ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–HQ–OAR–2017–0684, EPA–HQ–OAR–2017–0685; FRL–9993–45–OAR]

RIN 2060–AT51

National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Cans and Surface Coating of Metal Coil Residual Risk and Technology Reviews

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing amendments to address the results of the residual risk and technology reviews (RTRs) 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 Metal Cans and the NESHAP for the Surface Coating of Metal Coil. The EPA is proposing to find the risks due to emissions of air toxics from these source categories under the current standards to be acceptable and that 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.

DATES: *Comments.* Comments must be received on or before July 19, 2019. 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 July 5, 2019.

Public hearing. If anyone contacts us requesting a public hearing on or before June 10, 2019, 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-metal-cans-national-emission-standards-hazardous* and *https://www.epa.gov/stationary-sources-air-pollution/surface-coating-metal-coil-national-emission-standards-hazardous*. 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–2017–0684 for 40 Code of Federal Regulations (CFR) part 63, subpart KKKK, Surface Coating of Metal Cans, and Docket ID No. EPA–HQ–OAR–2017–0685 for 40 CFR part 63, subpart SSSS, Surface Coating of Metal Coil, as applicable, 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*. Include Docket ID No. EPA–HQ–OAR–2017–0684 or EPA–HQ–OAR–2017–0685 (specify the applicable docket number) in the subject line of the message.
- *Fax:* (202) 566–9744. Attention Docket ID No. EPA–HQ–OAR–2017–0684 or EPA–HQ–OAR–2017–0685 (specify the applicable docket number).
- *Mail:* U.S. Environmental Protection Agency, EPA Docket Center, Docket ID No. EPA–HQ–OAR–2017–0684 or EPA–HQ–OAR–2017–0685 (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, 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 questions about monitoring and testing requirements, contact Mr. Ketan Patel, 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) 541–9736; fax number: (919) 541–4991; and email address: *patel.ketan@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, 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.*

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 two separate dockets for this rulemaking. Docket ID No. EPA–HQ–OAR–2017–0684 has been established for 40 CFR part 63, subpart KKKK, Surface Coating of Metal Cans, and Docket ID No. EPA–HQ–OAR–2017–0685 has been established for 40 CFR part 63, subpart SSSS, Surface Coating of Metal Coil. 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.

Instructions. Direct your comments to Docket ID No. EPA–HQ–OAR–2017–0684 for 40 CFR part 63, subpart KKKK, Surface Coating of Metal Cans (Metal Cans Docket), or Docket ID No. EPA–HQ–OAR–2017–0685 for 40 CFR part 63, subpart SSSS, Surface Coating of Metal Coil (Metal Coil Docket), as applicable to your comments. 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–2017–0684 for 40 CFR part 63, subpart KKKK, Surface Coating of Metal Cans (Metal Cans Docket), or Docket ID No. EPA–HQ–OAR–2017–0685 for 40 CFR part 63, subpart SSSS, Surface Coating of Metal Coil (Metal Coil 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
ASTM American Society for Testing and Materials
BACT best available control technology
BPA bisphenol A
BPA–NI not intentionally containing BPA
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
DGME diethylene glycol monobutyl ether
ECHO Enforcement and Compliance History Online
EPA Environmental Protection Agency
ERPG Emergency Response Planning Guideline
ERT Electronic Reporting Tool
FR Federal Register
GACT generally available control technology gal gallon
HAP hazardous air pollutant(s)
HCl hydrochloric acid
HEM–3 Human Exposure Model, Version 1.1.0
HF hydrogen fluoride
HI hazard index
HQ hazard quotient
HQREL hazard quotient recommended exposure limit
IBR incorporation by reference
ICAC Institute of Clean Air Companies
ICR Information Collection Request
IRIS Integrated Risk Information System
kg kilogram
km kilometer
LAER lowest achievable emission rate
lb pound
MACT maximum achievable control technology
mg/m^3 milligrams per cubic meter
MIR maximum individual risk
mm millimeters
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
OCE overall control efficiency
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
ppmv parts per million by volume
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
TRIM.FaTE Total Risk Integrated Methodology.Fate, Transport, and Ecological Exposure model
UF uncertainty factor
µg/m3 micrograms per cubic meter
UMRA Unfunded Mandates Reform Act

URE unit risk estimate
VCS voluntary consensus standards
VOC volatile organic compound

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

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 Metal Cans source category includes any facility engaged in the coating of metal cans, including: One- and two-piece draw and iron can body coating, sheet coating, three-piece can body assembly coating, or end coating. We estimate that five major source facilities engaged in metal can coating would be subject to this proposal. The Surface Coating of Metal Coil source category includes any facility engaged in the surface coating of metal coil that is a major source of hazardous air pollutant (HAP) emissions. Metal coil is defined as any continuous metal strip (with a thickness of 0.15 millimeters (mm) or more) that is packaged in a roll or coil prior to coating. We estimate that 48 major source facilities engaged in metal coil coating would be subject to this proposal.

TABLE 1—NESHAP AND INDUSTRIAL SOURCE CATEGORIES AFFECTED BY THIS PROPOSED ACTION

NESHAP and source category	NAICS code [1]	Regulated entities [2]
Surface Coating of Metal Cans	332431, 332115, 332116, 332812, 332999	Two-piece Beverage Can Facilities, Three-piece Food Can Facilities, Two-piece Draw and Iron Facilities, One-piece Aerosol Can Facilities.
	332431	Can Assembly Facilities.
	332812	End Manufacturing Facilities.
Surface Coating of Metal Coil	325992	Photographic Film, Paper, Plate, and Chemical Manufacturing.
	326199	All Other Plastics Product Manufacturing.
	331110	Iron and Steel Mills and Ferroalloy Manufacturing.
	331221	Rolled Steel Shape Manufacturing.
	331315	Aluminum Sheet, Plate, and Foil Manufacturing.
	331318	Other Aluminum Rolling, Drawing, and Extruding.
	331420	Copper Rolling, Drawing, Extruding, and Alloying.
	332311	Prefabricated Metal Building and Component Manufacturing.
	332312	Fabricated Structural Metal Manufacturing.
	332322	Sheet Metal Work Manufacturing.
	[3] 332812	Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers.
	332999	All Other Miscellaneous Fabricated Metal Product Manufacturing.
	333249	Other Industrial Machinery Manufacturing.

TABLE 1—NESHAP AND INDUSTRIAL SOURCE CATEGORIES AFFECTED BY THIS PROPOSED ACTION—Continued

NESHAP and source category	NAICS code [1]	Regulated entities [2]
	337920	Blind and Shade Manufacturing.

[1] North American Industry Classification System.
[2] Regulated entities are major source facilities that apply surface coatings to these parts or products.
[3] The majority of coil coating facilities are included in NAICS Code 332812.

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 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-metal-cans-national-emission-standards-hazardous* and *https://www.epa.gov/stationary-sources-air-pollution/surface-coating-metal-coil-national-emission-standards-hazardous.* 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.*

Redline versions of the regulatory language that incorporates the proposed changes in this action are available in the Metal Cans and the Metal Coil Dockets (Docket ID No. EPA–HQ–OAR–2017–0684 and Docket ID No. EPA–HQ–OAR–2017–0685, 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.*).[1] 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 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–2017–0684 for Metal Cans Coating and Docket ID No. EPA–HQ–OAR–2017–0685 for Metal Coil Coating).

In the first stage of the CAA section 112 standard setting process, the EPA promulgates technology-based standards under CAA section112(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)(2) 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

[1] 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.

information, including risk estimation uncertainty, and includes a presumptive limit on maximum individual lifetime [cancer] risk (MIR)[2] of approximately 1-in-10 thousand.'' 54 FR 38045, September 14, 1989. If risks are unacceptable, the EPA must determine the emissions standards necessary to reduce risk to an acceptable level without 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. 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 often 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 Metal Cans source category and how does the current NESHAP regulate its HAP emissions?

a. Source Category Description

The NESHAP for the Surface Coating of Metal Cans source category was promulgated on November 13, 2003 (68 FR 64432), and is codified at 40 CFR part 63, subpart KKKK. Technical corrections and clarifying amendments were promulgated on January 6, 2006 (71 FR 1386). The Surface Coating of Metal Cans NESHAP applies to the surface coating and related operations at each new, reconstructed, and existing affected source of HAP emissions at facilities that are major sources and are engaged in the surface coating of metal cans and ends (including decorative tins) and metal crowns and closures. The Surface Coating of Metal Cans NESHAP (40 CFR 63.3561) defines a ''metal can'' as ''a single-walled container manufactured from metal substrate equal to or thinner than 0.3785 mm (0.0149 inch)'' and includes coating operations for the four following subcategories:

- One- and two-piece draw and iron can body coating—includes one-piece aerosol cans, defined as an ''aerosol can formed by the draw and iron process to which no ends are attached and a valve is placed directly on top'' and two-piece draw and iron cans, defined as a ''steel or aluminum can manufactured by the draw and iron process.'' These include two-piece beverage cans manufactured to contain drinkable liquids, such as beer, soft drinks, or fruit juices, and two-piece food cans designed to contain edible products other than beverages and to be hermetically sealed.
- Sheetcoating—includes all the flat metal sheetcoating operations associated with the manufacture of three-piece cans, decorative tins, crowns, and closures.
- Three-piece can body assembly coating—includes three-piece aerosol cans, defined as a ''steel aerosol can formed by the three-piece can assembly process manufactured to contain food or nonfood products,'' and three-piece food cans, defined as a ''steel can formed by the three-piece can assembly process manufactured to contain edible products and designed to be hermetically sealed.''
- End coating—includes the application of end seal compounds and repair spray coatings to metal can ends and includes three distinct coating type segments reflecting different end uses: Aseptic end seal compounds, non-aseptic end seal compounds, and repair spray coatings.

The Surface Coating of Metal Cans NESHAP defines a ''decorative tin'' as ''a single-walled container, designed to be covered or uncovered that is manufactured from metal substrate equal to or thinner than 0.3785 mm (0.0149 inch) and is normally coated on the exterior surface with decorative coatings. Decorative tins may contain foods but are not hermetically sealed and are not subject to food processing steps such as retort or pasteurization. Interior coatings are not usually applied to protect the metal and contents from chemical interaction.''

The Surface Coating of Metal Cans NESHAP also 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, and maskants.'' Fusion pastes, ink jet markings, mist solutions, and lubricants, as well as decorative, protective, or functional materials that consist only of protective oils for metals, acids, bases, or any combination of these substances, are not considered coatings under 40 CFR part 63, subpart KKKK.

Based on our search of the National Emission Inventory (NEI) (*www.epa.gov/air-emissions-inventories/national-emissions-inventory-nei*) and the EPA's Enforcement and Compliance History Online (ECHO) database (*echo.epa.gov*) and a review of active air emissions permits, we estimate that five facilities are subject to the Surface Coating of Metal Cans NESHAP. A complete list of facilities subject to the Surface Coating of Metal Cans NESHAP is available in Appendix 1 to the memorandum titled *Technology Review for Surface Coating Operations in the Metal Cans Category,* in the Metal Cans Docket (Docket ID No. EPA–HQ–OAR–2017–0684).

b. HAP Emission Sources

The primary HAP emitted from metal can surface coating operations are organic HAP and include glycol ethers, formaldehyde, xylenes, toluene, methyl isobutyl ketone, 2-(hexyloxy) ethanol, ethyl benzene, and methanol. These HAP account for 99 percent of the HAP emissions from the source category. The HAP emissions from the metal cans category occur from coating application lines, drying and curing ovens, mixing and thinning areas, and cleaning of equipment. The coating application lines and the drying and curing ovens are the largest sources of HAP emissions. The coating application lines apply an exterior base coat to two- and three-piece cans using a lithographic/printing (*i.e.,* roll) application process. The inside, side seam, and repair coatings are spray applied using airless spray equipment and are a minor portion of the can coating operations. As indicated by the name, repair spray coatings are used to cover breaks in the coating that are caused during the formation of the score in easy-open ends or to provide, after the manufacturing process, an additional protective layer for corrosion resistance.

[2] 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.

Inorganic HAP emissions were considered in the development of the Surface Coating of Metal Cans NESHAP. Inorganic HAP, including chromium and manganese compounds, are contained in some of the coatings used by this source category. However, the EPA determined that no controls were needed because the coatings used that may contain inorganic HAP were not spray applied. Instead, these coatings were roll applied through direct contact (similar to lithographic printing) with the surface to which they were being applied, and the inorganic HAP became part of the cured coating.[3] No inorganic HAP were reported in the NEI data used for this RTR for surface coating operations at major source metal can coating facilities.

c. NESHAP Requirements for Control of HAP

We estimated that the Surface Coating of Metal Cans NESHAP requirements would reduce the emissions of organic HAP from the source category by 71 percent or 6,800 tpy (68 FR 2110, January 15, 2003). This estimate included two HAP that were since delisted. The delisting of ethylene glycol monobutyl ether occurred in 2004, and the delisting of methyl ethyl ketone occurred in 2005.

The NESHAP specifies numerical emission limits for existing sources and for new and reconstructed sources for organic HAP emissions according to four can coating subcategories. The organic HAP emission limits for existing sources conducting: (1) One- and two-piece draw and iron can body coating (includes two-piece beverage cans, two-piece food cans, and one-piece aerosol cans) ranges from 0.07 to 0.12 kilogram (kg) HAP/liter of coating solids (or 0.59 to 0.99 pound/gallon (lb/gal)); (2) sheet coating is 0.03 kg HAP/liter of coating solids (or 0.26 lb/gal); (3) three piece can assembly (includes inside spray, aseptic, and non-aseptic side seam stripes on food cans, side seam stripes on general line non-food cans, and side seam stripes on aerosol cans) ranges from 0.29 to 1.94 kg HAP/liter of coating solids (or 2.43 to 16.16 lb/gal); and (4) end coating (includes aseptic and non-aseptic end seal compounds and repair spray coatings) ranges from zero to 2.06 kg HAP/liter of coating solids (or zero to 17.17 lb/gal). The organic HAP emission limits for new and reconstructed sources conducting: (1) One and two-piece draw and iron can body coating ranges from 0.04 to 0.08 kg HAP/liter of coating solids (or 0.31 to 0.65 lb/gal); (2) sheet coating is 0.02 kg HAP/liter of coating solids (or 0.17 lb/gal); (3) three piece can assembly ranges from 0.12 to 1.48 kg HAP/liter of coating solids (or 1.03 to 12.37 lb/gal); and (4) end coating ranges from zero to 0.64 kg HAP/liter of coating solids (or zero to 5.34 lb/gal). The specific organic HAP emission limits for each can coating subcategory are listed in Table 3 of the memorandum titled *Technology Review for Surface Coating Operations in the Metal Cans Category,* in the Metal Cans Docket (Docket ID No. EPA–HQ–OAR–2017–0684).

Compliance with the Surface Coating of Metal Cans 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), an emission rate with add-on controls option, or a control efficiency/outlet concentration. 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.

If the facility uses the emission rate with add-on controls option, 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, the coating operation(s) using that option. 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 Metal Coil source category and how does the current NESHAP regulate its HAP emissions?

a. Source Category Description

The NESHAP for the Surface Coating of Metal Coil source category was promulgated on June 10, 2002 (67 FR 39794), and is codified at 40 CFR part 63, subpart SSSS. A technical correction to the final rule was published on March 17, 2003 (68 FR 12590). The Surface Coating of Metal Coil NESHAP applies to owners or operators of metal coil surface coating operations at facilities that are major sources of HAP.

The Surface Coating of Metal Coil NESHAP (40 CFR 63.5100) applies to the collection of all coil coating lines at a facility and defines a coil coating line as the process for metal coil coating that includes the web unwind or feed station, a series of one or more coating stations, associated curing ovens, wet sections, and quench stations. A coil coating line does not include ancillary operations such as mixing/thinning, cleaning, wastewater treatment, and storage of coating material. The Surface Coating of Metal Coil NESHAP (40 CFR 63.5110) defines a coil coating operation as the collection of equipment used to apply an organic coating to the surface of any continuous metal strip that is 0.006 inch (0.15 millimeter (mm)) thick or more that is packaged in a roll or coil. The Surface Coating of Metal Coil NESHAP also defines a coating material as the coating and other products (*e.g.,* a catalyst and resin in multi-component coatings) combined to make a single material at the coating facility that is applied to metal coil and includes organic solvents used to thin a coating prior to application to the metal coil.

Based on our search of the NEI and EPA's ECHO database and a review of active air emission permits, we estimate that 48 facilities are subject to the Surface Coating of Metal Coil NESHAP. A complete list of facilities we identified as subject to the Surface Coating of Metal Coil NESHAP is available in Appendix 1 to the memorandum titled *Residual Risk Assessment for the Surface Coating of Metal Coil Source Category in Support of the 2019 Risk and Technology Review Proposed Rule* (hereafter referred to as the *Metal Coil Risk Assessment Report*), in the Surface Coating of Metal Coil Docket (Docket ID No. EPA–HQ–OAR–2017–0685).

b. HAP Emission Sources

The primary HAP emitted from metal coil coating operations are organic HAP and include xylenes, glycol ethers, naphthalene, isophorone, toluene, diethylene glycol monobutyl ether (DGME), and ethyl benzene. The majority of organic HAP emissions are from the coating application and the curing ovens.

