cause (including unknown cause) for the CPMS being out-of-control; and descriptions of corrective actions taken.

(viii) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the date and time period of each deviation from an operating limit in Table 1 to

this subpart; date and time period of any bypass of the add-on control device; and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

On and after [date 181 days after date of publication of final rule in the FEDERAL REGISTER], the number of deviations from an operating limit in Table 1 to this subpart and, for each deviation, the date, time, and duration of each deviation; and the date, time, and duration of any bypass of the add-on control device.

\* \* \* \* \*

(x) Before [date 181 days after date of publication of final rule in the FEDERAL REGISTER], a breakdown of the total duration of the deviations from the operating limits in Table 1 of this subpart and bypasses of the add-on control device during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes. On and after [date 181 days after date of publication of final rule in the FEDERAL REGISTER], a breakdown of the total duration of the deviations from the operating limits in Table 1 to this subpart and bypasses of the add-on control device during the semiannual reporting period into those that were due to control equipment problems, process problems, other known causes, and other unknown causes.

\* \* \* \* \*

(xiii) Before [date 181 days after date of publication of final rule in the FEDERAL REGISTER], 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. On and after [date 181 days after date of publication of final rule in the FEDERAL REGISTER], for deviations from the work practice standards, the number of

deviations, and, for each deviation, the information in paragraphs (a)(7)(xiii)(A) and (B) of this section:

(A) A description of the deviation; the date, time, and duration of the deviation; and the actions you took to minimize emissions in accordance with § 63.3900(b).

(B) The description required in paragraph (a)(7)(xiii)(A) of this section must include a list of the affected sources or equipment for which a deviation occurred and the cause of the deviation (including unknown cause, if applicable).

(xiv) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], statement of the cause of each deviation. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], for deviations from an emission limit in § 63.3890 or an operating limit in Table 1 to this subpart, a statement of the cause of each deviation (including unknown cause, if applicable) and the actions you took to minimize emissions in accordance with § 63.3900(b).

(xv) On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], for each deviation from an emission limit in § 63.3890 or operating limit in Table 1 to this subpart, a list of the affected sources or equipment for which a deviation occurred, an estimate of the quantity of each regulated pollutant emitted over any emission limit in § 63.3890 or operating limit in Table 1 to this subpart, and a description of the method used to estimate the emissions.

\* \* \* \* \*

(c) *Startup, shutdown, malfunction reports.* Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], if you used the emission rate with add-on controls option and you had a startup, shutdown, or malfunction during the semiannual

reporting period, you must submit the reports specified in paragraphs (c)(1) and (2) of this section. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the reports specified in paragraphs (c)(1) and (2) of this section are not required.

\* \* \* \* \*

(d) On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], you must submit the results of the performance test required in §§ 63.3940 and 63.3950 following the procedure specified in paragraphs (d)(1) through (3) of this section.

(1) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) at the time of the test, you must submit the results of the performance test to the EPA via the CEDRI. The CEDRI interface can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the XML schema listed on the EPA's ERT website.

(2) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in § 63.13, unless the Administrator agrees to or specifies an alternate reporting method.

(3) If you claim that some of the performance test information being submitted under paragraph (d)(1) of this section is CBI, you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website, including information claimed to be CBI, on a compact disc, flash drive,

or other commonly used electronic storage medium to the EPA. The electronic medium must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraph (d)(1) of this section.

(e) On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the owner or operator shall submit the initial notifications required in § 63.9(b) and the notification of compliance status required in § 63.9(h) and § 63.3910(c) to the EPA via the CEDRI. The CEDRI interface can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The owner or operator must upload to CEDRI an electronic copy of each applicable notification in portable document format (PDF). The applicable notification must be submitted by the deadline specified in this subpart, regardless of the method in which the reports are submitted. Owners or operators who claim that some of the information required to be submitted via CEDRI is CBI shall submit a complete report generated using the appropriate form in CEDRI or an alternate electronic file consistent with the XML schema listed on the EPA's CEDRI website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium shall be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(f) On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], or once the reporting template has been available on the CEDRI



website for 1 year, whichever date is later, the owner or operator shall submit the semiannual compliance report required in paragraph (a) of this section to the EPA via the CEDRI. The CEDRI interface can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The owner or operator must use the appropriate electronic template on the CEDRI website for this subpart or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri>). The date report templates become available will be listed on the CEDRI website. If the reporting form for the semiannual compliance report specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate addresses listed in § 63.13. Once the form has been available in CEDRI for 1 year, you must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted. Owners or operators who claim that some of the information required to be submitted via CEDRI is CBI shall submit a complete report generated using the appropriate form in CEDRI or an alternate electronic file consistent with the XML schema listed on the EPA's CEDRI website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium shall be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(g) If you are required to electronically submit a report through the CEDRI in the EPA's CDX, and due to a planned or actual outage of either the EPA's CEDRI or CDX systems within

the period of time beginning 5 business days prior to the date that the submission is due, you will be or are precluded from accessing CEDRI or CDX and submitting a required report within the time prescribed, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description identifying the date, time and length of the outage; a rationale for attributing the delay in reporting beyond the regulatory deadline to the EPA system outage; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(h) If you are required to electronically submit a report through CEDRI in the EPA's CDX and a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning 5 business days prior to the date the submission is due, the owner or operator may assert a claim of force majeure for failure to timely comply with the reporting requirement. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.*, hurricanes, earthquakes,

or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.*, large scale power outage). If you intend to assert a claim of force majeure, you must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

24. Section 63.3930 is amended by revising paragraphs (j), (k) introductory text, (k)(1), and (k)(2) to read as follows:

**§ 63.3930 What records must I keep?**

\* \* \* \* \*

(j) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], you must keep records of the date, time, and duration of each deviation. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], for each deviation from an emission limitation reported under § 63.3920(a)(5) through (7), a record of the information specified in paragraphs (j)(1) through (4) of this section, as applicable.

(1) The date, time, and duration of the deviation, as reported under § 63.3920(a)(5) through (7).

(2) A list of the affected sources or equipment for which the deviation occurred and the cause of the deviation, as reported under § 63.3920(a)(5) through (7).

(3) An estimate of the quantity of each regulated pollutant emitted over any applicable emission limit in § 63.3890 or any applicable operating limit in Table 1 to this subpart, and a description of the method used to calculate the estimate, as reported under § 63.3920(a)(5) through (7).

(4) A record of actions taken to minimize emissions in accordance with § 63.3900(b) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

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

(1) Before [date 181 days after date of publication of final rule in the **FEDERAL REGISTER**], for each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction. On and after [date 181 days after date of publication of final rule in the **FEDERAL REGISTER**], a record of whether the deviation occurred during a period of startup, shutdown, or malfunction is not required.

(2) Before [date 181 days after date of publication of final rule in the **FEDERAL REGISTER**], the records in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. On and after [date 181 days after date of publication of final rule in the **FEDERAL REGISTER**], the records in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction are not required.

\* \* \* \* \*

25. Section 63.3931 is amended by revising paragraph (a) to read as follows:

**§ 63.3931 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. On and after **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, any records required to be maintained by this subpart that are in reports that were submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

\* \* \* \* \*

26. Section 63.3941 is amended by revising paragraphs (a)(1)(i), (a)(4), (b)(1), the definition of “*D<sub>avg</sub>*” in Equation 1 of paragraph (b)(4), and paragraph (c) to read as follows:

**§ 63.3941 How do I demonstrate initial compliance with the emission limitations?**

\* \* \* \* \*

(a) \* \* \*

(1) \* \* \*

(i) Count each organic HAP in Table 5 to this subpart that is measured to be present at 0.1 percent by mass or more and at 1.0 percent by mass or more for other compounds. For example, if toluene (not listed in Table 5 to this subpart) 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).

\* \* \* \* \*

(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 in Table 5 to this subpart that is present at 0.1 percent by mass or more and at 1.0 percent by mass or more for other compounds. For example, if toluene (not listed in Table 5 to this subpart) is 0.5 percent of the material by mass, you do not have to count it. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may rely on manufacturer's data that expressly states the organic HAP or volatile matter mass fraction emitted. 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, you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

\* \* \* \* \*

(b) \* \* \*

(1) *ASTM Method D2697-03 (2014) or D6093-97 (2016).* You may use ASTM Method D2697-03 (2014), "Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings" (incorporated by reference, *see* § 63.14), or D6093-97 (2016), "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.