Inorganic HAP emissions were considered in the development of the Surface Coating of Metal Coil NESHAP. Based on information reported in survey responses during the development of the 2002 proposed NESHAP, inorganic HAP were present in the pigments and film-forming components of some coatings used by this source category. However, we concluded that inorganic HAP are not likely to be emitted from these sources because of the application techniques used (67 FR 46032, July 11, 2002). The data obtained from the NEI and the Toxics Release Inventory for

[3] *National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Cans Background Information for Final Standards.* Summary of Public Comments and Responses. EPA 453/R–03–009. August 2003. Section 2.5.4.

this RTR included low quantities of inorganic HAP for major source facilities that conduct metal coil operations. Further investigation of these sources concluded that these inorganic emissions were reported in error.

c. NESHAP Requirements for Control of HAP

We estimated that the Surface Coating of Metal Coil NESHAP requirements would reduce the emissions of organic HAP from the source category by approximately 55 percent or 1,318 tpy (65 FR 44616, July 18, 2000). The NESHAP specifies numerical emission limits for organic HAP emissions from the coating application stations and associated curing ovens. The Surface Coating of Metal Coil NESHAP provides options for limiting organic HAP emissions to one of the four specified levels: (1) Use only individually compliant coatings with an organic HAP content that does not exceed 0.046 kg/liter of solids applied, (2) use coatings with an average organic HAP content of 0.046 kg/liter of solids on a rolling 12-month average, (3) use a capture system and add-on control device to either reduce emissions by 98 percent or use a 100-percent efficient capture system (permanent total enclosure (PTE)) and an oxidizer to reduce organic HAP emissions to no more than 20 parts per million by volume (ppmv) as carbon, or (4) use a combination of compliant coatings and control devices to maintain an average equivalent emission rate of organic HAP not exceeding 0.046 kg/liter of solids on a rolling 12-month average basis. These compliance options apply to an individual coil coating line, to multiple lines as a group, or to the entire affected source.

Compliant coatings must contain no organic HAP (each organic HAP that is not an Occupational Safety and Health Administration (OSHA)-defined carcinogen that is measured to be present at less than 1 percent by weight is counted as zero). The NESHAP also sets operating limits for the emission capture and add-on control devices.

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 Surface Coating of Metal Cans source category can be found in Appendix 1 to the *Residual Risk Assessment for the Surface Coating of Metal Cans Source Category in Support of the 2019 Risk and Technology Review Proposed Rule* (hereafter referred to as the *Metal Cans Risk Assessment Report*), in the Metal Cans Docket (Docket ID No. EPA–HQ–OAR–2017–0684). Detailed information on the development of the modeling file for the Surface Coating of Metal Coil source category can be found in Appendix 1 to the *Metal Coil Risk Assessment Report,* in the Metal Coil Docket (Docket ID No. EPA–HQ–OAR–2017–0685).

For both the risk modeling and technology review portion of these 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. 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 NEI. No formal information collection request (ICR) was conducted for this action.

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 two 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.

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).[4] This is a database that 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, if a facility is planning new construction or a modification that will increase the air emissions by a large amount, an NSR permit must be obtained. 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 Metal Cans Category,* May 2017 (hereafter referred to as the *Metal Cans Technology Review Memo*), and the *Technology Review for Surface Coating Operations in the Metal Coil Category,* September 2017 (hereafter referred to as the *Metal Coil Technology Review Memo*), available in the respective Metal Cans and Metal Coil Dockets.

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

We also reviewed the NESHAP for other surface coating source categories that were promulgated after the Surface Coating of Metal Cans and the Surface Coating of Metal Coil NESHAP as part of the technology review for these source categories. We reviewed the regulatory requirements and/or technical analyses associated with these later regulatory actions to identify any practices, processes, and control technologies considered in those rulemakings that could be applied to emission sources in the Surface Coating of Metal Cans and the Surface Coating of Metal Coil source categories, as well as the costs, non-air impacts, and energy implications associated with the use of those technologies. We also reviewed

[4] *https://www.epa.gov/catc/ractbactlaer-clearinghouse-rblc-basic-information.*

information available in the American Coatings Association's (ACA) *Industry Market Analysis,* 9th Edition (2014–2019).[5] The *ACA Industry Market Analysis* provided information on trends in coatings technology that can affect emissions from the Surface Coating of Metal Cans and the Surface Coating of Metal Coil source categories. Additional details regarding our review of these information sources are contained in the *Metal Cans Technology Review Memo,* and the *Metal Coil Technology Review Memo,* available in the respective Metal Cans and Metal Coil 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.[6] The assessment also provides estimates of the distribution of cancer risk within the exposed populations, cancer incidence, and an evaluation of the potential for an adverse environmental effect. The scope of the EPA's risk analysis is consistent with the 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 noncancer 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 risk. 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 an MIR less than the presumptively acceptable level is unacceptable in the light of other health risk factors.'' *Id.* at 38045. Similarly, with regard to the ample margin of safety analysis, the EPA stated in the Benzene NESHAP that the: ''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 the HAP risk 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 risk, 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 an 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.'' [7]

[5] Prepared for the ACA, Washington, DC, by The ChemQuest Group, Inc., Cincinnati, Ohio. 2015.

[6] 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 exposure to the HAP to the level at or below which no adverse chronic non-cancer effects are expected; the HI is the sum of HQs for HAP that affect the same target organ or organ system.

[7] Recommendations of the SAB Risk and Technology Review (RTR) 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.*

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

Although we are interested in placing source category and facility-wide HAP risk in the context of total HAP risk 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?

Our technology review focuses 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 NESHAP (*i.e.,* the 2003 Surface Coating of Metal Cans NESHAP; and the 2002 Surface Coating of Metal Coil 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 two 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 Miscellaneous Metal Parts and Products (40 CFR part 63, subpart MMMM)). We also reviewed the results of other technology reviews for other surface coating source categories since the promulgation of the NESHAP (*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 Surface Coating of Metal Cans and the Surface Coating of Metal Coil 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-sponsored 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 *Metal Cans Technology Review Memo* and the *Metal Coil Technology Review Memo,* which are available in the respective Metal Cans and Metal Coil dockets.

C. How do we estimate post-MACT risk 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 section IV.B of this preamble).

The EPA conducts a risk assessment that provides estimates of the MIR for cancer posed by the HAP emissions from each source in the 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 assessment also provides estimates of the distribution of cancer risk within the exposed populations, cancer incidence, and an evaluation of the potential for an adverse environmental effect. The seven sections that follow this paragraph describe how we estimated emissions and conducted the risk assessments in this action. The dockets for this rulemaking contain the following documents which provide more information on the risk assessment inputs and models: Metal Cans Risk Assessment Report and the Metal Coil Risk Assessment Report. The methods used to assess risk (as described in the seven primary steps below) are consistent with those described by the EPA in the document reviewed by a panel of the EPA's SAB in 2009; [8] and described in the SAB review report issued in 2010. They are also consistent with the key recommendations contained in that report.

[8] U.S. EPA. *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–09–006. *https://www3.epa.gov/airtoxics/rrisk/rtrpg.html.*

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. The 2011 version of the NEI was the most recent version available during the data collection phase of this rulemaking; therefore, most data were obtained from the 2011 NEI. The 2014 NEI was used to supplement the dataset with 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 *Metal Cans Risk Assessment Report,* in the Metal Cans Docket and Appendix 1 to the *Metal Coil Risk Assessment Report,* in the Metal Coil 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. The emissions allowed under the MACT standards are referred to as the ''MACT-allowable'' emissions. We discussed the consideration 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 risk at the MACT-allowable level is inherently reasonable since that risk reflects 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 both the Surface Coating of Metal Cans and the Surface Coating of Metal Coil source categories, the EPA calculated allowable emissions by developing source category-specific multipliers of 1.1 that was 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 the add-on control device control efficiencies for metal can and metal coil coating operations. Both categories have facilities that employ the use of add-on controls with efficiencies that are slightly above the control efficiency level required by the respective NESHAP, which suggests that the actual emissions are slightly lower than the NESHAP allowable levels.

For more details on how the EPA estimated the MACT allowable emissions for the Surface Coating of Metal Cans source category, please see Appendix 1 to the *Metal Cans Risk Assessment Report,* in the Metal Cans Docket (Docket ID No. EPA–HQ–OAR–2017–0684). For more details on how the EPA calculated the MACT allowable emissions for the Surface Coating of Metal Coil source category, please see Appendix 1 to the *Metal Coil Risk Assessment Report,* in the Metal Coil Docket (Docket ID No. EPA–HQ–OAR–2017–0685).

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

Both long-term and short-term inhalation exposure concentrations and health risk from the source categories addressed in this proposal were estimated using the Human Exposure Model (HEM–3).[9] 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 risk 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.[10] 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[11] internal point locations and populations provides the basis of human exposure calculations (U.S. Census, 2010). In addition, for each 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 risk. 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 limitations of Gaussian dispersion models, 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, 70 years) 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 ($\mu g/m^3$)) by its unit risk estimate (URE). The URE is an upper-bound estimate of an individual's incremental risk 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

[9] For more information about HEM–3, go to *https://www.epa.gov/fera/risk-assessment-and-modeling-human-exposure-model-hem.*

[10] 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).

[11] A census block is the smallest geographic area for which census statistics are tabulated.

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 [12] 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.

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*). 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/crnr/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. We use the peak hourly emission rate,[13] worst-case dispersion conditions, and, in accordance with our mandate under section 112 of the CAA, the point of highest off-site exposure to assess the potential risk to the maximally exposed individual.

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 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.'' [14] 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.[15] They are guideline levels for

[12] 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—a SAB Advisory,* available at *https://yosemite.epa.gov/sab/sabproduct.nsf/214C6E915BB04E14852570CA007A682C/$File/ecadv02001.pdf.*

[13] 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 (either a category-specific factor or a default factor of 10) to account for variability. This is documented in the *Metal Cans Risk Assessment Report and the Metal Coil Risk Assessment Report* and in Appendix 5 of the report: Analysis of Data on Short-term Emission Rates Relative to Long-term Emission Rates. These documents are available in the Metal Cans Docket and the Metal Coil Docket.

[14] 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 http://oehha.ca.gov/air/general-info/oehha-acute-8-hour-and-chronic-reference-exposure-level-rel-summary.*

[15] 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.* Note that the National Advisory Committee for Acute Exposure Guideline Levels for Hazardous Substances ended in October 2011, but the AEGL program continues to operate at the EPA and works with the National

''once-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^3 (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.'' [16] *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 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 Surface Coating of Metal Cans source category process is a continuous (non-batch) coating application and curing process that results in consistent emission rates. The sources in this category primarily roll-apply coatings onto the surface of the metal cans. The sources employ the use of various compliance options, which include the use of compliant coatings, coatings when averaged meet the emission limits, and for facilities that cannot use these options, they employ the use of add-on controls. We expect that the hourly variations in emissions from these processes during routine operations to be minimal. Thus, applying the default emission factor 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 1.1 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 Metal Cans Risk Assessment Report in the Metal Cans Docket.

Similarly, for the Surface Coating of Metal Coil source category, we expect to see minimal hour-to-hour variation in emissions during routine operations because coil coating operations roll-apply coating onto a moving metal strip (coil) in a continuous coating process. The coil ends are seamed together in a continuous (non-batch) process that achieves a consistent emission rate. Thus, the default emission factor 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 1.1 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 Metal Coil Risk Assessment Report in the Metal Coil Docket.

In our acute inhalation screening risk assessment, acute impacts are deemed negligible for HAP for which acute HQs are less than or equal to 1 (even under the conservative assumptions of the screening assessment), and no further analysis is performed for these HAP. In cases where an acute HQ from the screening step is greater than 1, we consider additional site-specific data to develop a more refined estimate of the potential for acute exposures of concern. For both source categories in this action, the data refinements employed 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 *Metal Cans* and *Metal Coil Risk Assessment Reports,* available in the respective Metal Cans and Metal Coil 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 emit any HAP known to be persistent and bioaccumulative in the environment (PB–HAP), as identified in the EPA's Air Toxics Risk Assessment Library (see Volume 1, Appendix D, *at https://www.epa.gov/fera/risk-assessment-and-modeling-air-toxics-risk-assessment-reference-library*).

For the Surface Coating of Metal Cans source category, we did not identify emissions of any PB–HAP. Because we did not identify PB–HAP emissions, no further evaluation of multipathway risk was conducted for this source category. For the Surface Coating of Metal Coil source category, we identified PB–HAP emissions of lead, so we proceeded to the next step of the evaluation. In this

Academies to publish final AEGLs (*https://www.epa.gov/aegl*).

[16] *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.*

step, we determine whether the facility-specific emission rates of the emitted PB–HAP are large enough to create the potential for significant human health risk through ingestion exposure under reasonable worst-case conditions. 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 multipathway risk assessments for RTR rules. (See Volume 1, Appendix D at *https://www.epa.gov/sites/production/files/201308/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.

In the Tier 2 screening assessment, the location of each facility that exceeds a Tier 1 screening threshold emission rate is used to refine the assumptions associated with the Tier 1 fisher and farmer exposure scenarios at that facility. A key assumption in the Tier 1 screening assessment is that a lake and/or farm is located near the facility. As part of the Tier 2 screening assessment, we use a U.S. Geological Survey (USGS) database to identify actual waterbodies within 50 km of each facility. We also examine the differences between local meteorology near the facility and the meteorology used in the Tier 1 screening assessment. We then adjust the previously-developed Tier 1 screening threshold emission rates for each PB–HAP for each facility based on an understanding of how exposure concentrations estimated for the screening scenario change with the use of local meteorology and USGS waterbody data. If the PB–HAP emission rates for a facility exceed the Tier 2 screening threshold emission rates and data are available, we may conduct a Tier 3 screening assessment. If PB–HAP emission rates do not exceed a Tier 2 screening value of 1, we consider those PB–HAP emissions to pose risks below a level of concern.

There are several analyses that can be included in a Tier 3 screening assessment, depending upon the extent of refinement warranted, including validating that the lakes are fishable, considering plume-rise to estimate emissions lost above the mixing layer, and considering hourly effects of meteorology and plume rise on chemical fate and transport. If the Tier 3 screening assessment indicates that risks above levels of concern cannot be ruled out, the EPA may further refine the screening assessment through a site-specific assessment.

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 Standards (NAAQS) for lead.[17] Values below the level of the primary (health-based) lead NAAQS are considered to have a low potential for multipathway risk.

For further information on the multipathway assessment approach, see the Metal Coil Risk Assessment Report, which is available in the Metal Coil docket for this action.

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

a. Adverse Environmental Effect, Environmental HAP, and Ecological Benchmarks

The EPA conducts a screening assessment to examine the potential for an adverse environmental effect 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 assessment are arsenic compounds, cadmium compounds, dioxins/furans, (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, are 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-

[17] 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.

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 *Metal Cans Risk Assessment Report* and the *Metal Coil Risk Assessment Report,* in the Metal Cans Docket and the Metal Coil Docket, respectively.

b. Environmental Risk Screening Methodology

For the environmental risk screening assessment, the EPA first determined whether any facilities in the Surface Coating of Metal Cans and Surface Coating of Metal Coil source categories emitted any of the environmental HAP. For the Surface Coating of Metal Cans source category, we identified emissions of HCl and HF. For the Surface Coating of Metal Coil source category, we identified emissions of HF and lead.

Because one or more of the environmental HAP evaluated are emitted by at least one facility in the source categories, we proceeded to the second step of the evaluation for both the Surface Coating of Metal Cans and the Surface Coating of Metal Coil 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 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.

As in the multipathway human health risk assessment, 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 HF and HCl. 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 a potential adverse environmental effect (as defined in section 112(a)(7) of the CAA) from emissions of HF and HCl, we evaluate the following metrics: The size of the modeled area around each facility that exceeds the ecological benchmark for each acid gas, in acres and km^2; 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 Metal Cans Risk Assessment Report and Metal Coil Risk Assessment Report, which are available in each respective docket for this action.

6. How do 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 these 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 *Metal Cans Risk Assessment Report* and the *Metal Coil Risk Assessment Report,* available respectively in the Metal Cans Docket and the Metal Coil Docket, 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 do 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 *Metal Cans Risk Assessment Report* and the *Metal Coil Risk Assessment Report,* available respectively in the Metal Cans Docket and the Metal Coil Docket. If a multipathway site-specific assessment was performed for this source category, 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,* pages 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.[18] 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.[19] Chronic noncancer RfC and

[18] IRIS glossary (*https://ofmpub.epa.gov/sor_internet/registry/termreg/searchandretrieve/glossariesandkeywordlists/search.do?details=&glossaryName=IRIS%20Glossary*).

[19] 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,

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,[20] 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 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 this source category 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 humans at the location of the maximum concentration. In the acute screening assessment that we conduct under the RTR program, we assume that peak emissions from the source category and worst-case meteorological conditions co-occur, thus, resulting in maximum ambient concentrations. These two events are unlikely to occur at the same time, making these assumptions conservative. We then include the additional assumption that a person is located at this point during this same time period. For these source categories, these assumptions would tend to be worst-case actual exposures as it is unlikely that a person would be located at the point of maximum exposure during the time when peak emissions and worst-case meteorological conditions occur simultaneously.

f. Uncertainties in the Multipathway and Environmental Risk Screening Assessments

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.[21]

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 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

and which is based on maximum likelihood estimates.

[20] 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.

[21] 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.

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.

In Tier 2 of the multipathway and environmental screening assessments, we refine the model inputs to account for meteorological patterns in the vicinity of the facility versus using upper-end national values, and we identify the actual location of lakes near the facility rather than the default lake location that we apply in Tier 1. By refining the screening approach in Tier 2 to account for local geographical and meteorological data, we decrease the likelihood that concentrations in environmental media are overestimated, thereby increasing the usefulness of the screening assessment. In Tier 3 of the screening assessments, we refine the model inputs again to account for hour-by-hour plume rise and the height of the mixing layer. We can also use those hour-by-hour meteorological data in a TRIM.FaTE run using the screening configuration corresponding to the lake location. These refinements produce a more accurate estimate of chemical concentrations in the media of interest, thereby reducing the uncertainty with those estimates. The assumptions and the associated uncertainties regarding the selected ingestion exposure scenario are the same for all three tiers.

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 Metal Cans source category?

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

As described in section III of this preamble, for the Surface Coating of Metal Cans 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 *Metal Cans Risk Assessment Report* in the Metal Cans Docket (Docket ID No. EPA–HQ–OAR–2017–0684).

a. Inhalation Risk Assessment Results

Table 2 of this preamble summarizes the results of the inhalation risk assessment for the source category. As discussed in section III.C.2 of this preamble, we set MACT-allowable HAP emission levels at metal can coating facilities equal to 1.1 times actual emissions. For more detail about the MACT-allowable emission levels, see Appendix 1 to the *Metal Cans Risk Assessment Report* in the Metal Cans Docket.

TABLE 2—SURFACE COATING OF METAL CANS SOURCE CATEGORY INHALATION RISK ASSESSMENT RESULTS

Risk assessment	Maximum individual cancer risk (in 1 million)		Estimated population at increased risk of cancer ≥1-in-1 million		Estimated annual cancer incidence (cases per year)		Maximum chronic noncancer TOSHI [1]		Maximum screening acute noncancer HQ [2]
	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	3	3	700	800	0.0009	0.001	0.02	0.02	HQREL = 0.4.
Whole Facility	8	.....	1,500	.....	0.002	.....	0.2	.....	

[1] The TOSHI is the sum of the chronic noncancer HQs for substances that affect the same target organ or organ system.
[2] 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 3-in-1 million (driven by formaldehyde from a two-piece can coating line), the maximum chronic noncancer TOSHI value based on actual emissions could be up to 0.02 (driven by formaldehyde from a two-piece can coating line), and the maximum screening acute noncancer HQ value (off-facility site) could be up to 0.4 (driven by formaldehyde). The total estimated annual cancer incidence (national) from these facilities based on actual emission levels is 0.0009 excess

cancer cases per year or 1 case in every 1,100 years.

b. Acute Risk Results

Table 2 of this preamble shows the acute risk results for the Surface Coating of Metal Cans source category. The screening analysis for acute impacts was based on an industry specific multiplier of 1.1, to estimate the peak emission rates from the average rates. For more detailed acute risk results, refer to the *Metal Cans Risk Assessment Report* in the Metal Cans Docket.

c. Multipathway Risk Screening Results

There are no PB–HAP emitted by facilities in the Surface Coating of Metal Cans 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 Surface Coating of Metal Cans source category indicate that two environmental HAP are emitted by sources within this source category: HCl and HF. Therefore, we conducted a screening-level evaluation of the potential for adverse environmental risks associated with emissions of HCl and HF for the Surface Coating of Metal Cans source category. 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

Three facilities have a facility-wide cancer MIR greater than or equal to 1-in-1 million. The maximum facility-wide cancer MIR is 8-in-1 million, driven by formaldehyde from miscellaneous industrial processes (other/not classified) and acetaldehyde from beer production (brew kettle). The total estimated cancer incidence from the whole facility is 0.002 excess cancer cases per year, or one excess case in every 500 years. Approximately 1,500 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 three of the five facilities in this source category. The maximum facility-wide TOSHI for the source category is estimated to be less than 1, mainly driven by emissions of acetaldehyde from beer production (brew kettle primarily) and formaldehyde from miscellaneous industrial processes (other/not classified).

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 risk from the Surface Coating of Metal Cans source category across different demographic groups within the populations living near facilities.[22]

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 risk from actual emissions levels for the population living within 50 km of the facilities.

TABLE 3—SURFACE COATING OF METAL CANS SOURCE CATEGORY DEMOGRAPHIC RISK ANALYSIS RESULTS

	Nationwide	Population with cancer risk at or above 1-in-1 million due to Surface Coating of Metal Cans	Population with chronic hazard index above 1 due to Surface Coating of Metal Cans
Total Population	317,746,049	700	0
Race by Percent			
White	62	92	0
All Other Races	38	8	0
Race by Percent			
White	62	92	0
African American	12	0	0
Native American	0.8	0	0
Hispanic or Latino	18	4	0
Other and Multiracial	7	4	0
Income by Percent			
Below the Poverty Level	14	4	0
Above the Poverty Level	86	96	0
Education by Percent			
Over 25 and Without High a School Diploma	14	4	0
Over 25 and With a High School Diploma	86	96	0

The results of the Surface Coating of Metal Cans source category demographic analysis indicate that emissions from the source category expose approximately 700 people to a cancer risk at or above 1-in-1 million and no one to a chronic noncancer TOSHI greater than 1 (we note that many of those in the first risk group are

[22] 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.

the same as those in the second). None of the percentages of the at-risk populations are higher than their respective nationwide percentages.

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 Surface Coating of Metal Cans Source Category Operations,* May 2018 (hereafter referred to as the *Metal Cans Demographic Analysis Report*) in the Metal Cans Docket.

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

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 Surface Coating of Metal Cans source category, the risk analysis indicates that the cancer risks to the individual most exposed could be up to 3-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 (0.0009 cases per year for actual emissions and 0.001 cases per year for allowable emissions) and we did not identify potential for adverse chronic noncancer health effects. The acute noncancer risks based on actual emissions are low at an HQ of 0.4 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 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 Surface Coating of Metal Cans source category are acceptable.

b. Ample Margin of Safety Analysis

Although we are proposing that the risks from the Surface Coating of Metal Cans source category are acceptable, risk estimates for approximately 700 individuals in the exposed population are above 1-in-1 million at the actual emissions level and 800 individuals at the allowable emissions level. Consequently, we further considered whether the MACT standards for the Surface Coating of Metal Cans 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 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 Surface Coating of Metal Cans source category, and the EPA reviewed various information sources regarding emission sources that are currently regulated by the Surface Coating of Metal Cans NESHAP.

The only development identified in the technology review for can coating is the ongoing development and the potential future conversion from conventional interior can coatings that contain bisphenol A (BPA) to interior coatings that do not intentionally contain BPA (BPA–NI). Since BPA and BPA–NI are not HAP, this change would have no effect on the HAP emissions. There were no other technological developments identified that affect HAP emissions for the Surface Coating of Metal Cans source category. Therefore, we are proposing that additional emission controls for this source category are not necessary to provide an ample margin of safety.

c. Environmental Effects

The emissions data for the Surface Coating of Metal Cans source category indicate that two environmental HAP are emitted by sources within this source category: HCl and HF. The screening-level evaluation of the potential for adverse environmental risks associated with emissions of HCl and HF from the Surface Coating of Metal Cans 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 Surface Coating of Metal Cans source category. The EPA reviewed various information sources regarding emission sources that are currently regulated by the Surface Coating of Metal Cans 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 Surface Coating of Metal Cans NESHAP); a site visit and discussions with individual can coating facilities and the industry trade association. 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 had not been previously considered during development of the Surface Coating of Metal Cans 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 can coating operations follows. For a detailed discussion of the EPA's findings, refer to the Metal Cans Technology Review Memorandum in the Metal Cans Docket.

During the 2003 MACT development for the Surface Coating of Metal Cans NESHAP, numerical emission limits were determined for each coating type segment within the four subcategories for a total of 12 HAP emission 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. Alternately, the NESHAP provides sources with the option of limiting HAP emissions with capture and add-on control to achieve an overall control efficiency (OCE) of 97 percent for new or reconstructed sources and 95 percent for existing sources. Alternately, sources with add-on controls can choose the option of meeting a HAP concentration limit of 20 ppm by volume dry at the control device outlet. 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 metal can 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 (68 FR 2123).

For this technology review, we used the EPA's NEI and the ECHO databases to identify facilities that are currently subject to the Surface Coating of Metal Cans NESHAP. The facility list was also reviewed by the Can Manufacturers Institute (CMI). CMI provided facility operating permits to confirm that only five facilities are currently operating as major sources and are subject to the Surface Coating of Metal Cans NESHAP.

Our search of the RBLC database for improvements in can coating technologies provided results for four metal can coating facilities with permit dates of 2006 or later. All four of the results contained information about the add-on controls used by the facilities. Two facilities reported the use of regenerative thermal oxidizers (RTOs), one reported the use of an induction heater and catalytic oxidation, and one reported the use of thermal oxidation. All of these control technologies were in use by the can coating industry during development of the Surface Coating of Metal Cans NESHAP and were already considered in the development of the Surface Coating of Metal Cans NESHAP. Therefore, we concluded that the results of the search are consistent with current Surface Coating of Metal Cans NESHAP requirements and did not include any improvements in add-on control technology or other equipment that were not identified and considered at that time.

We also conducted a review of the state operating permits for the can coating facilities that are subject to the Surface Coating of Metal Cans NESHAP to determine whether any are using technologies that exceed the MACT level of control or are using technologies that were not considered during the development of the original NESHAP. The permits show that two of the five facilities use no add-on controls (they use the compliant material option or the material averaging option to meet the NESHAP emission limits) and three of the five facilities had only partial control (*i.e.,* not all can coating lines had control). The coating types are not specified in the permits for all facilities, but one permit specified the use of ultraviolet (UV)-cured coatings. The add-on controls in the permits included a thermal oxidizer and two regenerative thermal oxidizers. As a result of the permit review, we concluded that the add-on controls that are now available are essentially the same and have the same emission reduction performance (*i.e.,* 95- or 97-percent VOC destruction efficiency) as those that were available when the NESHAP was proposed and promulgated.

We reviewed other surface coating NESHAP promulgated after the Surface Coating of Metal Cans NESHAP to determine whether any requirements exceed the Surface Coating of Metal Cans MACT level of control or included technologies that were not considered during the development of the original Surface Coating of Metal Cans NESHAP. These NESHAP include Surface Coating of Miscellaneous Metal Parts and Products (40 CFR part 63, subpart MMMM), Surface Coating of Plastic Parts and Products (40 CFR part 63, subpart PPPP), and Surface Coating of Automobiles and Light-Duty Trucks (40 CFR part 63, subpart IIII). 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), and Wood Furniture Manufacturing (40 CFR part 63, subpart JJ).

Technology reviews for these NESHAP identified PTE and/or RTO as improvements in add-on control technology. Because the Surface Coating of Metal Cans 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 original Surface Coating of Metal Cans NESHAP, we concluded that these measures do not represent an improvement in control technology under CAA section 112(d)(6).

The technology review conducted for the Wood Furniture Manufacturing 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. This development is not applicable to metal can coating because the primary coating operations are performed using non-spray application methods, such as lithographic printing and other types of direct transfer coating application, or they already use airless spray equipment for the inside spray, side seam spray, and repair coating operations. In conclusion, we found no 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 the Surface Coating of Metal Cans NESHAP development.

Alternatives to conventional solvent-borne coatings were identified and considered during MACT development but were not considered to be suitable for all can coating applications. These alternative coatings include higher solids coatings, waterborne coatings, and low-energy electron beam/ultraviolet cured coatings. Powder coating applications are not common for metal containers. Waterborne and higher solids coatings with lower HAP and VOC content were considered in the development of the proposed and final standards and are reflected in the HAP emission limitations in the final rule. Interior coatings used for cans that contain food or beverages are subject to regulation by the U.S. Food and Drug Administration (FDA), as well as internal approval by the food and beverage manufacturers. The only anticipated technology change in the area of coating reformulation for the Surface Coating of Metal Cans source category is the replacement of coatings that have no intentionally added BPA for both beverage and food cans, referred to as BPA–NI coatings. The major can coating producers are currently devoting much of their research and development efforts to develop BPA–NI systems for new applications and to improve the BPA–NI systems that already exist. However, a complete shift to these coatings is not expected unless driven by FDA regulation or consumer opinion. Therefore, the EPA did not identify any developments in coating technology or 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 Surface Coating of Metal Cans 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 Surface Coating of Metal Cans NESHAP pursuant to CAA section 112(d)(6). For further discussion of the technology review results, refer to the Metal Cans Technology Review Memorandum in the Metal Cans Docket.

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

In addition to the proposed actions described above, we are proposing additional revisions to the NESHAP. We are proposing to require electronic submittal of notifications, semiannual reports, and compliance reports (which include performance test reports) for metal cans 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 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

In this action the EPA proposes to require owners and operators of surface coating of metal can facilities to submit electronic copies of the initial notifications required in 40 CFR 63.9(b) and 63.3510(b), notifications of compliance status required in 40 CFR 63.9(h) and 63.3510(c), performance test reports required in 40 CFR 63.3511(b), and semiannual reports required in 40 CFR 63.3511(a), through the EPA's Central Data Exchange (CDX), using the Compliance and Emissions Data Reporting Interface (CEDRI).[23] A description of the electronic submission process is provided in the memorandum Electronic Reporting Requirements *for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP),* August 8, 2018, in the Metal Cans Docket. This proposed rule requirement would replace the current rule requirement to submit the notifications and reports to the Administrator at the appropriate address listed in 40 CFR 63.13. This proposed rule requirement does not affect submittals required by state air agencies as required by 40 CFR 63.13.

For the performance test reports required in 40 CFR 63.3511(b), results collected using test methods that are supported by the Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (*https://www3.epa.gov/ttn/chief/ert/ert_info.pdf*) at the time of the performance test are required to be submitted in the format generated through the use of ERT. Performance test results collected using test methods that are not supported by the ERT at the time of the performance test are required to be submitted to the EPA electronically in a portable document format (PDF) using the attachment module of the ERT. Note that all but two of the EPA test methods (EPA Method 25 and optional EPA Method 18) listed under the emissions destruction or removal efficiency section of 40 CFR part 63, subpart KKKK, are currently supported by the ERT. As mentioned above, the rule proposes that, should an owner or operator use EPA Method 25 or EPA Method 18, then its results would be submitted in PDF using the attachment module of the ERT.

For the semiannual reports required in 40 CFR 63.3511(a), the EPA proposes that owners and operators use the final semiannual report template, which will reside in CEDRI, one year after finalizing this proposed action. The *Proposed Electronic Reporting Template for Surface Coating of Metal Cans Subpart KKKK Semiannual Report* is available for review and comment in the Metal Cans Docket as part of this action. We specifically request comment on the format and usability of the template (*e.g.,* filling out and uploading a provided spreadsheet versus entering the required information into an on-line fillable CEDRI web form), as well as the content, layout, and overall design of the template. Prior to availability of the final semiannual compliance report template in CEDRI, owners and operators of affected sources will be required to submit semiannual compliance reports as currently required by the rule. When the EPA finalizes the semiannual compliance report template, metal can sources will be notified about its availability via the CEDRI website. We plan to finalize a required reporting format with the final rule. The owner or operator would begin submitting reports electronically with the next report that is due, once the electronic template has been available for at least 1 year.

For the electronic submittal of initial notifications required in 40 CFR 63.9(b), no specific form is available at this time, so these notifications are required to be submitted electronically in PDF. If electronic forms are developed for these notifications, we will notify sources about their availability via the CEDRI website. For the electronic submittal of notifications of compliance status reports required in 40 CFR 63.9(h), the final semiannual report template discussed above, which will reside in CEDRI, will also contain the information required for the notifications of compliance status report and will satisfy the requirement to provide the notifications of compliance status information electronically, eliminating the need to provide a separate notifications of compliance status report. As stated above, the final semiannual report template will be available after finalizing this proposed action and sources will be required to use the form after one year. Prior to the availability of the final semiannual compliance report template in CEDRI, owners and operators of affected sources will be required to submit semiannual compliance reports as currently required by the rule. As stated above, we will notify sources about the availability of the final semiannual report template via the CEDRI website.