\* \* \* \* \*

(4) \* \* \*

$D_{avg}$  = Average density of volatile matter in the coating, grams volatile matter per liter volatile matter, determined from test results using ASTM Method D1475-13, “Standard Test Method for Density of Liquid Coatings, Inks, and Related Products” (incorporated by reference, *see* § 63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475-13 test results and other information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(c) *Determine the density of each coating.* Determine the density of each coating used during the compliance period from test results using ASTM Method D1475-13, “Standard Test Method for Density of Liquid Coatings, Inks, and Related Products” (incorporated by reference, *see* § 63.14), information from the supplier or manufacturer of the material, or specific gravity data for pure chemicals. If there is disagreement between ASTM Method D1475-13 test results and the supplier's or manufacturer's information, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

\* \* \* \* \*

27. Section 63.3951 is amended by revising paragraph (c) to read as follows:

**§ 63.3951 How do I demonstrate initial compliance with the emission limitations?**

\* \* \* \* \*

(c) *Determine the density of each material.* Determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM Method D1475-13, “Standard Test Method for Density of Liquid Coatings, Inks, and Related Products,” or ASTM Method D2111-10 (2015), “Standard Test Methods for Specific Gravity of Halogenated Organic Solvents and Their Admixtures” (both incorporated by reference, *see* § 63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If you are

including powder coatings in the compliance determination, determine the density of powder coatings, using ASTM Method D5965-02 (2013), “Standard Test Methods for Specific Gravity of Coating Powders” (incorporated by reference, *see* § 63.14), or information from the supplier. If there is disagreement between ASTM Method D1475-13 or ASTM Method D2111-10 (2015) test results and other such information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine material density. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 of this section.

\* \* \* \*

28. Section 63.3960 is amended by revising paragraphs (a)(1), (a)(4), (b)(1), and (c) introductory text to read as follows:

**§ 63.3960 By what date must I conduct performance tests and other initial compliance demonstrations?**

(a) \* \* \*

(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 § 63.3883. Except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.3961(j), you must conduct according to the schedule in paragraphs (a)(1)(i) and (ii) of this section initial and periodic performance tests of each capture system and add-on control device according to the procedures in §§ 63.3964, 63.3965, and 63.3966 and establish the operating limits required by § 63.3892. For a solvent recovery system for which you conduct liquid-liquid material balances according to § 63.3961(j), you must initiate the first material balance no later



than the applicable compliance date specified in § 63.3883. For magnet wire coating operations, you may, with approval, conduct a performance test of one representative magnet wire coating machine for each group of identical or very similar magnet wire coating machines.

(i) You must conduct the initial performance test and establish the operating limits required by § 63.3892 no later than 180 days after the applicable compliance date specified in § 63.3883.

(ii) You must conduct periodic performance tests and establish the operating limits required by § 63.3892 within 5 years following the previous performance test. You must conduct the first periodic performance test before [**date 3 years after date of publications of final rule in the FEDERAL REGISTER**], unless you are already required to complete periodic performance tests as a requirement of renewing your facility's operating permit under 40 CFR part 70 or 40 CFR part 71 and have conducted a performance test on or after [**date 2 years before date of publications of final rule in the FEDERAL REGISTER**]. Thereafter you must conduct a performance test no later than 5 years following the previous performance test. Operating limits must be confirmed or reestablished during each performance test. For any control device for which you are using the catalytic oxidizer control option at § 63.3967(b) and following the catalyst maintenance procedures in § 63.3967(b)(4), you are not required to conduct periodic testing control device performance testing as specified by this paragraph. For any control device for which instruments are used to continuously measure organic compound emissions, you are not required to conduct periodic control device performance testing as specified by this paragraph.

\* \* \* \* \*

(4) For the initial compliance demonstration, you do not need to comply with the operating limits for the emission capture system and add-on control device required by § 63.3892 until after you have completed the initial performance tests specified in paragraph (a)(1) of this section. Instead, you must maintain a log detailing the operation and maintenance of the emission capture system, add-on control device, and continuous parameter monitors during the period between the compliance date and the performance test. You must begin complying with the operating limits established based on the initial performance tests specified in paragraph (a)(1) of this section for your affected source on the date you complete the performance tests. For magnet wire coating operations, you must begin complying with the operating limits for all identical or very similar magnet wire coating machines on the date you complete the performance test of a representative magnet wire coating machine. The requirements in this paragraph (a)(4) do not apply to solvent recovery systems for which you conduct liquid-liquid material balances according to the requirements in § 63.3961(j).

(b) \* \* \*

(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 § 63.3883. Except for magnet wire coating operations and solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.3961(j), you must conduct according to the schedule in paragraphs (b)(1)(i) and (ii) of this section initial and periodic performance tests of each capture system and add-on control device according to the procedures in §§ 63.3964, 63.3965, and 63.3966 and establish the operating limits required by § 63.3892. For magnet wire coating operations, you may, with approval, conduct a performance test of a single magnet wire coating machine that represents identical or very similar magnet wire coating machines. For a solvent

recovery system for which you conduct liquid-liquid material balances according to § 63.3961(j), you must initiate the first material balance no later than the compliance date specified in § 63.3883.

(i) You must conduct the initial performance test and establish the operating limits required by § 63.3892 no later than 180 days after the applicable compliance date specified in § 63.3883.

(ii) You must conduct periodic performance tests and establish the operating limits required by § 63.3892 within 5 years following the previous performance test. You must conduct the first periodic performance test before [**date 3 years after date of publications of final rule in the FEDERAL REGISTER**], unless you are already required to complete periodic performance tests as a requirement of renewing your facility's operating permit under 40 CFR part 70 or 40 CFR part 71 and have conducted a performance test on or after [**date 2 years before date of publications of final rule in the FEDERAL REGISTER**]. Thereafter you must conduct a performance test no later than 5 years following the previous performance test. Operating limits must be confirmed or reestablished during each performance test. For any control device for which you are using the catalytic oxidizer control option at § 63.3967(b) and following the catalyst maintenance procedures in § 63.3967(b)(4), you are not required to conduct periodic testing control device performance testing as specified by this paragraph. For any control device for which instruments are used to continuously measure organic compound emissions, you are not required to conduct periodic control device performance testing as specified by this paragraph.

\* \* \* \* \*

(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 or control device. Any such previous tests must meet the conditions described in paragraphs (c)(1) through (3) of this section. You are still required to conduct a periodic performance test according to the applicable requirements of paragraphs (a)(1)(ii) and (b)(2)(ii) of this section.

\* \* \* \* \*

29. Section 63.3961 is amended by revising paragraph (j)(3) to read as follows:

**§ 63.3961 How do I demonstrate initial compliance?**

\* \* \* \* \*

(j) \* \* \*

(3) Determine the mass fraction of volatile organic matter for each coating, thinner and/or other additive, and cleaning material 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 EPA Method 24 of 40 CFR part 60, appendix A-7, ASTM Method D2369-10 (2015), “Test Method for Volatile Content of Coatings” (incorporated by reference, *see* § 63.14), 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 EPA Method 24 of 40 CFR part 60, appendix A-7, ASTM Method D2369-10 (2015), or an approved alternative method, the test method results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

\* \* \* \* \*

30. Section 63.3963 is amended by revising paragraph (f) and adding paragraph (i) to read as follows:

**§ 63.3963 How do I demonstrate continuous compliance with the emission limitations?**

\* \* \* \* \*

(f) As part of each semiannual compliance report required in § 63.3920, you must identify the coating operation(s) for which you used the emission rate with add-on controls option. If there were no deviations from the emission limits in § 63.3890, the operating limits in § 63.3892, and the work practice standards in § 63.3893, submit a statement that you were in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in § 63.3890, and you achieved the operating limits required by § 63.3892 and the work practice standards required by § 63.3893 during each compliance period.

\* \* \* \* \*

(i) On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], deviations that occur due to malfunction of the emission capture system, add-on control device, or coating operation that may affect emission capture or control device efficiency are required to operate in accordance with § 63.3900(b). The Administrator will determine whether the deviations are violations according to the provisions in § 63.3900(b).

\* \* \* \* \*

31. Section 63.3964 is amended by revising paragraphs (a) introductory text and (a)(1) to read as follows:

**§ 63.3964 What are the general requirements for performance tests?**

(a) Before [date 181 days after date of publication of final rule in the FEDERAL REGISTER], you must conduct each performance test required by § 63.3960 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). On and after [date 181 days after date of publication of final rule in the FEDERAL REGISTER], you must conduct each performance test required by § 63.3960 according to the requirements 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 periods of nonoperation do not constitute representative conditions for purposes of conducting a performance test. The owner or operator may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

\* \* \* \* \*

32. Section 63.3965 is amended by revising the introductory text to read as follows:

**§ 63.3965 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 each performance test required by § 63.3960.

\* \* \* \* \*

33. Section 63.3966 is amended by revising the introductory text and paragraph (b) to read as follows:

**§ 63.3966 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 § 63.3960. For each performance test, you must conduct three test runs as specified in § 63.7(e)(3) and each test run must last at least 1 hour. If the source is a magnet wire coating machine, you may use the procedures in section 3.0 of appendix A to this subpart as an alternative.

\* \* \* \* \*

(b) Measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-on control device simultaneously, using either EPA Method 25 or 25A of appendix A-7 to 40 CFR part 60.

(1) Use EPA Method 25 of appendix A-7 to 40 CFR part 60 if the add-on control device is an oxidizer and you expect the total gaseous organic concentration as carbon to be more than 50 parts per million (ppm) at the control device outlet.