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

[23] *https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri.*

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 report by the reporting deadline for reasons outside of their control. In 40 CFR 63.3511(f), we propose to address the situation where an extension may be warranted due to outages of the EPA's CDX or CEDRI that precludes an owner or operator from accessing the system and submitting required reports. Also in 40 CFR 63.3511(g), we propose to address 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. Examples of such events are acts of nature, acts of war or terrorism, and equipment failures or safety hazards that are beyond the control of the facility.

As discussed in the memorandum Electronic Reporting Requirements *for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP), August 8, 2018,* electronic submittal of the reports addressed in this proposed action will increase the usefulness of the data contained in those reports, and in keeping with current trends in data availability and transparency, will further assist in the protection of public health and the environment, and will ultimately result in less burden on the regulated facilities. Electronic submittal will also improve compliance by facilitating the ability of regulated facilities to demonstrate compliance and the ability of air agencies and the EPA to assess and determine compliance. Moreover, electronic reporting is consistent with the EPA's plan [24] to implement Executive Order 13563 and the EPA's agency-wide policy [25] developed in response to the White House's Digital Government Strategy.[26] 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),* August 8, 2018, available in the Metal Cans docket.

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 5 to Subpart KKKK of Part 63 (*Applicability of General Provisions to Subpart KKKK,* hereafter referred to as the ''General Provisions table to subpart KKKK''), 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 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 reasons explained below, has not proposed alternate standards for those periods. Startups and shutdowns are part of normal operations for the Surface Coating of Metal Cans source category. As currently specified in 40 CFR 63.3492(b), any coating operation(s) for which you use the emission rate with add-on controls option must meet operating limits ''at all times,'' except for solvent recovery systems for which you conduct liquid-liquid material balances according to 40 CFR 63.3541(i). (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 63.3500(a)(2), any coating operation(s) for which you use the emission rate with add-on controls option or the control efficiency/outlet concentration option must be in compliance ''at all times'' with the emission limits in 40 CFR 63.3490 and work practice standards in 40 CFR 63.3493. 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 63.3500(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.

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

[24] *Improving Our Regulations: Final Plan for Periodic Retrospective Reviews of Existing Regulations,* August 2011. Available at *https://www.regulations.gov, Document ID No. EPA–HQ–OA–2011–0156–0154.*

[25] *E-Reporting Policy Statement for EPA Regulations,* September 2013, *https://www.epa.gov/sites/production/files/2016-03/documents/epa-ereporting-policy-statement-2013-09-30.pdf.*

[26] *Digital Government: Building a 21st Century Platform to Better Serve the American People,* May 2012. Available at *http://www.whitehouse.gov/sites/default/files/omb/egov/digital-government/digitalgovernment-strategy/pdf.*

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 metal can surface coating operations for facilities using the compliant material option or the emission rate without add-on controls option. Facilities using the compliant material option have demonstrated that the organic HAP content of each coating is less than or equal to the applicable emission limit and that each thinner used contains no organic HAP. Facilities using the emission rate without add-on controls option have demonstrated that the coatings and thinners used in the coating operations are less than or equal to the applicable emission limit calculated as a rolling 12-month emission rate and determined on a monthly basis.

A malfunction event is more likely for metal can coating facilities that use the emission rate with add-on control options or the control efficiency/outlet concentration compliance option. For these options, facilities must demonstrate a reduction of total HAP of at least 97 or 95 percent or that the oxidizer outlet HAP concentration is no greater than 20 ppmv and 100-percent capture efficiency. For this option, facilities must demonstrate that their emission capture systems and add-on control devices meet the operating limits established by the Surface Coating of Metal Cans NESHAP. The capture and control device operating limits are listed in Table 4 of the Surface Coating of Metal Cans NESHAP and must be achieved continuously. 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. In addition, work practices are also required when using this option 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 Surface Coating of Metal Cans 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

a. 40 CFR 63.3500(b) General Duty

We are proposing to revise the General Provisions table to subpart KKKK (Table 5) 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 63.3500(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 63.3500(b) 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 KKKK (Table 5) 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 63.3500(b).

b. SSM Plan

We are proposing to revise the General Provisions table to subpart KKKK (Table 5) 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 KKKK, the current provisions requiring the SSM plan at 40 CFR 63.3511(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.

c. Compliance With Standards

We are proposing to revise the General Provisions table to subpart KKKK (table 5) 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 63.3541(h) 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.

d. 40 CFR 63.4164 Performance Testing

We are proposing to revise the General Provisions table to subpart KKKK (Table 5) 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 63.3543 and 40 CFR 63.3553. 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 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 clarifying that the owner or operator must make such records available to the Administrator upon request.

e. Monitoring

We are proposing to revise the General Provisions table to subpart KKKK (Table 5) 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 63.3547(a)(4) and 40 CFR 63.3557(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 63.3547(a)(4) and 63.3557(a)(4) to specify ''readily available.''

f. 40 CFR 63.3512 Recordkeeping

We are proposing to revise the General Provisions table to subpart KKKK (Table 5) 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 KKKK (Table 5) 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 63.3512(i), which requires a record of ''the date, time, and duration of each deviation,'' which the EPA is retaining. The regulatory text in 40 CFR 63.3512(i) 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 63.3512(i) 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 63.3512(i) 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 KKKK (Table 5) 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 63.3512(i)(4). When applicable, the provision in Section 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 KKKK (Table 5) 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 63.3512(i) covers records of periods of deviation from the standard, including instances where a CMS is inoperative or out-of-control.

We are proposing to revise the General Provisions table to subpart KKKK (Table 5) 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 63.3512(j)(1) 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 63.3512(j)(2).

g. 40 CFR 63.3511 Reporting

We are proposing to revise the General Provisions table to subpart KKKK (Table 5) 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 63.3511(a)(7) and (8). 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 KKKK 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 63.3511(a)(5)(i); 40 CFR 63.3511(a)(7)(vi), (a)(7)(vii), and (a)(7)(viii); 40 CFR 63.3511(a)(8)(v), (a)(8)(vi), and (a)(8)(xi)(A)) 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 63.3490 or operating limit in Table 4 to 40 CFR part 63 subpart KKKK, 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 associated with the emission rate with add-on controls option (40 CFR 63.3511(a)(8)(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 63.3500(b), 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 the EPA has 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 63.3511(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, shutdown, 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 63.3511(a)(7) and (a)(8) 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 63.3511(a)(7)(x) and 40 CFR 63.3511(a)(8)(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.

c. Technical Amendments to the Surface Coating of Metal Cans NESHAP

We propose to amend 40 CFR 63.3481(c)(5) to revise the reference to ''future subpart MMMM'' of this part by removing the word ''future'' because subpart MMMM was promulgated in 2004.

We propose to revise the format of references to test methods in 40 CFR part 60. The current reference in 40 CFR 63.3545(a) and (b) to 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 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 63.3521(a)(1)(i) and (4), which describe how to demonstrate initial compliance with the emission limitations using the compliant material option, 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 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 8 to 40 CFR part 63, subpart KKKK) 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 8 to 40 CFR part 63, subpart KKKK 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),[27] 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 temperature sensor referred to in 40 CFR 63.3547(c)(3) and 40 CFR 63.3557(c)(3) for purposes of performing periodic calibration and verification checks.

Current 40 CFR 63.3513(a) allows records, ''where appropriate,'' to be maintained as ''electronic spreadsheets'' or a ''database.'' We propose to add clarification to this provision that 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 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 Surface Coating of Metal Cans 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 ongoing 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.

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.[28]

[27] See *https://www.epa.gov/fera/dose-response-assessment-assessing-health-risks-associated-exposure-hazardous-air-pollutants.*

[28] 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

Continued

These factors are discussed in more detail in the memorandum titled *Proposed Periodic Testing Requirement* dated February 1, 2019, included in the Metal Cans and Metal Coil Dockets.

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 in a prior rulemaking. 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.[29] ICAC identifies 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 °F 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 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 °F—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 that 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 note that two of the state operating permits for metal can coating existing 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 63.3546(b) and following the catalyst maintenance procedures in 40 CFR 63.3546(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 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 *Draft Costs/Impacts of the 40 CFR part 63 Subparts KKKK and SSSS Monitoring Review Revisions,* in the Metal Cans and Metal Coil Dockets. We have reviewed the

documents are included in the Metal Can and Metal Coil Dockets for this action.

[29] See Docket Item No. EPA–HQ–OAR–2004–0094–0173, available at *www.regulations.gov*. A copy of the ICAC's comments on the proposed revisions to the General Provisions is also included in the Metal Cans and Metal Coil Dockets for this action.

state operating permits for facilities subject to the Surface Coating of Metal Cans NESHAP and found that one of the metal can coating facilities employs three add-on control devices that are currently not required to conduct periodic testing as a condition of their permit renewal. Two other facilities using add-on controls are currently required to conduct periodic performance tests as a condition of their 40 CFR part 70 operating permits. For these two facilities, the periodic testing would not add any new testing requirements and the estimated costs would not apply to these facilities. 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 Surface Coating of Metal Cans 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 63.3521(c) and 63.3531(c);
- ASTM D2111–10 (2015), Standard Test Methods for Specific Gravity of Halogenated Organic Solvents and Their Admixtures, proposed to be IBR approved for 40 CFR 63.3521(c) and 63.3531(c);
- ASTM D2369–10 (2015), Test Method for Volatile Content of Coatings, proposed to be IBR approved for 40 CFR 63.3521(a)(2) and 63.3541(i)(3);
- ASTM D2697–03 (2014), Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings, proposed to be IBR approved for 40 CFR 63.3521(b)(1); and
- ASTM 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 63.3521(b)(1).

Older versions of ASTM Methods, D2697 and D6093 were incorporated by reference when the Surface Coating of Metal Cans NESHAP was originally promulgated (68 FR 64432, November 13, 2003). 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 Methods D2111 and D2369 to the Surface Coating of Metal Cans NESHAP for the first time by incorporating these methods 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, or upon startup, whichever is later. All affected facilities would have to continue to meet the current requirements of 40 CFR part 63, subpart KKKK 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 KKKK. 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 timeframe 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 Surface Coating of Metal Coil source category?

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

As described above in section III of this preamble, for the Surface Coating of Metal Coil 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 *Metal Coil Risk Assessment Report* in the Metal Coil Docket (Docket ID No. EPA–HQ–OAR–2017–0685).

a. Inhalation Risk Assessment Results

Table 4 of this preamble summarizes the results of the inhalation risk assessment for the source category. As discussed in section III.C.2 of this preamble, we determined that MACT-allowable HAP emission levels at coil coating facilities are equal to 1.1 times the actual emissions. For more detail about the MACT-allowable emission levels, see Appendix 1 to the *Metal Coil Risk Assessment Report* in the Metal Coil Docket.

TABLE 4—SURFACE COATING OF METAL COIL SOURCE CATEGORY INHALATION RISK ASSESSMENT RESULTS

Risk assessment	Maximum individual cancer risk (in 1 million)		Estimated population at increased risk of cancer ≥1-in-1 million		Estimated annual cancer incidence (cases per year)		Maximum chronic noncancer TOSHI [1]		Maximum screening acute noncancer HQ [2]
	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	19,000	24,000	0.005	0.006	0.1	0.1	HQREL = 3.
Whole Facility	40		270,000		0.03		5		

[1] The TOSHI is the sum of the chronic noncancer HQ for substances that affect the same target organ or organ system.
[2] 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 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 from solvent storage), the maximum chronic noncancer TOSHI value based on actual emissions could be up to 0.1 (driven by glycol ethers from prime and finish coating application), and the maximum screening acute noncancer HQ value (off-facility site) could be up to 3 (driven by DGME). The total estimated annual cancer incidence (national) from these facilities based on actual emission levels is 0.005 excess cancer cases per year or one case in every 200 years.

b. Acute Risk Results

Table 4 of this preamble also shows the acute risk results for the Surface Coating of Metal Coil source category. The screening analysis for acute impacts was based on an industry-specific multiplier of 1.1, to estimate the peak emission rates from the average emission rates. For more detailed acute risk results refer to the *Metal Coil Risk Assessment Report* in the Metal Coil Docket.

c. Multipathway Risk Screening Results

The emissions data for the Surface Coating of Metal Coil 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, modeled maximum annual lead concentrations were compared to the NAAQS for lead (0.15 $\mu g/m^3$). Results of this analysis confirmed that the NAAQS for lead would not be exceeded by any facility.

d. Environmental Risk Screening Results

The emissions data for the Surface Coating of Metal Coil source category indicate that two environmental HAP are emitted by sources within this source category: HF and lead. Therefore, we conducted a screening-level evaluation of the potential adverse environmental risks associated with emissions of HF and lead for the Surface Coating of Metal Coil source category. For HF, each individual concentration (*i.e.,* each off-site data point in the modeling domain) was below the ecological benchmarks for all facilities. For lead, we did not estimate any exceedances of the secondary lead NAAQS. Therefore, we do not expect an adverse environmental effect as a result of HAP emissions from this source category.

e. Facility-Wide Risk Results

Sixteen facilities have a facility-wide cancer MIR greater than or equal to 1-in-1 million. The maximum facility-wide cancer MIR is 40-in-1 million, driven by naphthalene from equipment cleanup of metal coil coating processes. 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 270,000 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 48 facilities in this source category. The maximum facility-wide TOSHI for the source category is estimated to be 5, driven by emissions of chlorine from a secondary aluminum fluxing 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 risk 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 risk from the Surface Coating of Metal Coil source category across different demographic groups within the populations living near facilities.[30]

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 risk from actual emissions levels for the population living within 50 km of the facilities.

TABLE 5—SURFACE COATING OF METAL COIL SOURCE CATEGORY DEMOGRAPHIC RISK ANALYSIS RESULTS

	Nationwide	Population with cancer risk at or above 1-in-1 million due to surface coating of metal coil	Population with chronic hazard index above 1 due to surface coating of metal coil
Total Population	317,746,049	19,000	0
Race by Percent			
White	62	70	0
All Other Races	38	30	0

[30] 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 5—SURFACE COATING OF METAL COIL SOURCE CATEGORY DEMOGRAPHIC RISK ANALYSIS RESULTS—Continued

	Nationwide	Population with cancer risk at or above 1-in-1 million due to surface coating of metal coil	Population with chronic hazard index above 1 due to surface coating of metal coil
Race by Percent			
White	62	70	
African American	12	21	0
Native American	0.8	0.1	0
Hispanic or Latino	18	4	0
Other and Multiracial	7	5	0
Income by Percent			
Below the Poverty Level	14	15	0
Above the Poverty Level	86	85	0
Education by Percent			
Over 25 and Without a High School Diploma	14	10	0
Over 25 and With a High School Diploma	86	90	0

The results of the Surface Coating of Metal Coil source category demographic analysis indicate that emissions from the source category expose approximately 19,000 people to a cancer risk at or above 1-in-1 million and no one is exposed to a chronic noncancer TOSHI greater than 1 (we note that many of those in the first risk group are the same as those in the second). The percentages of the at-risk population in each demographic group (African American and Below the Poverty Level) are greater than their respective nationwide percentages.

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 Metal Coil Source Category Operations,* May 2017 (hereafter referred to as the *Metal Coil Demographic Analysis Report*), available in the Metal Coil 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 Surface Coating of Metal Coil 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 (0.005 cases per year for actual emissions and 0.006 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 3 for DGME. Since there is not a specified acute dose-response value for DGME, 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, these values are not available.

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 degree of 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 at the location of the maximum concentration. 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 worst-case meteorological conditions co-occur, thus, resulting in maximum ambient concentrations. These two events are unlikely to occur at the same time, making these assumptions conservative. We then include the additional assumption that a person is located at this point during the same time period. For this source category, these assumptions are likely to

overestimate the true worst-case actual exposures, as it is unlikely that a person would be located at the point of maximum exposure during the time when peak emissions and worst-case meteorological conditions occur simultaneously. Thus, as discussed in the Metal Coil Risk Assessment Report 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 are not anticipated due to emissions from this source category.

In addition, the risk assessment indicates no significant potential for multipathway health effects.

Considering all 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 Surface Coating of Metal Coil source category are acceptable.

b. Ample Margin of Safety Analysis

Although we are proposing that the risks from the Surface Coating of Metal Coil source category are acceptable, risk estimates for approximately 19,000 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 Surface Coating of Metal Coil 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 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 Surface Coating of Metal Coil source category, and we reviewed various information sources regarding emission sources that are currently regulated by the Surface Coating of Metal Coil NESHAP. Based on our review, we did not identify any add-on control technologies, other equipment, or work practices and procedures that had not previously been considered during development of the Surface Coating of Metal Coil NESHAP, and we did not identify any developments since the promulgation of the NESHAP. Therefore, 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 Surface Coating of Metal Coil source category indicate that two environmental HAP are emitted by sources within this source category: HF and lead. The screening-level evaluation of the potential for adverse environmental risks associated with emissions of HF from the Surface Coating of Metal Coil 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. For lead, we did not estimate any exceedances of the secondary lead NAAQS. 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 Surface Coating of Metal Coil source category. The EPA reviewed various information sources regarding emission sources that are currently regulated by the Surface Coating of Metal Coil NESHAP to support the technology review. The information sources included the following: The RBLC; the California Statewide BACT Clearinghouse; regulatory actions, including technology reviews promulgated for other surface coating NESHAP subsequent to the Surface Coating of Metal Coil NESHAP; state regulations; facility operating permits; a site visit; and industry information from individual facilities and the industry trade association. The primary emission sources for the technology review are the coil coating application stations and associated curing ovens.

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 Surface Coating of Metal Coil 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 coil coating operations follows. For a detailed discussion of the EPA's findings, refer to the Metal Coil Technology Review memorandum in the Metal Coil Docket.

The technology basis for MACT for metal coil coating operations in the 2002 Surface Coating of Metal Coil NESHAP was emission capture and add-on control with an OCE of 98 percent for new or reconstructed sources and existing sources. This OCE represents the use of PTE to achieve 100-percent capture of application station HAP emissions and a thermal oxidizer to achieve a destruction efficiency of 98-percent. No technology was identified at that time that could achieve a better OCE than the use of a PTE to capture HAP emissions from the coating application station and a thermal oxidizer to destroy HAP emissions from the coating application and the curing oven. An alternative facility HAP emission rate limit of 0.24 pounds of HAP per gallon of solids applied was also established to provide a compliance option for facilities that chose to limit their coating line HAP emissions either through a combination of low-HAP coatings and add-on controls or through the use of waterborne, high solids, or other pollution prevention coatings. During development of that rulemaking, we identified no beyond-the-floor technology that could achieve a higher OCE.

Using the EPA's NEI and the ECHO databases, we identified 48 major source facilities that are currently subject to the Surface Coating of Metal Coil NESHAP. A search of the RBLC database for improvements in coil coating technologies resulted in no findings. Therefore, we conducted a comprehensive review of state operating permits for 39 of the 48 facilities that were available on-line to determine whether any are using improved technologies or technologies that were not considered during the development of the original NESHAP. The review revealed that 37 of the 39 facilities had add-on controls (*e.g.,* thermal oxidizers, catalytic oxidizers, and regenerative thermal oxidizers) and three of the 39 facilities had only partial control (*i.e.,* not all coil coating lines had control).

The state permits included VOC emission limitations issued prior to promulgation of the Surface Coating of Metal Coil NESHAP. No permit had a

VOC limit lower than the Metal Coil New Source Performance Standards published in 1982 (40 CFR part 60, subpart TT). Because none of these limitations were more stringent than the HAP content limit, and all were based on control options considered in the development of the NESHAP, we concluded that none of these limitations represented a development in practices, processes, and control technologies for the Surface Coating of Metal Coil source category.

We reviewed other surface coating NESHAP promulgated subsequent to the Surface Coating of Metal Coil NESHAP to determine whether any requirements exceed the Metal Coil MACT level of control or include technologies that were not considered during the development of the original Surface Coating of Metal Coil NESHAP. These NESHAP include Surface Coating of Miscellaneous Metal Parts and Products (40 CFR part 63, subpart MMMM), Surface Coating of Plastic Parts and Products (40 CFR part 63, subpart PPPP), and Surface Coating of Automobiles and Light-Duty Trucks (40 CFR part 63, subpart IIII). We also reviewed the results of the technology reviews for other surface coating NESHAP promulgated after the Surface Coating of Metal Coil NESHAP. These NESHAP include Printing and Publishing (40 CFR part 63, subpart KK), Shipbuilding and Ship Repair (40 CFR part 63, subpart II), and Wood Furniture Manufacturing (40 CFR part 63, subpart JJ). Technology reviews for these NESHAP identified PTE and/or RTO as improvements in add-on control technology. Because the Surface Coating of Metal Coil 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 Surface Coating of Metal Coil NESHAP, we concluded that these measures do not represent a development in control technology under CAA section 112(d)(6). The technology review conducted for the Wood Furniture Manufacturing 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. Because the Surface Coating of Metal Coil source category does not use spray equipment, this development is not applicable to metal coil coating operations. In conclusion, we found no 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 Surface Coating of Metal Coil NESHAP development.

Alternatives to solvent borne coatings were identified and considered during MACT development but were not considered to be suitable for all coil coating end-product applications. These alternative coatings include waterborne coatings, low energy electron beam/ultraviolet cured coatings, and powder coatings. These coatings were used by about 10 percent of coil coating facilities according to the MACT survey. Our permit review concluded that this trend continues today and only about 10 percent of the facilities use these coatings to meet the Surface Coating of Metal Coil NESHAP emission limits. Most coil coaters have solvent destruction systems in place, which enables them to use organic paint solvents as a fuel supplement. The only anticipated technology change in the area of coating reformulation for the metal coil surface coating category is the replacement of coatings that contain the hexavalent chromate ion with more benign corrosion-inhibiting species that provide the same long-term protection to metals. The coil coating producers have worked unsuccessfully on this coating reformulation for the past 20 years.

Carbon adsorption was identified and considered for add-on control during Metal Coil MACT development, and although it is technologically feasible, no U.S. coil coaters used carbon adsorption due to the high temperature of the oven exhaust. The high temperature would inhibit adsorption of VOC on activated carbon in the adsorber beds. Therefore, we do not consider these measures to represent a development under CAA section 112(d)(6).

Finally, we identified no developments in work practices or procedures for the Surface Coating of Metal Coil source category, including work practices and procedures that are currently prescribed in the NESHAP that were not previously identified and considered during MACT development. The facility survey, conducted during MACT development, revealed that several types of work practices and housekeeping techniques were being used. However, the final rule applied only to the coating application stations and the associated curing ovens (*i.e.,* the affected source). The final rule did not apply to coating storage and mixing/thinning operations and did not apply to the equipment cleaning operations that are the primary operations to which the work practices would have been applied.

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 Surface Coating of Metal Coil NESHAP pursuant to CAA section 112(d)(6). For further discussion of the technology review results, refer to the Metal Coil Technology Review Memorandum in the Metal Coil Docket.

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

In addition to the proposed actions described above, we are proposing additional revisions to the NESHAP. We are proposing to amend 40 CFR 63.5090 to clarify that 40 CFR part 63, subpart SSSS does not apply to the application to bare metal coils of markings (including letters, numbers, or symbols) that are used for product identification or for product inventory control. In the public comments on the proposed initial MACT standard subpart SSSS (40 FR 44616, July 18, 2000),[31] the request was made that the EPA clarify in the final rule that subpart SSSS did not apply to incidental printing operations that applied a company name or logo, or other markings to bare metal coils for product identification or inventory control purposes. (See EPA Air Docket A–97–47, item V–B–1, Report, National Emission Standards for Hazardous Air Pollutants: Metal Coil Surface Coating Background Information for Promulgated Standards, EPA: OAQPS, Publication number EPA–453R–02–009, May 2002.) The commenters suggested revising the definition of ''coil coating operation'' to read ''the collection of equipment used to apply an organic coating to all or substantially all of the surface width of a continuous metal strip.'' The EPA responded at the time that it agreed that these types of markings applied to bare metal were simply not considered to be part of a coil coating operation, and therefore were not intended to be covered by the coil coating NESHAP subpart SSSS. However, the EPA did not want to exclude operations that applied a printed image to a coated metal coil from coverage by subpart SSSS because they were considered integral to certain

[31] See *National Emissions Standards for Hazardous Air Pollutants: Metal Coil Surface Coating Background Information for Promulgated Standards,* EPA–453/R–02–009, May 2002 in the Metal Coil Docket.

coil coating operations and part of the coil coating line and affected source. During the development of these proposed amendments to subpart SSSS, we were notified by steel coil manufacturers that the applicability of subpart SSSS to the application of identification markings to bare metal coils was still unresolved. The steel coil manufacturers asked us to amend subpart SSSS be amended to clarify this applicability issue and whether these identification markings are subject to subpart SSSS. Therefore, we are proposing to clarify that the application of identification markings (including letters, numbers, or symbols) to bare metal coils is not part of a coil coating line and not part of a coil coating affected source. However, we intend to continue to regulate application of printed images to coated steel coils as part of the coil coating affected source. Therefore, the application of letters, numbers, or symbols to a coated metal coil is still considered a coil coating process and part of the coil coating source category.

In addition, we are proposing to require electronic submittal of notifications (initial and compliance status), semiannual reports, and performance test reports for metal coil surface coating facilities. We are also 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. And finally, we are proposing the IBR of optional EPA Method 18, IBR of an alternative test method, and 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 facilities subject to the Surface Coating of Metal Coil NESHAP submit electronic copies of initial notifications required in 40 CFR 63.9(b), notifications of compliance status required in 40 CFR 63.9(h), performance test reports, and semiannual reports 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 Surface Coating of Metal Coil source category is the same as for the Surface Coating of Metal Cans source category, as discussed in section IV.A.4.a of this preamble. A description of the electronic submission process is provided in the memorandum *Electronic Reporting Requirements for New Source Performance Standards (NSPS)* and *National Emission Standards for Hazardous Air Pollutants (NESHAP),* August 8, 2018, in the Metal Coil Docket. No specific form is proposed at this time for the initial notifications required in 40 CFR 63.9(b). Until the EPA has completed electronic forms for these notifications, the notifications will be required to be submitted via CEDRI in PDF. If electronic forms are developed for these notifications, we will notify sources about their availability via the CEDRI website. For semiannual reports, the EPA proposes that owners or operators use the final semiannual report template that will reside in CEDRI one year after finalizing this proposed action. The *Proposed Electronic Reporting Template for Surface Coating of Metal Coil Subpart SSSS Semiannual Report* is available for review and comment in the Metal Cans Docket as part of this action. We specifically request comment on the format and usability of the template (*e.g.,* filling and uploading a provided spreadsheet versus entering the required information into a fillable CEDRI web form), as well as the content, layout, and overall design of the template. Prior to availability of the final semiannual compliance report template in CEDRI, owners or operators of affected sources will be required to submit semiannual compliance reports as currently required by the rule. After development of the final semiannual compliance report template, metal coil sources will be notified about its availability via the CEDRI website. We plan to finalize a required reporting format with the final rule. The owner or operator would begin submitting reports electronically with the next report that is due, once the electronic template has been available for at least one year. For the electronic submittal of notifications of compliance status reports required in 40 CFR 63.9(h), the final semiannual report template discussed above, which will reside in CEDRI, will also contain the information required for the notifications of compliance status report and will satisfy the requirement to provide the notifications of compliance status information electronically, eliminating the need to provide a separate notifications of compliance status report. As stated above, the final semiannual report template will be available after finalizing this proposed action and sources will be required to use the form after one year. Prior to the availability of the final semiannual compliance report template in CEDRI, owners and operators of affected sources will be required to submit semiannual compliance reports as currently required by the rule. As stated above, we will notify sources about the availability of the final semiannual report template via the CEDRI website.

Regarding submittal of performance test reports via the EPA's ERT, as discussed in section IV.A.4.a of this preamble for the Surface Coating of Metal Cans 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 Surface Coating of Metal Coil NESHAP, all of the EPA test methods listed under 40 CFR part 63, subpart SSSS, are currently supported by the ERT, except for EPA Method 25 and EPA Method 18 (an optional test method proposed in this action), which appears in the proposed text for 40 CFR 63.5160. As mentioned above, the rule proposes that should an owner or operator choose to use EPA Method 25 or 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 Surface Coating of Metal Cans 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 63.5181(d), we address the situation for facilities subject to the Surface Coating of Metal Coil 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 63.5181(e), we address the situation for facilities subject to the Surface Coating of Metal Coil 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.

b. SSM Requirements

1. Proposed Elimination of the SSM Exemption

The EPA is proposing to eliminate the SSM exemption in the Surface Coating of Metal Coil NESHAP. The EPA's

proposed rationale for the elimination of the SSM exemption for the Surface Coating of Metal Coil source category is the same as for the Surface Coating of Metal Cans 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 SSSS of 40 CFR part 63 (*Applicability of General Provisions to Subpart SSSS,* hereafter referred to as the ''General Provisions table to subpart SSSS'') 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 delete 40 CFR 63.4342(h), which specifies that deviations during SSM periods are not violations. 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 Surface Coating of Metal Cans source category, has not proposed alternate standards for those periods in the Surface Coating of Metal Coil NESHAP. Startups and shutdowns are part of normal operations for the Surface Coating of Metal Coil source category. As currently specified in 40 CFR 63.5121(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 SSSS ''at all times,'' except for solvent recovery systems for which you conduct liquid-liquid material balances according to 40 CFR 63.5170(e)(1). (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 63.3500(a)(2), any coating operation(s) for which you use the emission rate with add-on controls option or the control efficiency/outlet concentration option must be in compliance ''at all times'' with the applicable emission limitations in 40 CFR 63.3500(a)(2). 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 63.5140(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 Surface Coating of Metal Can source category.

It is unlikely that a malfunction would result in a violation of the standards during metal coil surface coatings operations for facilities using the compliant material ''as-purchased'' or ''as-applied'' options or the coating materials averaging option. Facilities using these options have demonstrated that the organic HAP content of each coating material as-purchased does not exceed 0.046 kg HAP per liter of solids as purchased, or that each coating material as-applied does not exceed 0.046 kg HAP per liter of solids on a rolling 12-month average basis and determined on a monthly basis, or that the average HAP content of all coating materials used does not exceed 0.046 kg HAP per liter of solids as applied based on a rolling 12-month emission rate and determined on a monthly basis.

A malfunction event is more likely for metal coil coating facilities that use the emission rate with add-on controls option or the combination of compliant coatings and control device option. For add-on control options, facilities must demonstrate an overall organic HAP control efficiency of at least 98 percent, or that the oxidizer outlet HAP concentration is no greater than 20 ppmv and 100-percent capture efficiency and that operating limits are achieved continuously. For the combination option, facilities must demonstrate that the average equivalent emission rate does not exceed 0.046 kg HAP per liter solids on a rolling 12-month average as-applied basis, determined monthly. Operating limits for the capture and control devices are listed in Table 1 to 40 CFR part 63, subpart SSSS of the Surface Coating of Metal Coil NESHAP and must be achieved continuously. The operating limits are based on maintaining an average temperature over a 3-hour block period, which must not fall below the temperature limit established by the facility during its initial performance test.

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

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 Surface Coating of Metal Cans source category, which applies to this source category.

2. Proposed Revisions to the General Provisions Applicability Table

a. 40 CFR 63.5140(b) General Duty

We are proposing to revise the General Provisions table to subpart SSSS (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 63.5140(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 63.5140(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 SSSS (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 63.5140(b).

b. SSM Plan

We are proposing to revise the General Provisions table to subpart SSSS (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.

c. Compliance With Standards

We are proposing to revise the General Provisions table to subpart SSSS (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.

d. 40 CFR 63.5160 Performance Testing

We are proposing to revise the General Provisions table to subpart SSSS (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 63.5160(d)(2). 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.

e. Monitoring

We are proposing to revise the General Provisions table to subpart SSSS (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 SSSS of 40 CFR part 63 does not have monitoring requirements for flares.

We are proposing to revise the General Provisions table to subpart SSSS (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 63.5150(a) to add a requirement to maintain the monitoring equipment at all times in accordance with 40 CFR 63.5140(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 63.5150(a).

We are proposing to revise the General Provisions table to subpart SSSS (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 SSSS (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 requirement in 40 CFR 63.5180(i) that requires reporting of CEMS out-of-control periods.

We are proposing to revise the General Provisions table to subpart SSSS (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 SSSS.

We are proposing to revise the General Provisions table to subpart SSSS (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(c)(8) is no longer needed since it is redundant to the requirement in 40 CFR 63.5170, 63.5140, 63.5150, and 63.5150 that specify monitoring data reduction.

f. 40 CFR 63.5190 Recordkeeping

We are proposing to revise the General Provisions table to subpart SSSS (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 SSSS (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 63.5190(a)(5), which requires a record of ''the date, time, and duration of each deviation,'' which the EPA is retaining. The regulatory text in 40 CFR 63.5190(a)(5) 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 63.5190(a)(5) 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 63.5190(a)(5) 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 SSSS (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 63.5190(a)(5).