(2) Use EPA Method 25A of appendix A-7 to 40 CFR part 60 if the add-on control device is an oxidizer and you expect the total gaseous organic concentration as carbon to be 50 ppm or less at the control device outlet.

(3) Use EPA Method 25A of appendix A-7 to 40 CFR part 60 if the add-on control device is not an oxidizer.

(4) You may use EPA Method 18 of appendix A-6 to 40 CFR part 60 to subtract methane emissions from measured total gaseous organic mass emissions as carbon.

\* \* \* \* \*

34. Section 63.3967 is amended by revising paragraphs (a)(1) and (2), (b)(1) through (3), (d)(1) and (2), and (e)(1) through (4) to read as follows:

**§ 63.3967 How do I establish the emission capture system and add-on control device operating limits during the performance test?**

\* \* \* \* \*

(a) \* \* \*

(1) During performance tests, 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) For each performance test, use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. This average combustion temperature is the minimum operating limit for your thermal oxidizer.

(b) \* \* \*

(1) During performance tests, 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) For each performance test, use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed and the average



temperature difference across the catalyst bed maintained during the performance test. These are the minimum operating limits for your catalytic oxidizer.

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

\* \* \* \* \*

(d) \* \* \*

(1) During performance tests, 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) For each performance test, use the data collected during the performance test to calculate and record the average condenser outlet (product side) gas temperature maintained during the performance test. This average condenser outlet gas temperature is the maximum operating limit for your condenser.

(e) \* \* \*

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

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

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

(4) For each performance test, use the data collected during the performance test to calculate and record the average pressure drop. This is the minimum operating limit for the dilute stream across the concentrator.

\* \* \* \* \*

35. Section 63.3968 is amended by revising paragraphs (a)(4), (a)(5), (a)(7), and (c)(3) introductory text to read as follows:

**§ 63.3968 What are the requirements for continuous parameter monitoring system installation, operation, and maintenance?**

(a) \* \* \*

(4) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], you must maintain the CPMS at all times and have available necessary parts for routine repairs of the monitoring equipment. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], you must maintain the CPMS at all times in accordance with § 63.3900(b) and keep necessary parts readily available for routine repairs of the monitoring equipment.

(5) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], 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).

On and after **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, you must operate the CPMS and collect emission capture system and add-on control device parameter data at all times in accordance with § 63.3900(b).

\* \* \* \* \*

(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. Before **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, 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. On and after **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, except for periods of required quality assurance or control activities, any period for which the CPMS fails to operate and record data continuously as required by paragraph (a)(5) of this section, or generates data that cannot be included in calculating averages as specified in (a)(6) of this section constitutes a deviation from the monitoring requirements.

\* \* \* \* \*

(c) \* \* \*

(3) For all thermal oxidizers and catalytic oxidizers, you must meet the requirements in paragraphs (a) and (c)(3)(i) through (v) of this section for each gas temperature monitoring

device. For the purposes of this paragraph (c)(3), a thermocouple is part of the temperature sensor.

\* \* \* \* \*

36. Section 63.3981 is amended by revising the definitions of “Deviation” and “Non-HAP coating” to read as follows:

**§ 63.3981 What definitions apply to this subpart?**

\* \* \* \* \*

*Deviation* means:

(a) Before **[DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

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

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

(3) Fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart; and

(b) On and after **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, any instance in which an affected source subject to this subpart or an owner or operator of such a source:

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

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

\* \* \* \* \*

*Non-HAP coating* means, for the purposes of this subpart, a coating that contains no more than 0.1 percent by mass of any individual organic HAP that is listed in Table 5 to this subpart and no more than 1.0 percent by mass for any other individual HAP.

\* \* \* \* \*

37. Table 2 to Subpart MMMM of Part 63 is revised to read as follows:

**Table 2 to Subpart MMMM of Part 63—Applicability of General Provisions to Subpart MMMM of Part 63**

You must comply with the applicable General Provisions requirements according to the following table:

Citation	Subject	Applicable to subpart MMMM	Explanation
§ 63.1(a)(1)-(14)	General Applicability	Yes	
§ 63.1(b)(1)-(3)	Initial Applicability Determination	Yes	Applicability to subpart MMMM is also specified in § 63.3881.
§ 63.1(c)(1)	Applicability After Standard Established	Yes	
§ 63.1(c)(2)-(3)	Applicability of Permit Program for Area Sources	No	Area sources are not subject to subpart MMMM.
§ 63.1(c)(4)-(5)	Extensions and Notifications	Yes	

§ 63.1(e)	Applicability of Permit Program Before Relevant Standard is Set	Yes	
§ 63.2	Definitions	Yes	Additional definitions are specified in § 63.3981.
§ 63.1(a)-(c)	Units and Abbreviations	Yes	
§ 63.4(a)(1)-(5)	Prohibited Activities	Yes	
§ 63.4(b)-(c)	Circumvention/Severability	Yes	
§ 63.5(a)	Construction/Reconstruction	Yes	
§ 63.5(b)(1)-(6)	Requirements for Existing Newly Constructed, and Reconstructed Sources	Yes	
§ 63.5(d)	Application for Approval of Construction/Reconstruction	Yes	
§ 63.5(e)	Approval of Construction/Reconstruction	Yes	
§ 63.5(f)	Approval of Construction/Reconstruction Based on Prior State Review	Yes	
§ 63.6(a)	Compliance With Standards and Maintenance Requirements—Applicability	Yes	
§ 63.6(b)(1)-(7)	Compliance Dates for New and Reconstructed Sources	Yes	Section 63.3883 specifies the compliance dates.
§ 63.6(c)(1)-(5)	Compliance Dates for Existing Sources	Yes	Section 63.3883 specifies the compliance dates.
§ 63.6(e)(1)-(2)	Operation and Maintenance	Yes before [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ] No on and after [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ]	See § 63.3900(b) for general duty requirement.

§ 63.6(e)(3)	Startup, Shutdown, and Malfunction Plan	Yes before [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ] No on and after [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ]	
§ 63.6(f)(1)	Compliance Except During Startup, Shutdown, and Malfunction	Yes before [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ] No on and after [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ]	
§ 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 Mmmm does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).
§ 63.6(i)(1)-(16)	Extension of Compliance	Yes	
§ 63.6(j)	Presidential Compliance Exemption	Yes	
§ 63.7(a)(1)	Performance Test Requirements—Applicability	Yes	Applies to all affected sources. Additional requirements for performance testing are specified in §§ 63.3964, 63.3965, and 63.3966.
§ 63.7(a)(2)	Performance Test Requirements—Dates	Yes	Applies only to performance tests for

			capture system and control device efficiency at sources using these to comply with the standard. Section 63.3960 specifies the schedule for performance test requirements that are earlier than those specified in § 63.7(a)(2).
§ 63.7(a)(3)-(4)	Performance Tests Required By the Administrator, Force Majeure	Yes	
§ 63.7(b)-(d)	Performance Test Requirements—Notification, Quality Assurance, Facilities Necessary for Safe Testing, Conditions During Test	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.
§ 63.7(e)(1)	Conduct of Performance Tests	Yes before [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ] No on and after [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ]	See §§ 63.3964
§ 63.7(e)(2)-(4)	Conduct of Performance Tests	Yes	
§ 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 standard.



§ 63.8(a)(1)-(3)	Monitoring Requirements—Applicability	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for monitoring are specified in § 63.3968.
§ 63.8(a)(4)	Additional Monitoring Requirements	No	Subpart Mmmm does not have monitoring requirements for flares.
§ 63.8(b)	Conduct of Monitoring	Yes	
§ 63.8(c)(1)	Continuous Monitoring System (CMS) Operation and Maintenance	Yes before <b>[date 181 days after date of publication of final rule in the FEDERAL REGISTER]</b> No on and after <b>[date 181 days after date of publication of final rule in the FEDERAL REGISTER]</b>	Section 63.3968 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(2)-(3)	CMS Operation and Maintenance	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for CMS operations and maintenance are specified in § 63.3968.
§ 63.8(c)(4)	CMS	No	§ 63.3968 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.

§ 63.8(c)(5)	COMS	No	Subpart M MMM does not have opacity or visible emission standards.
§ 63.8(c)(6)	CMS Requirements	No	Section 63.3968 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(7)	CMS Out-of-Control Periods	Yes	
§ 63.8(c)(8)	CMS Out-of-Control Periods and Reporting	No	§ 63.3920 requires reporting of CMS out-of-control periods.
§ 63.8(d)-(e)	Quality Control Program and CMS Performance Evaluation	No	Subpart M MMM 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 M MMM does not require the use of continuous emissions monitoring systems.
§ 63.8(g)(1)-(5)	Data Reduction	No	Sections 63.3967 and 63.3968 specify monitoring data reduction.
§ 63.9(a)-(d)	Notification Requirements	Yes	
§ 63.9(e)	Notification of Performance Test	Yes	Applies only to capture system and add-on control device performance tests at sources using these to comply with the standard.
§ 63.9(f)	Notification of Visible Emissions/Opacity Test	No	Subpart M MMM does not have opacity or

			visible emissions standards.
§ 63.9(g)(1)-(3)	Additional Notifications When Using CMS	No	Subpart M MMM does not require the use of continuous emissions monitoring systems.
§ 63.9(h)	Notification of Compliance Status	Yes	Section 63.3910 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 §§ 63.3930 and 63.3931.
§ 63.10(b)(2)(i)-(ii)	Recordkeeping of Occurrence and Duration of Startups and Shutdowns and of Failures to Meet Standards	Yes before [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ] No on and after [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ]	See § 63.3930(j).
§ 63.10(b)(2)(iii)	Recordkeeping Relevant to Maintenance of Air Pollution Control and Monitoring Equipment	Yes	§ 63.10(b)(2)(iii)
§ 63.10(b)(2)(iv)-(v)	Actions Taken to Minimize Emissions During Startup, Shutdown, and Malfunction	Yes before [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ] No on and after [ <b>date 181 days after date of</b>	See § 63.3930(j) for a record of actions taken to minimize emissions duration a deviation from the standard.