We are proposing to revise the General Provisions table to subpart SSSS (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 SSSS (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.

g. 40 CFR 63.5180 Reporting

We are proposing to revise the General Provisions table to subpart SSSS (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 63.5180(f). 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 SSSS 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 63.5180(h)(2), 63.5180(h)(3), 63.5180(i)(3), and 63.5180(i)(4)). 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 Table 1 to 40 CFR 63.5170 or operating limit in Table 1 to 40 CFR part 63, subpart SSSS, 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 63.5180(f)(1) 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 63.5180(i)(6) 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 63.5180(i)(6) 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 Surface Coating of Metal Cans source category, which also applies to this source category.

c. Technical Amendments to the Metal Coil NESHAP

We propose to amend 40 CFR 63.5160(d)(1)(vi) 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 63.5160(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 63.5160(b)(1)(i) and 63.5160(b)(4), which describe how to demonstrate compliance with the emission limitations using the compliant material option, 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 3 to 40 CFR part 63, subpart SSSS) 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 3 to 40 CFR part 63, subpart SSSS 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),[32] 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 63.5190 specifies records that must be maintained. We propose to add clarification to this provision at 40 CFR 63.5190(c) 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.

We propose to clarify and harmonize the general requirement in 40 CFR 63.5140(a) with the reporting requirement in 40 CFR 63.5180(g)(2)(v) and 40 CFR 63.5180(h)(4) and the recordkeeping requirement in 40 CFR 63.5190(a)(5). Section 40 CFR 63.5140(a) currently states that, ''You must be in compliance with the standards in this subpart at all times . . .''. We propose to add clarification to this text to read; ''You must be in compliance with the applicable emission standards in 40 CFR 63.5120 and the operating limits in Table 1 of this subpart at all times.''

If there were no deviations from the applicable emission limit, 40 CFR 63.5180(g)(2)(v) requires you to submit a semiannual compliance report containing specified information including, ''A statement that there were no deviations from the standards during the reporting period, and that no CEMS were inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted.'' We are proposing to revise the text to read, ''A statement that there were no deviations from the applicable emission limit in § 63.5120 or the applicable operating limit(s) established according to § 63.5121 during the reporting period, and that no CEMS were inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted.'' Conforming changes are also being proposed to the reporting requirement at 40 CFR 63.5180(h)(4) and the recordkeeping requirement at 40 CFR 63.5190(a)(5).

We propose to revise one instance in 40 CFR 63.5160(e) regarding performance testing in which an erroneous rule citation, ''§ 63.5170(h)(2) through (4),'' is specified. Section 63.5170 provides requirements to demonstrate compliance with the standards for each compliance option and refers back to the capture efficiency procedure in 40 CFR 63.5160(e). Sections 63.5170(h)(2) through (4) pertain to the mass of coatings and solvents used in the liquid-liquid material balance calculation of HAP in Equation 10 of the subpart and are unrelated to capture efficiency. Sections 63.5170(g)(2) through (4) include capture efficiency determinations which are not referenced by 40 CFR 63.5160(e); therefore, we propose to change the erroneous citation from ''§ 63.5170(h)(2) through (4)'' to ''§ 63.5170(g)(2) through (4).''

We are proposing to amend 40 CFR 63.5130(a) to clarify that the compliance date for existing affected sources is June 10, 2005.

We are proposing to amend 40 CFR 63.5160(d)(3)(ii)(D) to correct a typographical error in a reference to paragraphs ''(d)(3)(ii)(D)(1 (3).'' The correct reference is to paragraphs (d)(3)(ii)(D)(1)–(3).

We are proposing to amend 40 CFR 63.5170(c)(1) and (2) to correct the cross references to 40 CFR 63.5120(a)(1) or (2). The correct cross references are to 40 CFR 63.5120(a)(1) or (3), because these are the two compliance options relying on the overall organic HAP control efficiency and the oxidizer outlet HAP concentration.

We are proposing to amend Equation 11 in 40 CFR 63.5170 so that the value calculated by the equation is correctly identified as ''H_e'' instead of just ''e.''

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 Surface Coating of Metal Coil 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 ongoing 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.

[32] 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 Surface Coating of Metal Cans source category, the EPA documented potential operational problems associated with control devices in several publications; [33] 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; [34] 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 Surface Coating of Metal Coil 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 metal coil 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 63.5160(d)(3)(ii) and following the catalyst maintenance procedures in 40 CFR 63.5160(d)(3)(ii)(C). 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 KKKK and SSSS Monitoring Review Revisions,* in the Metal Coil Docket. We have reviewed the operating permits for facilities subject to the Surface Coating of Metal Coil NESHAP, and we found that about one-half of the affected sources currently using emission capture systems and add-on controls are required to conduct periodic control device performance tests as a condition of their 40 CFR part 70 operating permits. We estimate that 21 metal coil coating facilities with 30 add-on control devices 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 Surface Coating of Metal Coil 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 Surface Coating of Metal Coil 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 63.5160(d)(vi);
- ASTM Method D1475–13, Standard Test Method for Density of Liquid Coatings, Inks, and Related Products, proposed to be IBR approved for 40 CFR 63.5160(c);
- ASTM D2111–10 (2015), Standard Test Methods for Specific Gravity of Halogenated Organic Solvents and Their Admixtures, proposed to be IBR approved for 40 CFR 63.5160(c);
- ASTM D2369–10 (2015), Test Method for Volatile Content of Coatings, proposed to be IBR approved for 40 CFR 63.5160(b)(2);
- ASTM D2697–03 (2014), Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings, proposed to be IBR approved for 40 CFR 63.5160(c); and

[33] 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 Metal Cans and Metal Coil dockets for this action.

[34] See Docket Item No. EPA–HQ–OAR–2004–0094–0173, available at *www.regulations.gov.* A copy of the ICAC's comments on the proposed revisions to the General Provisions is also included in the Metal Cans and Metal Coil Dockets for this action.

• ASTM 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 63.5160(c).

Older versions of ASTM methods D2697 and D6093 were incorporated by reference when the Surface Coating of Metal Coil NESHAP was originally promulgated (67 FR 39794, June 10, 2002). 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 D1475, D2111, and D2369 to the Surface Coating of Metal Coil 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, or upon startup, whichever is later. All affected facilities would have to continue to meet the current requirements of 40 CFR part 63, subpart SSSS 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 SSSS. 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 timeframe 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.

V. Summary of Cost, Environmental, and Economic Impacts

A. What are the affected sources?

Currently, five major sources subject to the Surface Coating of Metal Cans NESHAP are 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 metal can or end (including decorative tins), or metal crown or closure, and to dry or cure the coating after application. A 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.

Currently, 48 major sources subject to the Surface Coating of Metal Coil NESHAP are operating in the United States. The affected source under the NESHAP is the collection of all the coil coating lines at a facility, including the equipment used to apply an organic coating to the surface of metal coil. A coil coating line includes a web unwind or feed section, a series of one or more work stations, any associated curing oven, wet section, and quench station. A coil coating line does not include ancillary operations such as mixing/thinning, cleaning, wastewater treatment, and storage of coating material. Metal coil is a continuous metal strip that is at least 0.15 mm (0.006 inch) thick, which is packaged in a roll or coil prior to coating. Material less than 0.15 mm (0.006 inch) thick is considered metal foil, not metal coil. The NESHAP applies to coating lines on which more than 15 percent of the material coated, based on surface area, meets the definition of metal coil. There may be multiple coating operations in an affected source.

B. What are the air quality impacts?

At the current level of control, estimated emissions of volatile organic HAP from the Surface Coating of Metal Cans source category are approximately 77 tpy. Current estimated emissions of volatile organic HAP from the Surface Coating of Metal Coil source category are approximately 291 tpy.

The proposed amendments require that all 53 major sources in the Surface Coating of Metal Cans and Surface Coating of Metal Coil 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 either of the two 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 two 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 one facility subject to the Metal Can Surface Coating NESHAP and using three add-on control devices would incur costs to conduct control device performance testing because it is using the emission rate with add-on controls compliance option and is not required by its permit to conduct testing every 5 years. We estimate that 21 major source facilities subject to the Surface Coating of Metal Coil NESHAP would incur costs to conduct periodic testing because they are currently using the emission rate with add-on controls compliance option and are not required by their permits to conduct testing every 5 years. These 21 metal coil coating facilities have a total of 30 add-on controls. This total does not include facilities in the Surface Coating of Metal Coil 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, with tests of additional control devices at the same facility costing 25 percent less due to reduced travel costs. The total cost for the one metal can surface coating facility to test three add-on control devices in a single year would be $47,000. The total cost for all 21 facilities to test 30 add-on control devices in a single year, plus two retests to account for 5 percent of control devices failing to pass the first test, would be $560,000. The total annualized testing cost is approximately $11,000 per year for the Metal Can Surface Coating source category, and $130,000 per year for the Metal Coil Surface Coating source category, including retests. In addition to the testing costs, each facility performing a test will have an additional $5,500 in reporting costs per facility in the year in which the test occurs. For further information on the potential costs, see the cost tables in the memoranda titled *Estimated Costs/Impacts of the 40 CFR part 63 Subparts KKKK and SSSS Monitoring Review Revisions,* February 2019, and the *Economic Impact and Small Business Screening Assessments for Hazardous Air Pollutants for Metal Cans Coating Plants (Subpart KKKK) and the Economic Impact and Small Business Screening Assessments for Hazardous Air Pollutants for Metal Coil Coating Plants (Subpart SSSS)* in the Metal Cans and Metal Coil 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 NESHAP for the Surface Coating of Metal Cans, the total annualized cost is estimated to be $11,000 for performance testing in year 3 for the five affected entities. The five affected facilities are owned by three different parent companies, and the total costs associated with the proposed requirements range from 0.00002 to 0.77 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 NESHAP for the Surface Coating of Metal Coil, the total annualized cost is estimated to be $130,000 for performance testing in year 3 for the 48 affected entities. The 48 affected facilities are owned by 25 different parent companies, and the total costs associated with the proposed requirements range from 0.00001 to 0.28 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 NESHAP for the Surface Coating of Metal Cans is a small entity. Ten of the facilities potentially affected by the proposed revisions to the NESHAP for the Surface Coating of Metal Coil are small entities. However, the annualized costs associated with the proposed requirements for the seven ultimate owners of these eleven affected small entities range from 0.0029 to 0.77 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.

More information and details of this analysis is provided in the technical documents titled *Economic Impact and Small Business Screening Assessments for Proposed Amendments to the National Emission Standards for Hazardous Air Pollutants for the Surface Coating of Metal Cans (Subpart KKKK)* and *Economic Impact and Small Business Screening Assessments for Proposed Amendments to the National Emission Standards for Hazardous Air Pollutants for the Surface Coating of Metal Coil (Subpart SSSS),* available in the Metal Cans and Metal Coil Dockets, respectively.

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://www3.epa.gov/ttn/atw/rrisk/rtrpg.html*. 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, we request that you 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 Metal Cans Docket or Metal Coil 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://www3.epa.gov/ttn/atw/rrisk/rtrpg.html*.

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 2.

1. Surface Coating of Metal Cans

The ICR document that the EPA prepared has been assigned EPA ICR number 2079.07. You can find a copy of the ICR in the Metal Cans Docket (Docket ID No. EPA–HQ–OAR–2017–0684), and it is briefly summarized here.

As part of the RTR for the Surface Coating of Metal Cans 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 KKKK.

Respondents/affected entities: Facilities performing surface coating of metal cans.

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

Estimated number of respondents: In the 3 years after the amendments are final, approximately five 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 15 and in year 3 is one. Year 2 would have no responses.

Total estimated burden: The average annual burden to the five metal can facilities over the 3 years if the amendments are finalized is estimated to be 54 hours (per year). The average annual burden to the Agency over the 3 years after the amendments are final is estimated to be 23 hours (per year). Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: The average annual cost to the metal can facilities is $6,200 in labor costs in the first 3 years after the amendments are final. The average annual capital and operation and maintenance (O&M) costs is $15,600. The total average annual Agency cost over the first 3 years after the amendments are final is estimated to be $1,090.

2. Surface Coating of Metal Coil

The ICR document that the EPA prepared has been assigned EPA ICR number 1957.09. You can find a copy of the ICR in the Metal Coil Docket (Docket ID No. EPA–HQ–OAR–2017–0685), and it is briefly summarized here.

As part of the RTR for the Surface Coating of Metal Coil 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 SSSS.

Respondents/affected entities: Facilities performing surface coating of metal coil.

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

Estimated number of respondents: In the 3 years after the amendments are final, approximately 48 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 144 and in year 3 is 69. Years 2 would have no responses.

Total estimated burden: The average annual burden to the 48 metal coil coating facilities over the 3 years if the amendments are finalized is estimated to be 738 hours (per year). The average annual burden to the Agency over the 3

years after the amendments are final is estimated to be 179 hours (per year) for the Agency. Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: The average annual cost to the 48 metal coil coating facilities is $85,000 in labor costs and $186,000 in capital and O&M costs in the first 3 years after the amendments are final. The average annual Agency cost over the first 3 years after the amendments are final is estimated to be $8,530.

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,* 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 July 5, 2019. 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 annualized costs associated with the proposed requirements in this action for the affected small entities is described in section V.D. above and additional detail is provided in the economic impact memorandums associated with this action.

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 (metal can surface coating and metal coil 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 Metal Cans Risk Assessment Report and the Metal Coil Risk Assessment Report in the Metal Cans Docket and the Metal Coil Docket, respectively.

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. The EPA is proposing to amend the Surface Coating of Metal Coil NESHAP in this action to provide owners and operators with the option of conducting two new methods: 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, and ASTM Method D1475–13, ''Standard Test Method for Density of Liquid Coatings, Inks, and Related Products.'' We are proposing to add these two standards to the Surface Coating of Metal Coil NESHAP only, as these methods are already provided in the Surface Coating of Metal Cans NESHAP.

The EPA is also proposing to amend the Surface Coating of Metal Cans NESHAP to update three ASTM test methods and amend the Surface Coating of Metal Coil NESHAP to update two ASTM test methods. We are proposing to update ASTM Method D1475–90, ''Standard Test Method for Density of Liquid Coatings, Inks, and Related Products,'' in the Surface Coating of Metal Cans NESHAP 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 update ASTM Method D2697–86 (1998), ''Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings,'' in both the Surface Coating of Metal Cans and the Surface Coating of Metal Coil NESHAP by incorporating by reference ASTM D2697–03 (2014), which is the updated version of the previously approved method. We are also proposing to update ASTM Method D6093–97 (2003), ''Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using Helium Gas Pycnometer,'' in both the Surface Coating of Metal Cans and the Surface Coating of Metal Coil NESHAP by incorporating by reference ASTM D6093–97 (2016), which is the updated version of the previously approved method. ASTM 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 D6093–97 (2016) is a test method that can be used to determine the percent volume of nonvolatile matter in clear and pigmented coatings.

For the Surface Coating of Metal Cans NESHAP and the Surface Coating of Metal Coil NESHAP, the EPA proposes to incorporate by reference the following VCS as an alternative to EPA Method 24 for the determination of the volatile matter content in surface coatings:

- ASTM D2369–10 (2015), ''Test Method for Volatile Content of Coatings.'' This test method allows for more accurate results for multi-component chemical resistant coatings.

For the Surface Coating of Metal Cans and the Surface Coating of Metal Coil NESHAP, the EPA proposes to incorporate by reference the following VCS for the determination of the specific gravity of halogenated organic solvents in surface coatings:

- ASTM D2111–10 (2015), ''Standard Test Methods for Specific Gravity of Halogenated Organic Solvents and Their

Admixtures'' (corrected to a standard temperature). This test method allows measurement of specific gravity at different temperatures that are chosen by the analyst.

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 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 CARB 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 21 VCS for the Surface Coating of Metal Cans and another 20 VCS for the Surface Coating of Metal Coil as being acceptable 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 Metal Cans,* August 16, 2018, and *Voluntary Consensus Standard Results for Surface Coating of Metal Coil,* August 16, 2018, in the Metal Cans Docket and the Metal Coil 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 and sections IV.B.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 Metal Cans Source Category Operations,* May 2018, and *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Surface Coating of Metal Coil Source Category Operations,* May 2018, available in the Metal Cans Docket and the Metal Coil Docket, respectively.

As discussed in sections IV.A.1 and IV.B.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 Surface Coating of Metal Cans and the Surface Coating of Metal Coil 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 Surface Coating of Metal Cans source category demographic analysis indicate that approximately 700 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. None of the percentages of the at-risk populations are higher than their respective nationwide percentages.

The proximity results (irrespective of risk) indicate that the population percentages for six demographic categories located within 5 km of metal can coating facilities are higher than their respective nationwide percentages.

The results of the Surface Coating of Metal Coil source category demographic analysis indicate that emissions from the source category expose approximately 19,000 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: ''African American,'' and ''Below the Poverty Level.''

The proximity results (irrespective of risk) indicate that the population percentages for the ''Below the Poverty Level'' demographic category within 5 km of metal coil coating facilities and the ''African American'' demographic category within 50 km of metal coil coating facilities are slightly higher than 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 Metal Cans Source Category Operations,* May 2018, and *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Surface Coating of Metal Coil Source Category Operations,* May 2018, which are available in the Metal Cans and Metal Coil Dockets, respectively.

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Hazardous substances, Incorporation by reference, Surface coating of metal cans, Surface coating of metal coil, Reporting and recordkeeping requirements, Appendix A.

Dated: May 2, 2019.

Andrew R. Wheeler,

Administrator.

For the reasons stated in the preamble, the Environmental Protection Agency proposes to amend 40 CFR part 63 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)(13), (21), (26), (29), (30), (78) and (79) to read as follows:

§ 63.14 Incorporations by reference.

* * * * *

(h) * * *

(13) ASTM Method D1475–13, Standard Test Method for Density of

Liquid Coatings, Inks, and Related Products, approved November 1, 2013, IBR approved for §§ 63.3521(c), 63.3531(c), 63.4141(b) and (c), 63.4741(b) and (c), 63.4751(c), 63.4941(b) and (c), and 63.5160(c).

* * * * *

(21) ASTM D2111–10 (Reapproved 2015), Standard Test Methods for Specific Gravity of Halogenated Organic Solvents and Their Admixtures, approved June 1, 2015, IBR approved for §§ 63.3531(c), 63.4141(b) and (c), 63.4741(a), and 63.5160(c).

* * * * *

(26) ASTM D2369–10 (Reapproved 2015)[e], Standard Test Method for Volatile Content of Coatings, approved June 1, 2015, IBR approved for §§ 63.3521(a), 63.3541(i)(3), 63.4141(a) and (b), 63.4161(h), 63.4321(e), 63.4341(e), 63.4351(d), 63.4741(a), 63.4941(a) and (b), 63.4961(j), and 63.5160(b).

* * * * *

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

(30) ASTM D2697–03 (Reapproved 2014), Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings, approved July 1, 2014, IBR approved for §§ 63.3521(b), 63.4141(b), 63.4741(a) and (b), 63.4941(b), and 63.5160(c).

* * * * *

(78) ASTM D6093–97 (Reapproved 2003), Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer, IBR approved for §§ 63.3161 and 63.3941.

(79) ASTM 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 §§ 63.3521(b), 63.4141(b), 63.4741(a) and (b), 63.4941(b), and 63.5160(c).

* * * * *

Subpart KKKK—National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Cans

■ 3. Section 63.3481 is amended by revising paragraph (c)(5) to read as follows:

§ 63.3481 Am I subject to this subpart?

(c) * * *

(5) Surface coating of metal pails, buckets, and drums. Subpart MMMM of this part covers surface coating of all miscellaneous metal parts and products not explicitly covered by another subpart.

■ 4. Section 63.3492 is amended by revising paragraph (b) to read as follows:

§ 63.3492 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 or the control efficiency/outlet concentration option, except those for which you use a solvent recovery system and conduct a liquid-liquid material balance according to § 63.3541(i), you must meet the operating limits specified in Table 4 to this subpart. Those operating limits apply to the emission capture and control systems for the coating operation(s) used for purposes of complying with this subpart. You must establish the operating limits during the performance tests required in § 63.3540 or § 63.3550 according to the requirements in § 63.3546 or § 63.3556. You must meet the operating limits established during the most recent performance tests required in § 63.3540 or § 63.3550 at all times after they have been established during the performance test.

* * * * *

■ 5. Section 63.3500 is amended by revising paragraphs (a)(1), (b), and (c) to read as follows:

§ 63.3500 What are my general requirements for complying with this subpart?

(a) * * *

(1) Any coating operation(s) for which you use the compliant material option or the emission rate without add-on controls option, as specified in § 63.3491(a) and (b), must be in compliance with the applicable emission limit in § 63.3490 at all times.

* * * * *

(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 for purposes of complying with this subpart, you must develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in § 63.6(e)(3). The plan must address 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.

■ 6. Section 63.3511 is amended by:

■ a. Revising paragraphs (a)(4), (a)(5) introductory text, (a)(5)(i), and (a)(5)(iv);

■ b. Adding paragraph (a)(5)(v);

■ c. Revising paragraph (a)(6) introductory text and (a)(6)(iii);

■ d. Adding paragraph (a)(6)(iv);

■ e. Revising paragraph (a)(7) introductory text, and paragraphs (a)(7)(iii), (a)(7)(vi) through (viii), (a)(7)(x), and (a)(7)(xiii) and (xiv);

■ f. Adding paragraph (a)(7)(xv);

■ g. Revising paragraph (a)(8) introductory text, and paragraphs (a)(8)(i), (a)(8)(iv) through (vi), (a)(8)(viii), and (a)(8)(xi) and (xii);

■ f. Adding paragraph (a)(8)(xiii);

■ g. Revising paragraph (c) introductory text; and

■ h. Adding paragraphs (d) through (h).

The revisions and additions read as follows:

§ 63.3511 What reports must I submit?

(a) * * *

(4) *No deviations.* If there were no deviations from the emission limits,

operating limits, or work practice standards in §§ 63.3490, 63.3492, and 63.3493 that apply to you, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period. If you used the emission rate with add-on controls option or the control efficiency/outlet concentration option and there were no periods during which the continuous parameter monitoring systems (CPMS) were out of control as specified in § 63.8(c)(7), the semiannual compliance report must include a statement that there were no periods during which the CPMS were out of control during the reporting period.

(5) *Deviations: Compliant material option.* If you used the compliant material option and there was a deviation from the applicable emission limit in § 63.3490, 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 emission limit, each thinner 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 § 63.3490, a description of the method used to estimate the emissions, and the actions you took to minimize emissions in accordance with § 63.3500(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 § 63.3490, 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 § 63.3490, a description of the method used to estimate the emissions, and the actions you took to minimize emissions in accordance with § 63.3500(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 § 63.3490 or the applicable operating limit(s) in Table 4 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. That 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 § 63.3493(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 § 63.3500(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 4 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 4 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 4 to 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 4 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 § 63.3500(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 § 63.3490 or an operating limit in Table 4 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 § 63.3500(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 § 63.3490 or operating limit in Table 4 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 § 63.3490 or operating limit in Table 4 to this subpart, and a description of the method used to estimate the emissions.

(8) *Deviations: Control efficiency/outlet concentration option.* If you used the control efficiency/outlet concentration option, and there was a deviation from the applicable emission limit in § 63.3490 or the applicable operating limit(s) in Table 4 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)(8)(i) through (xii) 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 specify the number of deviations during the compliance period and contain the information in paragraphs (a)(8)(i) through (x), (xii), and (xiii) of this section. If you use the control efficiency/outlet concentration option and there was a deviation from the applicable work practice standards in § 63.3493(b), the semiannual compliance report must contain the information in paragraph (a)(8)(xi) of this section.

(i) The date and time that each malfunction of the capture system or add-on control devices started and stopped.

* * * * *

(iv) 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 the actions you took to minimize emissions in accordance with § 63.3500(b).

(v) 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 the actions you took to minimize emissions in accordance with § 63.3500(b).

(vi) 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 4 to this subpart; date and time 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 date, time, and duration of each deviation from an operating limit in Table 4 to this subpart; and the date, time, and duration of any bypass of the add-on control device.

* * * * *

(viii) 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 4 to 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 4 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.

* * * * *

(xi) 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 in § 63.3493(b), the number of deviations, and, for each deviation, the information in paragraphs (a)(8)(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 § 63.3500(b).

(B) The description required in paragraph (a)(8)(xi)(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).

(xii) 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 § 63.3490 or operating limit in Table 4 to this subpart, a statement of the cause of each deviation (including unknown cause, if applicable).

(xiii) 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 § 63.3490 or operating limit in Table 4 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 § 63.3490, 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 or the control efficiency/outlet concentration 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 §§ 63.3540 and 63.3550 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 Compliance and Emissions Data Reporting Interface (CEDRI). The CEDRI interface 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 in portable document format (PDF) using the attachment module of the ERT.

(3) If you claim that some of the performance test information being submitted under paragraph (d)(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 § 63.3510(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 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 confidential business information (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 website for this subpart (*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 confidential business information (CBI) shall submit a complete report generated using the appropriate form in CEDRI, 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 Compliance and Emissions Data Reporting Interface (CEDRI) in the EPA's Central Data Exchange (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 63.3512 is amended by revising paragraphs (i), (j) introductory text, and (j)(1) and (2) to read as follows:

§ 63.3512 What records must I keep?

* * * * *

(i) 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. 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 § 63.3511(a)(5) through (8), a record of the information specified in paragraphs (i)(1) through (4) of this section, as applicable.

(1) The date, time, and duration of the deviation, as reported under § 63.3511(a)(5) through (8).

(2) A list of the affected sources or equipment for which the deviation occurred and the cause of the deviation, as reported under § 63.3511(a)(5) through (8).

(3) An estimate of the quantity of each regulated pollutant emitted over any applicable emission limit in § 63.3490 or any applicable operating limit in Table 4 to this subpart, and a description of the method used to calculate the estimate, as reported under § 63.3511(a)(5) through (8).

(4) A record of actions taken to minimize emissions in accordance with § 63.3500(b) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(j) If you use the emission rate with add-on controls option or the control efficiency/outlet concentration option, you must also keep the records specified in paragraphs (j)(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.

* * * * *

■ 8. Section 63.3513 is amended by revising paragraph (a) to read as follows:

§ 63.3513 In what form and for how long must I keep my records?

(a) Your records must be kept 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.

* * * * *

■ 9. Section 63.3521 is amended by revising paragraphs (a)(1)(i), (a)(2), (a)(4), (b)(1), and (c) to read as follows:

§ 63.3521 How do I demonstrate initial compliance with the emission limitations?

* * * * *

(a) * * *

(1) * * *

(i) Count each organic HAP in Table 8 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 8 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) *Method 24 (appendix A to 40 CFR part 60).* For coatings, you may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. As an alternative to using Method 24, you may use ASTM 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 8 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 8 to 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, a regulated source can 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. If these values cannot be determined using these methods, the owner/operator may submit an alternative technique for determining the values for approval by the Administrator.

* * * * *

(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) or information from the supplier or manufacturer of the material. 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.

* * * * *

■ 10. Section 63.3531 is amended by revising paragraph (c) to read as follows:

§ 63.3531 How do I demonstrate initial compliance with the emission limitations?

* * * * *

(c) *Determine the density of each material.* Determine the density of each coating and thinner used during each month from test results using ASTM Method D1475–13 or ASTM D2111–10 (2015) (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 D2111–10 (2015) test results and such other information sources, the test results will take precedence.

* * * * *

■ 11. Section 63.3540 is amended by revising the section heading and paragraphs (a)(1), (a)(4), and (b)(1) to read as follows:

§ 63.3540 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 § 63.3483. Except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.3541(i), 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 §§ 63.3543, 63.3544, and 63.3545 and establish the operating limits required by § 63.3492. For a solvent recovery system for which you conduct liquid-liquid material balances according to § 63.3541(i), you must initiate the first material balance no later than the applicable compliance date specified in § 63.3483.

(i) You must conduct the initial performance test and establish the operating limits required by § 63.3492 no later than 180 days after the applicable compliance date specified in § 63.3483.

(ii) You must conduct periodic performance tests and establish the operating limits required by § 63.3492 within 5 years following the previous performance test. You must conduct the first periodic performance test before [date 3 years after date of publication 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 publication 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.

* * * * *

(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 § 63.3492 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 § 63.3541(i).

(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 § 63.3483. Except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.3541(i), 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 §§ 63.3543, 63.3544, and 63.3545 and establish the operating limits required by § 63.3492. For a solvent recovery system for which you conduct liquid-liquid material balances according to § 63.3541(i), you must initiate the first material balance no later than the compliance date specified in § 63.3483.

(i) You must conduct the initial performance test and establish the operating limits required by § 63.3492 no later than 180 days after the applicable compliance date specified in § 63.3483.

(ii) You must conduct periodic performance tests and establish the operating limits required by § 63.3492 within 5 years following the previous performance test. You must conduct the first periodic performance test before [date 3 years after date of publication 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 publication 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.

* * * * *

■ 12. Section 63.3541 is amended by revising paragraphs (h) introductory text and (i)(3) to read as follows:

§ 63.3541 How do I demonstrate initial compliance?

* * * * *

(h) *Calculate the organic HAP emission reduction for each controlled coating operation not using liquid-liquid material balances.* For each controlled coating operation using an emission capture system and add-on control device, other than a solvent recovery system for which you conduct liquid-liquid material balances, calculate the

organic HAP emission reduction, using Equation 1 of this section. The calculation applies the emission capture system efficiency and add-on control device efficiency to the mass of organic HAP contained in the coatings and thinners that are used in the coating operation served by the emission capture system and add-on control device during each month. For any period of time a deviation specified in § 63.3542(c) or (d) occurs in the controlled coating operation, you must assume zero efficiency for the emission capture system and add-on control device, unless you have other data indicating the actual efficiency of the emission capture system and add-on control device, and the use of these data has been approved by the Administrator. Equation 1 of this section treats the materials used during such a deviation as if they were used on an uncontrolled coating operation for the time period of the deviation. * * *

* * * * *

(i) * * *

(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, in kg volatile organic matter per kg coating. You may determine the volatile organic matter mass fraction using Method 24 of 40 CFR part 60, appendix A, ASTM 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 Method 24 of 40 CFR part 60, appendix A, ASTM D2369–10 (2015), ''Test Method for Volatile Content of Coatings'' (incorporated by reference, see § 63.14), or an approved alternative method, the test method results will take precedence unless, after consultation, a regulated source can demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

* * * * *

■ 13. Section 63.3542 is amended by revising paragraphs (f) and (h) to read as follows:

§ 63.3542 How do I demonstrate continuous compliance with the emission limitations?

* * * * *

(f) As part of each semiannual compliance report required in § 63.3511, 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 § 63.3490, the operating limits in § 63.3492, and the work practice standards in § 63.3493, 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 § 63.3490, and you achieved the operating limits required by § 63.3492 and the work practice standards required by § 63.3493 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**], 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 § 63.3500(b). The Administrator will determine whether the deviations are violations according to the provisions in § 63.3500(b).

* * * * *

■ 14. Section 63.3543 is amended by revising paragraphs (a) introductory text and (a)(1) to read as follows:

§ 63.3543 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 § 63.3540 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 § 63.3540 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.

* * * * *

■ 15. Section 63.3544 is amended by revising the introductory text to read as follows:

§ 63.3544 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 § 63.3540.

* * * * *

■ 16. Section 63.3545 is amended by revising the introductory text, paragraph (b) introductory text, and paragraphs (b)(1) through (4) to read as follows:

§ 63.3545 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 tests required by § 63.3540. 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.

* * * * *

(b) Measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-on control device simultaneously using either Method 25 or 25A of appendix A–7 to 40 CFR part 60 as specified in paragraphs (b)(1) through (5) of this section. You must use the same method for both the inlet and outlet measurements.

(1) Use 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 ppm at the control device outlet.

(2) Use 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 Method 25A of appendix A–7 to 40 CFR part 60 if the add-control device is not an oxidizer.

(4) You may use Method 18 of appendix A–6 to 40 CFR part 60 to subtract methane emissions from measured total gaseous organic mass emissions as carbon.

* * * * *

■ 17. Section 63.3546 is amended by revising the introductory text and paragraphs (a)(1) and (2), (b)(1) through (3), (d)(1), (e)(1) and (2), (f)(1) through (3), and (f)(5) and (6) to read as follows:

§ 63.3546 How do I establish the emission capture system and add-on control device operating limits during the performance test?

During performance tests required by § 63.3540 and described in §§ 63.3543, 63.3544, and 63.3545, you must establish the operating limits required by § 63.3492 unless you have received approval for alternative monitoring and operating limits under § 63.8(f) as specified in § 63.3492.

(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. That average combustion temperature is the minimum operating limit for your thermal oxidizer.

(b) * * *

(1) During performance tests, you must monitor and record the temperature at the inlet to 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 at the inlet to the catalyst bed and the average temperature difference across the catalyst bed maintained during the performance test. The average temperature difference is the minimum operating limit for your catalytic oxidizer.

(3) As an alternative to monitoring the temperature difference across the catalyst bed, you may monitor the temperature at the inlet to the catalyst bed and implement a site-specific inspection and maintenance plan for your catalytic oxidizer as specified in paragraph (b)(4) of this section. During performance tests, you must monitor and record the temperature at the inlet to 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 at the inlet to the catalyst bed during the performance test. That is the minimum operating limit for your catalytic oxidizer.

* * * * *

(d) * * *

(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.

* * * * *

(e) * * *

(1) During performance tests, 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.

(f) * * *

(1) During performance tests, monitor and record the inlet temperature to the desorption/reactivation zone of the concentrator 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/reactivation zone inlet temperature.

(3) During each performance test, monitor and record an indicator(s) of performance for the desorption/reactivation fan operation at least once every 15 minutes during each of the three runs of the performance test. The indicator can be speed in revolutions per minute (rpm), power in amps, static pressure, or flow rate.