		<b>publication of final rule in the FEDERAL REGISTER]</b>	
§ 63.10(b)(2)(vi)	Recordkeeping for CMS Malfunctions	Yes before [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER]</b> No on and after [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER]</b>	<i>See § 63.3930(j) for records of periods of deviation from the standard, including instances where a CMS is inoperative or out-of-control.</i>
§ 63.10(b)(2)(xii)	Records	Yes	
§ 63.10(b)(2)(xiii)		No	Subpart Mmmm 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)	Additional Recordkeeping Requirements for Sources with CMS	No	<i>See § 63.3930(j) for records of periods of deviation from the standard, including instances where a CMS is inoperative or out-of-control.</i>
§ 63.10(c)(10)-(14)	Additional Recordkeeping Requirements for Sources with CMS	Yes	
§ 63.10(c)(15)	Records Regarding the Startup, Shutdown, and Malfunction Plan	Yes before [ <b>date 181 days after date of publication of final rule</b>	

		<b>in the FEDERAL REGISTER]</b> No on and after [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER]</b>	
§ 63.10(d)(1)	General Reporting Requirements	Yes	Additional requirements are specified in § 63.3920.
§ 63.10(d)(2)	Report of Performance Test Results	Yes	Additional requirements are specified in § 63.3920(b) and (d).
§ 63.10(d)(3)	Reporting Opacity or Visible Emissions Observations	No	Subpart M MMM 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 before [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER]</b> No on and after [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER]</b>	See § 63.3920 (a)(7) and (c).
§ 63.10(e) (1)-(2)	Additional CMS Reports	No	Subpart M MMM does not require the use of continuous emissions monitoring systems.
§ 63.10(e) (3)	Excess Emissions/CMS Performance Reports	No	Section 63.3920 (b) specifies the contents of periodic compliance reports.
§ 63.10(e) (4)	COMS Data Reports	No	Subpart M MMM does not specify requirements for opacity or COMS.

§ 63.10(f)	Recordkeeping/Reporting Waiver	Yes	
§ 63.11	Control Device Requirements/Flares	No	Subpart M MMM 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	

38. Table 5 to Subpart M MMM of Part 63 is added to read as follows:

**Table 5 to Subpart M MMM of Part 63—List of Hazardous Air Pollutants That Must Be Counted Toward Total Organic HAP Content if Present at 0.1 Percent or More by Mass**

<b>Chemical Name</b>	<b>CAS No.</b>
1,1,2,2-Tetrachloroethane	79-34-5
1,1,2-Trichloroethane	79-00-5
1,1-Dimethylhydrazine	57-14-7
1,2-Dibromo-3-chloropropane	96-12-8
1,2-Diphenylhydrazine	122-66-7
1,3-Butadiene	106-99-0
1,3-Dichloropropene	542-75-6
1,4-Dioxane	123-91-1
2,4,6-Trichlorophenol	88-06-2
2,4,2,6-Dinitrotoluene (mixture)	25321-14-6
2,4-Dinitrotoluene	121-14-2
2,4-Toluene diamine	95-80-7
2-Nitropropane	79-46-9
3,3'-Dichlorobenzidine	91-94-1
3,3'-Dimethoxybenzidine	119-90-4
3,3'-Dimethylbenzidine	119-93-7
4,4'-Methylene bis(2-chloroaniline)	101-14-4
Acetaldehyde	75-07-0
Acrylamide	79-06-1
Acrylonitrile	107-13-1
Allyl chloride	107-05-1

alpha-Hexachlorocyclohexane (a-HCH)	319-84-6
Aniline	62-53-3
Benzene	71-43-2
Benzidine	92-87-5
Benzotrichloride	98-07-7
Benzyl chloride	100-44-7
beta-Hexachlorocyclohexane (b-HCH)	319-85-7
Bis(2-ethylhexyl)phthalate	117-81-7
Bis(chloromethyl)ether	542-88-1
Bromoform	75-25-2
Captan	133-06-2
Carbon tetrachloride	56-23-5
Chlordane	57-74-9
Chlorobenzilate	510-15-6
Chloroform	67-66-3
Chloroprene	126-99-8
Cresols (mixed)	1319-77-3
DDE	3547-04-4
Dichloroethyl ether	111-44-4
Dichlorvos	62-73-7
Epichlorohydrin	106-89-8
Ethyl acrylate	140-88-5
Ethylene dibromide	106-93-4
Ethylene dichloride	107-06-2
Ethylene oxide	75-21-8
Ethylene thiourea	96-45-7
Ethylidene dichloride (1,1-Dichloroethane)	75-34-3
Formaldehyde	50-00-0
Heptachlor	76-44-8
Hexachlorobenzene	118-74-1
Hexachlorobutadiene	87-68-3
Hexachloroethane	67-72-1
Hydrazine	302-01-2
Isophorone	78-59-1
Lindane (hexachlorocyclohexane, all isomers)	58-89-9
m-Cresol	108-39-4
Methylene chloride	75-09-2
Naphthalene	91-20-3
Nitrobenzene	98-95-3

Nitrosodimethylamine	62-75-9
o-Cresol	95-48-7
o-Toluidine	95-53-4
Parathion	56-38-2
p-Cresol	106-44-5
p-Dichlorobenzene	106-46-7
Pentachloronitrobenzene	82-68-8
Pentachlorophenol	87-86-5
Propoxur	114-26-1
Propylene dichloride	78-87-5
Propylene oxide	75-56-9
Quinoline	91-22-5
Tetrachloroethene	127-18-4
Toxaphene	8001-35-2
Trichloroethylene	79-01-6
Trifluralin	1582-09-8
Vinyl bromide	593-60-2
Vinyl chloride	75-01-4
Vinylidene chloride	75-35-4



**Subpart NNNN—National Emission Standards for Hazardous Air Pollutants: Surface Coating of Large Appliances**

39. Section 63.4168 is amended by adding paragraphs (c)(3)(i) through (vii) to read as follows:

**§ 63.4168 What are the requirements for continuous parameter monitoring system installation, operation, and maintenance?**

\* \* \* \* \*

(c) \* \* \*

(3) \* \* \*

- (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's reading.

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

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

\* \* \* \* \*

**Subpart OOOO—National Emission Standards for Hazardous Air Pollutants: Printing, Coating, and Dyeing of Fabrics and Other Textiles**

40. Section 63.4371 is amended by revising the definition for “No organic HAP” to read as follows:

**§ 63.4371 What definitions apply to this subpart?**

\* \* \* \* \*

*No organic HAP* means no organic HAP in Table 5 to this subpart is present at 0.1 percent by mass or more and no organic HAP not listed in Table 5 to this subpart is present at 1.0 percent by mass or more. The organic HAP content of a regulated material is determined according to § 63.4321(e)(1).

\* \* \* \* \*

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

41. Section 63.4492 is amended by revising paragraph (b) to read as follows:

**§ 63.4492 What operating limits must I meet?**

\* \* \* \* \*

(b) For any controlled coating operation(s) on which you use the emission rate with add-on controls option, except those for which you use a solvent recovery system and conduct a liquid-liquid material balance according to § 63.4561(j), you must meet the operating limits specified in Table 1 to this subpart. These operating limits apply to the emission capture and control systems on the coating operation(s) for which you use this option, and you must establish the operating limits during the performance tests required in § 63.4560 according to the requirements in § 63.4567. You must meet the operating limits established during the most recent performance tests required in § 63.4560 at all times after you establish them.

\* \* \* \* \*

42. Section 63.4500 is amended by revising paragraphs (a)(2)(i), (a)(2)(ii), (b), and (c) to read as follows:

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

(a) \* \* \*

(2) \* \* \*

(i) The coating operation(s) must be in compliance with the applicable emission limit in § 63.4490 at all times.

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

\* \* \* \* \*

(b) Before [date 181 days after date of publication of final rule in the FEDERAL REGISTER], 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). On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], at all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the affected source.

(c) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], if your affected source uses an emission capture system and add-on control device, you must develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in § 63.6(e)(3). The plan must address the startup, shutdown, and corrective actions in the event of a malfunction of the emission capture system or the add-on control device. The plan must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the SSMP is not required.

43. Section 63.4520 is amended by:

a. Revising paragraphs (a)(5) introductory text, (a)(5)(i), and (a)(5)(iv);

- b. Adding paragraph (a)(5)(v);
- c. Revising paragraphs (a)(6) introductory text and (a)(6)(iii);
- d. Adding paragraph (a)(6)(iv);
- e. Revising paragraphs (a)(7) introductory text, (a)(7)(iii), (a)(7)(vi), (a)(7)(vii), (a)(7)(viii), (a)(7)(x), (a)(7)(xiii), and (a)(7)(xiv);
- f. Adding paragraph (a)(7)(xv);
- f. Revising paragraph (c) introductory text; and
- g. Adding paragraphs (d) through (h).

The revisions and additions read as follows:

**§ 63.4520 What reports must I submit?**

(a) \* \* \*

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

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

\* \* \* \* \*

(iv) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], a statement of the cause of each deviation. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], a statement of the cause of each deviation (including unknown cause, if applicable).

(v) On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the number of deviations and, for each deviation, a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any applicable emission limit in § 63.4490, a description of the method used to estimate the emissions, and the actions you took to minimize emissions in accordance with § 63.4500(b).

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

\* \* \* \* \*

(iii) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], a statement of the cause of each deviation. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], a statement of the cause of each deviation (including unknown cause, if applicable).

(iv) On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the number of deviations, date, time, duration, a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any applicable emission limit in § 63.4490, a description of the method used to estimate the emissions, and the actions you took to minimize emissions in accordance with § 63.4500(b).

(7) *Deviations: Emission rate with add-on controls option.* If you used the emission rate with add-on controls option and there was a deviation from the applicable emission limit in § 63.4490 or the applicable operating limit(s) in Table 1 to this subpart (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere), before

[**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the semiannual compliance report must contain the information in paragraphs (a)(7)(i) through (xiv) of this section. This includes periods of startup, shutdown, and malfunction during which deviations occurred. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the semiannual compliance report must contain the information in paragraphs (a)(7)(i) through (xii), (a)(7)(xiv), and (a)(7)(xv) of this section. If you use the emission rate with add-on controls option and there was a deviation from the applicable work practice standards in § 63.4493(b), the semiannual compliance report must contain the information in paragraph (a)(7)(xiii) of this section.

\* \* \* \* \*

(iii) The date and time that each malfunction of the capture system or add-on control devices started and stopped.

\* \* \* \* \*

(vi) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the date and time that each CPMS was inoperative, except for zero (low-level) and high-level checks. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the number of instances that the CPMS was inoperative, and for each instance, except for zero (low-level) and high-level checks, the date, time, and duration that the CPMS was inoperative; the cause (including unknown cause) for the CPMS being inoperative; and the actions you took to minimize emissions in accordance with § 63.4500(b).

(vii) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the date, time, and duration that each CPMS was out-of-control, including the information in § 63.8(c)(8). On and after [**date 181 days after date of publication of final rule**

**in the FEDERAL REGISTER]**, the number of instances that the CPMS was out of control as specified in § 63.8(c)(7) and, for each instance, the date, time, and duration that the CPMS was out-of-control; the cause (including unknown cause) for the CPMS being out-of-control; and descriptions of corrective actions taken.

(viii) Before **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, the date and time period of each deviation from an operating limit in Table 1 to this subpart; date and time period of any bypass of the add-on control device; and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period. On and after **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, the number of deviations from an operating limit in Table 1 to this subpart and, for each deviation, the date, time, and duration of each deviation; the date, time, and duration of any bypass of the add-on control device.

\* \* \* \* \*

(x) Before **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, a breakdown of the total duration of the deviations from the operating limits in Table 1 of this subpart and bypasses of the add-on control device during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes. On and after **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, a breakdown of the total duration of the deviations from the operating limits in Table 1 to this subpart and bypasses of the add-on control device during the semiannual reporting period into those that were due to control equipment problems, process problems, other known causes, and other unknown causes.

\* \* \* \* \*



(xiii) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], 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. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], for deviations from the work practice standards, the number of deviations, and, for each deviation, the information in paragraphs (a)(7)(xiii)(A) and (B) of this section:

(A) A description of the deviation; the date, time, and duration of the deviation; and the actions you took to minimize emissions in accordance with § 63.4500(b).

(B) The description required in paragraph (a)(7)(xiii)(A) of this section must include a list of the affected sources or equipment for which a deviation occurred and the cause of the deviation (including unknown cause, if applicable).

(xiv) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], a statement of the cause of each deviation. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], for deviations from an emission limit in § 63.4490 or an operating limit in Table 1 to this subpart, a statement of the cause of each deviation (including unknown cause, if applicable) and the actions you took to minimize emissions in accordance with § 63.4500(b).

(xv) On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], for each deviation from an emission limit in § 63.4490 or operating limit in Table 1 to this subpart, a list of the affected sources or equipment for which a deviation occurred, an estimate of the quantity of each regulated pollutant emitted over any emission limit

in § 63.4490 or operating limit in Table 1 to this subpart, and a description of the method used to estimate the emissions.

\* \* \* \* \*

(c) *Startup, shutdown, malfunction reports.* Before **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, if you used the emission rate with add-on controls option and you had a startup, shutdown, or malfunction during the semiannual reporting period, you must submit the reports specified in paragraphs (c)(1) and (2) of this section. On and after **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, the reports specified in paragraphs (c)(1) and (2) of this section are not required.

\* \* \* \* \*

(d) On and after **[date 181 days after date of publication of final rule in the FEDERAL REGISTER]**, you must submit the results of the performance tests required in § 63.4560 following the procedure specified in paragraphs (d)(1) through (3) of this section.

(1) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) at the time of the test, you must submit the results of the performance test to the EPA via the CEDRI. The CEDRI interface can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the XML schema listed on the EPA's ERT website.

(2) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test, you must submit the results of the

performance test to the Administrator at the appropriate address listed in § 63.13, unless the Administrator agrees to or specifies an alternate reporting method.

(3) If you claim that some of the performance test information being submitted under paragraph (d)(1) of this section is CBI, you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraph (d)(1) of this section.

(e) On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], the owner or operator shall submit the initial notifications required in § 63.9(b) and the notification of compliance status required in § 63.9(h) and § 63.4510(c) to the EPA via the CEDRI. The CEDRI interface can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The owner or operator must upload to CEDRI an electronic copy of each applicable notification in portable document format (PDF). The applicable notification must be submitted by the deadline specified in this subpart, regardless of the method in which the reports are submitted. Owners or operators who claim that some of the information required to be submitted via CEDRI is CBI shall submit a complete report generated using the appropriate form in CEDRI or an alternate electronic file consistent with the XML schema listed on the EPA's CEDRI website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium shall be

clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(f) On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], or once the reporting template has been available on the CEDRI website for 1 year, whichever date is later, the owner or operator shall submit the semiannual compliance report required in paragraph (a) of this section to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX (<https://cdx.epa.gov/>)). The owner or operator must use the appropriate electronic template on the CEDRI website for this subpart or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri>). The date report templates become available will be listed on the CEDRI website. If the reporting form for the semiannual compliance report specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate addresses listed in § 63.13. Once the form has been available in CEDRI for 1 year, you must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted. Owners or operators who claim that some of the information required to be submitted via CEDRI is CBI shall submit a complete report generated using the appropriate form in CEDRI or an alternate electronic file consistent with the XML schema listed on the EPA's CEDRI website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium shall be

clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(g) If you are required to electronically submit a report through the CEDRI in the EPA's CDX, and due to a planned or actual outage of either the EPA's CEDRI or CDX systems within the period of time beginning 5 business days prior to the date that the submission is due, you will be or are precluded from accessing CEDRI or CDX and submitting a required report within the time prescribed, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description identifying the date, time and length of the outage; a rationale for attributing the delay in reporting beyond the regulatory deadline to the EPA system outage; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(h) If you are required to electronically submit a report through CEDRI in the EPA's CDX and a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning 5 business days prior to the date

the submission is due, the owner or operator may assert a claim of force majeure for failure to timely comply with the reporting requirement. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.*, hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.*, large scale power outage). If you intend to assert a claim of force majeure, you must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

44. Section 63.4530 is amended by revising paragraphs (h), (i) introductory text, (i)(1), and (i)(2) to read as follows:

**§ 63.4530 What records must I keep?**

\* \* \* \* \*

(h) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], you must keep records of the date, time, and duration of each deviation. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], for each deviation from an emission limitation reported under § 63.4520(a)(5) through (7), a record of the information specified in paragraphs (h)(1) through (4) of this section, as applicable.

(1) The date, time, and duration of the deviation, as reported under § 63.4520(a)(5) through (7).

(2) A list of the affected sources or equipment for which the deviation occurred and the cause of the deviation, as reported under § 63.4520(a)(5) through (7).

(3) An estimate of the quantity of each regulated pollutant emitted over any applicable emission limit in § 63.4490 or any applicable operating limit in Table 1 to this subpart, and a description of the method used to calculate the estimate, as reported under § 63.4520(a)(5) through (7).

(4) A record of actions taken to minimize emissions in accordance with § 63.4500(b) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

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

(1) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], for each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], a record of whether the deviation occurred during a period of startup, shutdown, or malfunction is not required.

(2) Before [date 181 days after date of publication of final rule in the **FEDERAL REGISTER**], the records in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. On and after [date 181 days after date of publication of final rule in the **FEDERAL REGISTER**], the records in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction are not required.

\* \* \* \* \*

45. Section 63.4531 is amended by revising paragraph (a) to read as follows:

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

(a) Your records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database. On and after [date 181 days after date of publication of final rule in the **FEDERAL REGISTER**], any records required to be maintained by this subpart that are in reports that were submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

\* \* \* \* \*

46. Section 63.4541 is amended by revising paragraphs (a)(1)(i), (a)(2), and (a)(4) to read as follows:

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

\* \* \* \* \*

(a) \* \* \*

(1) \* \* \*



(i) Count each organic HAP in Table 5 to this subpart that is measured to be present at 0.1 percent by mass or more and at 1.0 percent by mass or more for other compounds. For example, if toluene (not listed in Table 5 to this subpart) 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).

\* \* \* \* \*

(2) *EPA Method 24 (appendix A-7 to 40 CFR part 60)*. For coatings, you may use EPA Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. As an alternative to using EPA Method 24, you may use ASTM Method D2369-10 (2015), “Test Method for Volatile Content of Coatings” (incorporated by reference, *see* § 63.14). For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may use the alternative method contained in appendix A to this subpart, rather than EPA Method 24. You may use the volatile fraction that is emitted, as measured by the alternative method in appendix A to this subpart, as a substitute for the mass fraction of organic HAP.

\* \* \* \* \*

(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 in Table 5 to this subpart that is present at 0.1 percent by mass or more and at 1.0 percent by mass or more for other compounds. For example, if toluene (not listed in Table 5 to this subpart) is 0.5 percent of the material by mass, you do not have to count it. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may rely on

manufacturer's data that expressly states the organic HAP or volatile matter mass fraction emitted. 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 you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

\* \* \* \* \*

47. Section 63.4551 is amended by revising paragraph (c) to read as follows:

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

\* \* \* \* \*

(c) *Determine the density of each material.* Determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM Method D1475-13 “Standard Test Method for Density of Liquid Coatings, Inks, and Related Products” or ASTM Method D2111-10 (2015) “Standard Test Methods for Specific Gravity of Halogenated Organic Solvents and Their Admixtures” (both incorporated by reference, *see* § 63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475-13 or ASTM Method D2111-10 (2015) and other such information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine material density. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 of this section.

\* \* \* \* \*

48. Section 63.4560 is amended by revising the section heading and paragraphs (a)(1), (a)(4), (b)(1), and (c) introductory text to read as follows:

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

(a) \* \* \*

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

(i) You must conduct the initial performance test and establish the operating limits required by § 63.4492 no later than 180 days after the applicable compliance date specified in § 63.4483.

(ii) You must conduct periodic performance tests and establish the operating limits required by § 63.4492 within 5 years following the previous performance test. You must conduct the first periodic performance test before [**date 3 years after date of publications of final rule in the FEDERAL REGISTER**], unless you are already required to complete periodic performance tests as a requirement of renewing your facility's operating permit under 40 CFR part 70 or 40 CFR part 71 and have conducted a performance test on or after [**date 2 years**

**before date of publications of final rule in the FEDERAL REGISTER]**. Thereafter you must conduct a performance test no later than 5 years following the previous performance test.

Operating limits must be confirmed or reestablished during each performance test. For any control device for which you are using the catalytic oxidizer control option at § 63.4567(b) and following the catalyst maintenance procedures in § 63.4567(b)(4), you are not required to conduct periodic control device performance testing as specified by this paragraph. For any control device for which instruments are used to continuously measure organic compound emissions, you are not required to conduct periodic control device performance testing as specified by this paragraph.

\* \* \* \*

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

(b) \* \* \*

(1) All emission capture systems, add-on control devices, and CPMS must be installed and operating no later than the applicable compliance date specified in § 63.4483. Except for

solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.4561(j), you must conduct according to the schedule in paragraphs (b)(1)(i) and (ii) of this section initial and periodic performance tests of each capture system and add-on control device according to the procedures in §§ 63.4564, 63.4565, and 63.4566 and establish the operating limits required by § 63.4492. For a solvent recovery system for which you conduct liquid-liquid material balances according to § 63.4561(j), you must initiate the first material balance no later than the compliance date specified in § 63.4483.

(i) You must conduct the initial performance test and establish the operating limits required by § 63.4492 no later than 180 days after the applicable compliance date specified in § 63.4483.

(ii) You must conduct periodic performance tests and establish the operating limits required by § 63.4492 within 5 years following the previous performance test. You must conduct the first periodic performance test before [**date 3 years after date of publications of final rule in the FEDERAL REGISTER**], unless you are already required to complete periodic performance tests as a requirement of renewing your facility's operating permit under 40 CFR part 70 or 40 CFR part 71 and have conducted a performance test on or after [**date 2 years before date of publications of final rule in the FEDERAL REGISTER**]. Thereafter you must conduct a performance test no later than 5 years following the previous performance test. Operating limits must be confirmed or reestablished during each performance test. For any control device for which you are using the catalytic oxidizer control option at § 63.4567(b) and following the catalyst maintenance procedures in § 63.4567(b)(4), you are not required to conduct periodic control device performance testing as specified by this paragraph. For any control device for which instruments are used to continuously measure organic compound

emissions, you are not required to conduct periodic control device performance testing as specified by this paragraph.

\* \* \* \*

(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 or control device. Any such previous tests must meet the conditions described in paragraphs (c)(1) through (3) of this section. You are still required to conduct a periodic performance test according to the applicable requirements of paragraphs (a)(1)(ii) and (b)(2)(ii) of this section.

\* \* \* \*

49. Section 63.4561 is amended by revising paragraphs (j)(3) and (n) to read as follows:

**§ 63.4561 How do I demonstrate initial compliance?**

\* \* \* \*

(j) \* \* \*

(3) Determine the mass fraction of volatile organic matter for each coating, thinner and/or other additive, and cleaning material 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 EPA Method 24 of 40 CFR part 60, appendix A-7, ASTM Method D2369-10 (2015), “Test Method for Volatile Content of Coatings” (incorporated by reference, *see* § 63.14), or an EPA approved alternative method. Alternatively, you may determine the volatile organic matter mass fraction using 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 EPA Method 24 of 40 CFR part 60,

appendix A-7, ASTM Method D2369-10 (2015), or an approved alternative method, the test method results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

\* \* \* \* \*

(n) *Compliance demonstration.* The organic HAP emission rate for the initial compliance period, calculated using Equation 5 of this section, must be less than or equal to the applicable emission limit for each subcategory in § 63.4490 or the predominant activity or facility-specific emission limit allowed in § 63.4490(c). You must keep all records as required by §§ 63.4530 and 63.4531. As part of the notification of compliance status required by § 63.4510, you must identify the coating operation(s) for which you used the emission rate with add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in § 63.4490, and for control devices other than solvent recovery system using a liquid-liquid material balance, you achieved the operating limits required by § 63.4492 and the work practice standards required by § 63.4493.

50. Section 63.4563 is amended by revising paragraph (f) and adding paragraph (g) to read as follows:

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

\* \* \* \* \*

(f) As part of each semiannual compliance report required in § 63.4520, you must identify the coating operation(s) for which you used the emission rate with add-on controls option. If there were no deviations from the emission limits in § 63.4490, the operating limits in § 63.4492, and the work practice standards in § 63.4493, submit a statement that you were in

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

(g) On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], deviations that occur due to malfunction of the emission capture system, add-on control device, or coating operation that may affect emission capture or control device efficiency are required to operate in accordance with § 63.4500(b). The Administrator will determine whether the deviations are violations according to the provisions in § 63.4500(b).

\* \* \* \* \*

51. Section 63.4564 is amended by revising paragraphs (a) introductory text and (a)(1) to read as follows:

**§ 63.4564 What are the general requirements for performance tests?**

(a) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], you must conduct each performance test required by § 63.4560 according to the requirements in § 63.7(e)(1) and under the conditions in this section, unless you obtain a waiver of the performance test according to the provisions in § 63.7(h). On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], you must conduct each performance test required by § 63.4560 according to the requirements 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 nonoperation do not constitute representative conditions



for purposes of conducting a performance test. The owner or operator may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

\* \* \* \* \*

52. Section 63.4565 is amended by revising the introductory text to read as follows:

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

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

\* \* \* \* \*

53. Section 63.4566 is amended by revising the introductory text and paragraphs (a)(1) through (4) and (b) to read as follows:

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

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

(a) \* \* \*

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

(2) Use EPA Method 2, 2A, 2C, 2D, or 2F of appendix A-1 to 40 CFR part 60, or 2G of appendix A-2 to 40 CFR part 60, as appropriate, to measure gas volumetric flow rate.

(3) Use EPA Method 3, 3A, or 3B of appendix A-2 to 40 CFR part 60, as appropriate, for gas analysis to determine dry molecular weight.

(4) Use EPA Method 4 of appendix A-3 to 40 CFR part 60, to determine stack gas moisture.

\* \* \* \* \*

(b) Measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-on control device simultaneously, using either EPA Method 25 or 25A of appendix A-7 to 40 CFR part 60.

(1) Use EPA Method 25 of appendix A-7 if the add-on control device is an oxidizer and you expect the total gaseous organic concentration as carbon to be more than 50 parts per million (ppm) at the control device outlet.

(2) Use EPA Method 25A of appendix A-7 if the add-on control device is an oxidizer and you expect the total gaseous organic concentration as carbon to be 50 ppm or less at the control device outlet.

(3) Use EPA Method 25A of appendix A-7 if the add-on control device is not an oxidizer.

(4) You may use EPA Method 18 in appendix A-6 of part 60 to subtract methane emissions from measured total gaseous organic mass emissions as carbon.

\* \* \* \* \*

54. Section 63.4567 is amended by revising the introductory text and paragraphs (a)(1), (a)(2), (b)(1) through (b)(3), (c)(1), (d)(1), (d)(2), and (e)(1) through (4) to read as follows:

**§ 63.4567 How do I establish the emission capture system and add-on control device**

**operating limits during the performance test?**

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

(a) \* \* \*

(1) During performance tests, 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) For each performance test, use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. This average combustion temperature is the minimum operating limit for your thermal oxidizer.

(b) \* \* \*

(1) During performance tests, 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) For each performance test, use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed and the average temperature difference across the catalyst bed maintained during the performance test. These are the minimum operating limits for your catalytic oxidizer.

(3) You must monitor the temperature at the inlet to the catalyst bed and implement a site-specific inspection and maintenance plan for your catalytic oxidizer as specified in paragraph (b)(4) of this section. During performance tests, 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. For each performance test, use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed during the performance test. This is the minimum operating limit for your catalytic oxidizer.

\* \* \* \* \*

(c) \* \* \*

(1) During performance tests, 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.

\* \* \* \* \*

(d) \* \* \*

(1) During performance tests, 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 of the performance test.

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

(e) \* \* \*

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

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

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

(4) For each performance test, use the data collected during the performance test to calculate and record the average pressure drop. This is the minimum operating limit for the dilute stream across the concentrator.

\* \* \* \* \*

55. Section 63.4568 is amended by revising paragraphs (a)(4), (a)(5), (a)(7), and (c)(3) introductory text to read as follows:

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

(a) \* \* \*

(4) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], you must maintain the CPMS at all times and have available necessary parts for routine repairs of the monitoring equipment. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], you must maintain the CPMS at all

times in accordance with § 63.4500(b) and keep necessary parts readily available for routine repairs of the monitoring equipment.

(5) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], 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). On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], you must operate the CPMS and collect emission capture system and add-on control device parameter data at all times in accordance with § 63.4500(b).

\* \* \* \* \*

(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. Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], 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. On and after [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], except for periods of required quality assurance or control activities, any period for which the CPMS fails to operate and record data continuously as required by paragraph (a)(5) of this section, or generates data that cannot be included in calculating averages as specified in (a)(6) of this section constitutes a deviation from the monitoring requirements.

\* \* \* \* \*

(c) \* \* \*

(3) For all thermal oxidizers and catalytic oxidizers, you must meet the requirements in paragraphs (a) and (c)(3)(i) through (v) of this section for each gas temperature monitoring device. For the purposes of this paragraph (c)(3), a thermocouple is part of the temperature sensor.

\* \* \* \* \*

56. Section 63.4581 is amended by revising the definitions of “Deviation” and “Non-HAP coating” to read as follows:

**§ 63.4581 What definitions apply to this subpart?**

\* \* \* \* \*

*Deviation* means:

(a) Before [**date 181 days after date of publication of final rule in the FEDERAL REGISTER**], any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

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

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

(3) Fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart; and

(b) On and after [date 181 days after date of publication of final rule in the **FEDERAL REGISTER**], any instance in which an affected source subject to this subpart or an owner or operator of such a source:

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

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

\* \* \* \* \*

*Non-HAP coating* means, for the purposes of this subpart, a coating that contains no more than 0.1 percent by mass of any individual organic HAP that is listed in Table 5 to this subpart and no more than 1.0 percent by mass for any other individual HAP.

\* \* \* \* \*

57. Table 2 to Subpart PPPP of Part 63 is revised to read as follows:

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

You must comply with the applicable General Provisions requirements according to the following table:

Citation	Subject	Applicable to subpart PPPP	Explanation
§ 63.1(a)(1)-(12)	General Applicability	Yes	
§ 63.1(b)(1)-(3)	Initial Applicability Determination	Yes	Applicability to subpart PPPP is also specified in § 63.4481.
§ 63.1(c)(1)	Applicability After Standard Established	Yes	



§ 63.1(c)(2)	Applicability of Permit Program for Area Sources	No	Area sources are not subject to subpart PPPP.
§ 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 § 63.4581.
§ 63.3	Units and Abbreviations	Yes	
§ 63.4(a)(1)-(2)	Prohibited Activities	Yes	
§ 63.4(b)-(c)	Circumvention/Fragmentation	Yes	
§ 63.5(a)	Construction/Reconstruction	Yes	
§ 63.5(b)(1), (3), (4), (6)	Requirements for Existing, Newly Constructed, and Reconstructed Sources	Yes	
§ 63.5(d)(1)(i)-(ii)(F), (d)(1)(ii)(H), (d)(1)(ii)(J), (d)(1)(iii), (d)(2)-(4)	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)-(5), (b)(7)	Compliance Dates for New and Reconstructed Sources	Yes	Section 63.4483 specifies the compliance dates.
§ 63.6(c)(1), (2), (5)	Compliance Dates for Existing Sources	Yes	Section 63.4483 specifies the compliance dates.

§ 63.6(e)(1)(i)-(ii)	Operation and Maintenance	Yes before [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ] No on and after [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ]	See § 63.4500(b) for general duty requirement.
§ 63.6(e)(1)(iii)	Operation and Maintenance	Yes	
§ 63.6(e)(3)(i), (e)(3)(iii)-(ix)	Startup, Shutdown, and Malfunction Plan (SSMP)	Yes before [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ] No on and after [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ]	
§ 63.6(f)(1)	Compliance Except During Startup, Shutdown, and Malfunction	Yes before [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ] No on and after [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ]	
§ 63.6(f)(2)-(3)	Methods for Determining Compliance	Yes	
§ 63.6(g)	Use of an Alternative Standard	Yes	
§ 63.6(h)	Compliance With Opacity/Visible Emission Standards	No	Subpart PPPP does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).

§ 63.6(i)(1)-(14), (16)	Extension of Compliance	Yes	
§ 63.6(j)	Presidential Compliance Exemption	Yes	
§ 63.7(a)(1)	Performance Test Requirements—Applicability	Yes	Applies to all affected sources. Additional requirements for performance testing are specified in §§ 63.4564, 63.4565, and 63.4566.
§ 63.7(a)(2), except (a)(2)(i)-(viii)	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 63.4560 specifies the schedule for performance test requirements that are earlier than those specified in § 63.7(a)(2).
§ 63.7(a)(3)-(4)	Performance Tests Required By the Administrator, Force Majeure	Yes	
§ 63.7(b)-(d)	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(e)(1)	Conduct of Performance Tests	Yes before [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ] No on and after [ <b>date 181 days after date of publication of final</b>	See § 63.4500 and § 63.4564(a).

		<b>rule in the FEDERAL REGISTER]</b>	
§ 63.7(e)(2)-(4)	Conduct of Performance Tests	Yes	
§ 63.7(f)	Performance Test Requirements—Use Alternative Test Method	Yes	Applies to all test methods except those of 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.
§ 63.8(a)(1)-(2)	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 § 63.4568.
§ 63.8(a)(4)	Additional Monitoring Requirements	No	Subpart PPPP does not have monitoring requirements for flares.
§ 63.8(b)	Conduct of Monitoring	Yes	
§ 63.8(c)(1)	Continuous Monitoring System (CMS) Operation and Maintenance	Yes before [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER]</b> No on and after [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER]</b>	Section 63.4568 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(2)-(3)	CMS Operation and Maintenance	Yes	Applies only to monitoring of capture

			system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for CMS operations and maintenance are specified in § 63.4568.
§ 63.8(c)(4)	CMS	No	Section 63.4568 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(5)	COMS	No	Subpart PPPP does not have opacity or visible emission standards.
§ 63.8(c)(6)	CMS Requirements	No	Section 63.4568 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(7)	CMS Out-of-Control Periods	Yes	
§ 63.8(c)(8)	CMS Out-of-Control Periods and Reporting	No	Section 63.4520 requires reporting of CMS out-of-control periods.
§ 63.8(d)-(e)	Quality Control Program and CMS Performance Evaluation	No	Subpart PPPP does not require the use of continuous emissions monitoring systems.
§ 63.8(f)(1)-(5)	Use of an Alternative Monitoring Method	Yes	
§ 63.8(f)(6)	Alternative to Relative Accuracy Test	No	Subpart PPPP does not require the use of

			continuous emissions monitoring systems.
§ 63.8(g)	Data Reduction	No	Sections 63.4567 and 63.4568 specify monitoring data reduction.
§ 63.9(a)-(d)	Notification Requirements	Yes	
§ 63.9(e)	Notification of Performance Test	Yes	Applies only to capture system and add-on control device performance tests at sources using these to comply with the standards.
§ 63.9(f)	Notification of Visible Emissions/Opacity Test	No	Subpart PPPP does not have opacity or visible emission standards.
§ 63.9(g)	Additional Notifications When Using CMS	No	Subpart PPPP does not require the use of continuous emissions monitoring systems.
§ 63.9(h)(1)-(3), (5)-(6)	Notification of Compliance Status	Yes	Section 63.4510 specifies the dates for submitting the notification of compliance status.
§ 63.9(i)	Adjustment of Submittal Deadlines	Yes	
§ 63.9(j)	Change in Previous Information	Yes	
§ 63.10(a)	Recordkeeping/Reporting—Applicability and General Information	Yes	
§ 63.10(b)(1)	General Recordkeeping Requirements	Yes	Additional requirements are specified in §§ 63.4530 and 63.4531.
§ 63.10(b)(2)(i)-(ii)	Recordkeeping of Occurrence and Duration of Startups and	Yes before <b>[date 181 days after date of publication of final</b>	See § 63.4530(h).

	Shutdowns and of Failures to Meet Standards	<b>rule in the FEDERAL REGISTER]</b> No on and after [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER]</b>	
§ 63.10(b)(2)(iii)	Recordkeeping Relevant to Maintenance of Air Pollution Control and Monitoring Equipment	Yes	
§ 63.10(b)(2)(iv)-(v)	Actions Taken to Minimize Emissions During Startup, Shutdown, and Malfunction	Yes before [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER]</b> No on and after [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER]</b>	<i>See</i> § 63.4530(h)(4) for a record of actions taken to minimize emissions during a deviation from the standard.
§ 63.10(b)(2)(vi)	Recordkeeping for CMS Malfunctions	Yes before [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER]</b> No on and after [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER]</b>	<i>See</i> § 63.4530(h) for records of periods of deviation from the standard, including instances where a CMS is inoperative or out-of-control.
§ 63.10(b)(2)(vii)-(xii)	Records	Yes	
§ 63.10(b)(2)(xiii)		No	Subpart PPPP does not require the use of continuous emissions monitoring systems.
§ 63.10(b)(2)(xiv)		Yes	
§ 63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations	Yes	

§ 63.10(c)(1),(5)-(6)	Additional Recordkeeping Requirements for Sources with CMS	Yes	
§ 63.10(c)(7)-(8)	Additional Recordkeeping Requirements for Sources with CMS	No	See § 63.4530(h) for records of periods of deviation from the standard, including instances where a CMS is inoperative or out-of-control.
§ 63.10(c)(10)-(14)	Additional Recordkeeping Requirements for Sources with CMS	Yes	
§ 63.10(c)(15)	Records Regarding the Startup, Shutdown, and Malfunction Plan	Yes before [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ] No on and after [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ]	
§ 63.10(d)(1)	General Reporting Requirements	Yes	Additional requirements are specified in § 63.4520.
§ 63.10(d)(2)	Report of Performance Test Results	Yes	Additional requirements are specified in § 63.4520(b).
§ 63.10(d)(3)	Reporting Opacity or Visible Emissions Observations	No	Subpart PPPP 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 before [ <b>date 181 days after date of publication of final rule in the FEDERAL REGISTER</b> ]	See § 63.4520(a)(7).



		No on and after [date 181 days after date of publication of final rule in the FEDERAL REGISTER]	
§ 63.10(e)(1)-(2)	Additional CMS Reports	No	Subpart PPPP does not require the use of continuous emissions monitoring systems.
§ 63.10(e)(3)	Excess Emissions/CMS Performance Reports	No	Section 63.4520(b) specifies the contents of periodic compliance reports.
§ 63.10(e)(4)	COMS Data Reports	No	Subpart PPPP does not specify requirements for opacity or COMS.
§ 63.10(f)	Recordkeeping/Reporting Waiver	Yes	
§ 63.11	Control Device Requirements/Flares	No	Subpart PPPP does not specify use of flares for compliance.
§ 63.12	State Authority and Delegations	Yes	
§ 63.13	Addresses	Yes	
§ 63.14	Incorporation by Reference	Yes	
§ 63.15	Availability of Information/Confidentiality	Yes	

58. Table 5 to Subpart PPPP of Part 63 is added to read as follows:

**Table 5 to Subpart PPPP of Part 63—List of Hazardous Air Pollutants That Must Be Counted Toward Total Organic HAP Content if Present at 0.1 Percent or More by Mass**

Chemical Name	CAS No.
1,1,2,2-Tetrachloroethane	79-34-5
1,1,2-Trichloroethane	79-00-5
1,1-Dimethylhydrazine	57-14-7
1,2-Dibromo-3-chloropropane	96-12-8
1,2-Diphenylhydrazine	122-66-7
1,3-Butadiene	106-99-0

1,3-Dichloropropene	542-75-6
1,4-Dioxane	123-91-1
2,4,6-Trichlorophenol	88-06-2
2,4/2,6-Dinitrotoluene (mixture)	25321-14-6
2,4-Dinitrotoluene	121-14-2
2,4-Toluene diamine	95-80-7
2-Nitropropane	79-46-9
3,3'-Dichlorobenzidine	91-94-1
3,3'-Dimethoxybenzidine	119-90-4
3,3'-Dimethylbenzidine	119-93-7
4,4'-Methylene bis(2-chloroaniline)	101-14-4
Acetaldehyde	75-07-0
Acrylamide	79-06-1
Acrylonitrile	107-13-1
Allyl chloride	107-05-1
alpha-Hexachlorocyclohexane (a-HCH)	319-84-6
Aniline	62-53-3
Benzene	71-43-2
Benzidine	92-87-5
Benzotrichloride	98-07-7
Benzyl chloride	100-44-7
beta-Hexachlorocyclohexane (b-HCH)	319-85-7
Bis(2-ethylhexyl)phthalate	117-81-7
Bis(chloromethyl)ether	542-88-1
Bromoform	75-25-2
Captan	133-06-2
Carbon tetrachloride	56-23-5
Chlordane	57-74-9
Chlorobenzilate	510-15-6
Chloroform	67-66-3
Chloroprene	126-99-8
Cresols (mixed)	1319-77-3
DDE	3547-04-4
Dichloroethyl ether	111-44-4
Dichlorvos	62-73-7
Epichlorohydrin	106-89-8
Ethyl acrylate	140-88-5
Ethylene dibromide	106-93-4
Ethylene dichloride	107-06-2

Ethylene oxide	75-21-8
Ethylene thiourea	96-45-7
Ethylidene dichloride (1,1-Dichloroethane)	75-34-3
Formaldehyde	50-00-0
Heptachlor	76-44-8
Hexachlorobenzene	118-74-1
Hexachlorobutadiene	87-68-3
Hexachloroethane	67-72-1
Hydrazine	302-01-2
Isophorone	78-59-1
Lindane (hexachlorocyclohexane, all isomers)	58-89-9
m-Cresol	108-39-4
Methylene chloride	75-09-2
Naphthalene	91-20-3
Nitrobenzene	98-95-3
Nitrosodimethylamine	62-75-9
o-Cresol	95-48-7
o-Toluidine	95-53-4
Parathion	56-38-2
p-Cresol	106-44-5
p-Dichlorobenzene	106-46-7
Pentachloronitrobenzene	82-68-8
Pentachlorophenol	87-86-5
Propoxur	114-26-1
Propylene dichloride	78-87-5
Propylene oxide	75-56-9
Quinoline	91-22-5
Tetrachloroethene	127-18-4
Toxaphene	8001-35-2
Trichloroethylene	79-01-6
Trifluralin	1582-09-8
Vinyl bromide	593-60-2
Vinyl chloride	75-01-4
Vinylidene chloride	75-35-4

**Subpart RRRR—National Emission Standards for Hazardous Air Pollutants: Surface**

## Coating of Metal Furniture

59. Section 63.4965 is amended by adding paragraphs (b)(1) through (3) to read as follows:

### **§ 63.4965 How do I determine the add-on control device emission destruction or removal efficiency?**

\* \* \* \* \*

(b) \* \* \*

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

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

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

\* \* \* \* \*