* * * * *

(5) During each performance test, monitor the rotational speed of the concentrator at least once every 15 minutes during each of the three runs of the performance test.

(6) For each performance test, use the data collected during the performance test to calculate and record the average rotational speed. This is the minimum operating limit for the rotational speed of the concentrator. However, the indicator range for the rotational speed may be changed if an engineering evaluation is conducted and a determination made that the change in speed will not affect compliance with the emission limit.

* * * * *

■ 18. Section 63.3547 is amended by revising paragraphs (a)(4) and (5), (a)(7), and (c)(3) introductory text to read as follows:

§ 63.3547 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 § 63.3500(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 § 63.3500(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 (ii) 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.

* * * * *

■ 19. Section 63.3550 is amended by revising the section heading and paragraphs (a)(1), (a)(4), and (b)(1) to read as follows:

§ 63.3550 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 § 63.3483. 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 §§ 63.3553, 63.3554, and 63.3555 and establish the operating limits required by § 63.3492.

(i) You must conduct the initial performance test and establish the operating limits required by § 63.3492 no later than 180 days after the applicable compliance date specified in § 63.3483.

(ii) You must conduct periodic performance tests and establish the operating limits required by § 63.3492 within 5 years following the previous performance test. You must conduct the first periodic performance test before [date 3 years after date of publication 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 publication 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.

* * * * *

(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 § 63.3492 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 on the date you complete the performance tests.

(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 § 63.3483. Except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.3541(i), 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 §§ 63.3543, 63.3544, and 63.3545 and establish the operating limits required by § 63.3492.

(i) You must conduct the initial performance test and establish the operating limits required by § 63.3492 no later than 180 days after the applicable compliance date specified in § 63.3483.

(ii) You must conduct periodic performance tests and establish the operating limits required by § 63.3492 within 5 years following the previous performance test. You must conduct the first periodic performance test before [date 3 years after date of publication 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 publication 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.

* * * * *

■ 20. Section 63.3552 is amended by revising paragraph (g) to read as follows:

§ 63.3552 How do I demonstrate continuous compliance with the emission limitations?

* * * * *

(g) 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**] 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 § 63.3500(b). The Administrator will determine whether the deviations are violations according to the provisions in § 63.3500(b).

* * * * *

■ 21. Section 63.3553 is amended by revising paragraphs (a) introductory text and (a)(1) to read as follows:

§ 63.3553 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 § 63.3550 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 § 63.3550 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 operating conditions.* You must conduct the performance test under representative operating conditions for the coating operation(s). 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.

* * * * *

■ 22. Section 63.3555 is amended by revising the introductory text, paragraph (b) introductory text, and paragraphs (b)(1) through (4) to read as follows:

§ 63.3555 How do I determine the outlet THC emissions and add-on control device emission destruction or removal efficiency?

You must use the procedures and test methods in this section to determine either the outlet THC emissions or add-on control device emission destruction or removal efficiency as part of the performance tests required by § 63.3550. You must conduct three test runs as specified in § 63.7(e)(3), and each test run must last at least 1 hour.

* * * * *

(b) Measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-on control device simultaneously using either Method 25 or 25A of appendix A–7 to 40 CFR part 60 as specified in paragraphs (b)(1) through (3) of this section. You must use the same method for both the inlet and outlet measurements.

(1) Use Method 25 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 ppm at the control device outlet.

(2) Use 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 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 Method 18 of appendix A–6 to 40 CFR part 60 to subtract methane emissions from measured total gaseous organic mass emissions as carbon.

* * * * *

■ 23. Section 63.3556 is amended by revising the introductory text and paragraphs (a)(1) and (2), (b)(1) through (3), (d)(1), (e)(1) and (2), (f)(1) through (3), and (f)(5) and (6) to read as follows:

§ 63.3556 How do I establish the emission capture system and add-on control device operating limits during the performance test?

During the performance tests required by § 63.3550 and described in §§ 63.3553, 63.3554, and 63.3555, you must establish the operating limits required by § 63.3492 according to this section, unless you have received approval for alternative monitoring and operating limits under § 63.8(f) as specified in § 63.3492.

(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. That average combustion temperature is the minimum operating limit for your thermal oxidizer.

(b) * * *

(1) During performance tests, you must monitor and record the temperature at the inlet to 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 at the inlet to the catalyst bed and the average temperature difference across the catalyst bed maintained during the performance test. The average temperature difference is the minimum operating limit for your catalytic oxidizer.

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

* * * * *

(d) * * *

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

* * * * *

(e) * * *

(1) During performance tests, 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.

(f) * * *

(1) During performance tests, monitor and record the inlet temperature to the desorption/reactivation zone of the concentrator 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/reactivation zone inlet temperature.

(3) During performance tests, monitor and record an indicator(s) of performance for the desorption/reactivation fan operation at least once every 15 minutes during each of the three runs of the performance test. The indicator can be speed in rpm, power in amps, static pressure, or flow rate.

* * * * *

(5) During performance tests, monitor the rotational speed of the concentrator at least once every 15 minutes during each of the three runs of a performance test.

(6) For each performance test, use the data collected during the performance test to calculate and record the average rotational speed. This is the minimum operating limit for the rotational speed of the concentrator. However, the indicator range for the rotational speed

may be changed if an engineering evaluation is conducted and a determination made that the change in speed will not affect compliance with the emission limit.

* * * * *

■ 24. Section 63.3557 is amended by revising paragraphs (a)(4) and (5), (a)(7), and (c)(3) introductory text to read as follows:

§ 63.3557 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 § 63.3500(b) and have readily available necessary parts for routine repairs of the monitoring equipment.

(5) You must operate the CPMS and collect emission capture system and add-on control device parameter data at all times in accordance with § 63.3500(b) 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).

* * * * *

(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 (ii) 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.

* * * * *

■ 25. Section 63.3561 is amended by removing the definition for ''*Deviation*'' and adding definitions for ''*Deviation,* before'' and ''*Deviation,* on and after'' in alphabetical order to read as follows:

§ 63.3561 What definitions apply to this subpart?

* * * * *

Deviation, before [date 181 days after date of publication of final rule in the **Federal Register**], means any instance in which an affected source subject to this subpart or an owner or operator of such a source:

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

(3) Fails to meet any emission limit, 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.

Deviation, on and after [date 181 days after date of publication of final rule in the **Federal Register**], means any instance in which an affected source subject to this subpart or an owner or operator of such a source:

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

* * * * *

■ 26. Table 5 to subpart KKKK of part 63 is revised to read as follows:

Table 5 to Subpart KKKK of Part 63—Applicability of General Provisions to Subpart KKKK

You must comply with the applicable General Provisions requirements according to the following table:

Citation	Subject	Applicable to subpart KKKK	Explanation
§ 63.1(a)(1)–(4)	General Applicability	Yes.	
§ 63.1(a)(6)	Source Category Listing	Yes.	
§ 63.1(a)(10)–(12)	Timing and Overlap Clarifications	Yes.	
§ 63.1(b)(1)	Initial Applicability Determination	Yes	Applicability to subpart KKKK is also specified in § 63.3481.
§ 63.1(b)(3)	Applicability Determination Recordkeeping.	Yes.	
§ 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 KKKK.
§ 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 § 63.3561.
§ 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.	

Citation	Subject	Applicable to subpart KKKK	Explanation
§ 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 63.3483 specifies the compliance dates.
§ 63.6(c)(1), (2), (5)	Compliance Dates for Existing Sources.	Yes	Section 63.3483 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 § 63.3500(b) 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 Start-up, 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 after date of publication of final rule in the **Federal Register**].	
§ 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 KKKK 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(i)(16)	Compliance Extensions and Administrator's Authority.	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 §§ 63.3543, 63.3544, 63.3545, 63.3554, and 63.3555.
§ 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. Sections 63.3540 and 63.3550 specify the schedule for performance test requirements that are earlier than those specified in § 63.7(a)(2).
§ 63.7(a)(3)	Performance Tests Required by the Administrator.	Yes.	
§ 63.7(b)–(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 [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 §§ 63.3543 and 63.3553.
§ 63.7(e)(2)–(4)	Conduct of Performance Tests	Yes.	

Citation	Subject	Applicable to subpart KKKK	Explanation
§ 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 requirements for monitoring are specified in §§ 63.3547 and 63.3557.
§ 63.8(a)(4)	Additional Monitoring Requirements.	No	Subpart KKKK 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 [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**].	Sections 63.3547 and 63.3557 specify 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 §§ 63.3547 and 63.3557.
§ 63.8(c)(4)	CMS	No	Sections 63.3547 and 63.3557 specify 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 KKKK does not have opacity or visible emission standards.
§ 63.8(c)(6)	CMS Requirements	No	Sections 63.3547 and 63.3557 specify 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 Reporting.	No	Section 63.3511 requires reporting of CMS out of control periods.
§ 63.8(d)–(e)	Quality Control Program and CMS Performance Evaluation.	No.	
§ 63.8(f)(1)–(5)	Use of an Alternative Monitoring Method.	Yes.	
§ 63.8(f)(6)	Alternative to Relative Accuracy Test.	No	Section 63.8(f)(6) provisions are not applicable because subpart KKKK does not require CEMS.
§ 63.8(g)	Data Reduction	No	Sections 63.3542, 63.3547, 63.3552 and 63.3557 specify monitoring data reduction.
§ 63.9(a)	Notification Applicability	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.	
§ 63.9(d)	Special Compliance Requirement Notification.	Yes.	

Citation	Subject	Applicable to subpart KKKK	Explanation
§ 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 KKKK does not have opacity or visible emission standards.
§ 63.9(g)	Additional Notifications When Using CMS.	No.	
§ 63.9(h)(1)–(3)	Notification of Compliance Status	Yes	Section 63.3510 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 §§ 63.3512 and 63.3513.
§ 63.10(b)(2)(i)–(ii)	Recordkeeping of Occurrence and Duration of Startups and Shutdowns and of Failures to Meet Standards.	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 § 63.3512(i).
§ 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 [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 § 63.3512(i)(4) for a record of actions taken to minimize emissions duration 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 § 63.3512(i) 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.	
§ 63.10(b)(2) (xiv)		Yes.	
§ 63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations.	Yes.	
§ 63.10(c)(1)	Additional Recordkeeping Requirements for Sources with CMS.	Yes.	
§ 63.10(c)(5)–(6)		Yes.	
§ 63.10(c)(7)–(8)	Additional Recordkeeping Requirements for Sources with CMS.	No	See § 63.3512(i) 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 [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**].	
§ 63.10(d)(1)	General Reporting Requirements	Yes	Additional requirements are specified in § 63.3511.
§ 63.10(d)(2)	Report of Performance Test Results.	Yes	Additional requirements are specified in § 63.3511(b).
§ 63.10(d)(3)	Reporting Opacity or Visible Emissions Observations.	No	Subpart KKKK does not require opacity or visible emissions observations.
§ 63.10(d)(4)	Progress Reports for Sources with Compliance Extensions.	Yes.	

Citation	Subject	Applicable to subpart KKKK	Explanation
§ 63.10(d)(5)	Startup, Shutdown, 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 § 63.3511(a)(7) and (8).
§ 63.10(e)(1)–(2)	Additional CMS Reports	No.	
§ 63.10(e)(3)	Excess Emissions/CMS Performance Reports.	No	Section 63.3511(b) specifies the contents of periodic compliance reports.
§ 63.10(e)(4)	COMS Data Reports	No	Subpart KKKK does not specify requirements for opacity or COMS.
§ 63.10(f)	Recordkeeping/Reporting Waiver	Yes.	
§ 63.11	Control Device Requirements/Flares.	No	Subpart KKKK does not specify use of flares for compliance.
§ 63.12	State Authority and Delegations	Yes.	
§ 63.13(a)	Addresses	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**].	
§ 63.13(b)	Submittal to State Agencies	Yes.	
§ 63.13(c)	Submittal to State Agencies	Yes before [date 181 days after date of publication of final rule in the **Federal Register**]. No unless the state requires the submittal via CEDRI, on and after [date 181 days after date of publication of final rule in the **Federal Register**].	
§ 63.14	Incorporation by Reference	Yes.	
§ 63.15	Availability of Information/Confidentiality.	Yes.	

■ 27. Table 8 to subpart KKKK of part 63 is added to read as follows:

TABLE 8 TO SUBPART KKKK 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

TABLE 8 TO SUBPART KKKK 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—Continued

Chemical name	CAS No.
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 SSSS—National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil

■ 28. Section 63.5090 is amended by revising paragraph (a) and adding paragraph (e) to read as follows:

§ 63.5090 Does this subpart apply to me?

(a) The provisions of this subpart apply to each facility that is a major source of HAP, as defined in § 63.2, at which a coil coating line is operated, except as provided in paragraphs (b) and (e) of this section.

* * * * *

(e) This subpart does not apply to the application of incidental markings (including letters, numbers, or symbols) that are added to bare metal coils and that are used for only product identification or for product inventory control. The application of letters, numbers, or symbols to a coated metal coil is considered a coil coating process and part of the coil coating affected source.

■ 29. Section 63.5110 is amended by removing the definition for ''*Deviation*'' and adding definitions for ''*Deviation,* before'' and ''*Deviation,* on and after'' in alphabetical order to read as follows:

§ 63.5110 What special definitions are used in this subpart?

* * * * *

Deviation, before [date 181 days after date of publication of final rule in the **Federal Register**], means any instance in which an affected source, subject to this subpart, or an owner or operator of such a source:

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

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

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

Deviation, on and after [date 181 days after date of publication of final rule in the **Federal Register**], means any instance in which an affected source, subject to this subpart, or an owner or operator of such a source:

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

* * * * *

■ 30. Section 63.5121 is amended by revising paragraph (a) to read as follows:

§ 63.5121 What operating limits must I meet?

(a) Except as provided in paragraph (b) of this section, for any coil coating line for which you use an add-on control device, unless you use a solvent recovery system and conduct a liquid-liquid material balance according to § 63.5170(e)(1), you must meet the applicable operating limits specified in Table 1 to this subpart. You must establish the operating limits during performance tests according to the requirements in § 63.5160(d)(3) and Table 1 to § 63.5160. You must meet the operating limits established during the most recent performance test required in § 63.5160 at all times after you establish them.

* * * * *

■ 31. Section 63.5130 is amended by revising paragraph (a) to read as follows:

§ 63.5130 When must I comply?

(a) For an existing affected source, the compliance date is June 10, 2005.

* * * * *

■ 32. Section 63.5140 is amended by:

■ a. Revising paragraph (a);

■ b. Redesignating paragraph (b) as (c); and

■ c. Adding paragraph (b).

The revision and addition read as follows:

§ 63.5140 What general requirements must I meet to comply with the standards?

(a) Before [date 181 days after publication of final rule in the **Federal Register**], you must be in compliance with the applicable emission standards in § 63.5120 and the operating limits in Table 1 to this subpart at all times, except during periods of start-up, shutdown, and malfunction of any capture system and control device used to comply with this subpart. On and after [date 181 days after publication of final rule in the **Federal Register**] you must be in compliance with the applicable emission standards in § 63.5120 and the operating limits in Table 1 to this subpart at all times. If you are complying with the emission standards of this subpart without the use of a capture system and control device, you must be in compliance with the standards at all times.

(b) Before [date 181 days after publication of final rule in the **Federal Register**], you must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in § 63.6(e)(1). On and after [date 181 days after publication of final rule in the **Federal Register**], at all times, you must operate and maintain your 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.

* * * * *

■ 33. Section 63.5150 is amended by revising paragraph (a) introductory text, paragraph (a)(4)(i), and paragraph (b) to read as follows:

§ 63.5150 If I use a control device to comply with the emission standards, what monitoring must I do?

* * * * *

(a) To demonstrate continuing compliance with the standards, you must monitor and inspect each capture system and each control device required to comply with § 63.5120 following the date on which the initial performance test of the capture system and control device is completed. You must install and operate the monitoring equipment as specified in paragraphs (a)(1) through (4) of this section. On and after [date 181 days after publication of final rule in the **Federal Register**], you must also maintain the monitoring equipment at all times in accordance with § 63.5140(b) and keep the necessary parts readily available for routine repairs of the monitoring equipment.

* * * * *

(4) * * *

(i) The monitoring plan must identify the operating parameter to be monitored to ensure that the capture efficiency measured during compliance tests is maintained, explain why this parameter is appropriate for demonstrating ongoing compliance, and identify the specific monitoring procedures.

* * * * *

(b) If an operating parameter monitored in accordance with paragraphs (a)(3) and (4) of this section is out of the allowed range specified in Table 1 to this subpart it will be considered a deviation from the operating limit.

■ 34. Section 63.5160 is amended by revising table 1 and paragraphs (b)(1)(i), (b)(2), (b)(4), (c), (d) introductory text, (d)(1) introductory text, (d)(1)(vi) introductory text, (d)(1)(vii), (d)(2), (d)(3) introductory text, (d)(3)(i)(A), (d)(3)(ii)(D) introductory text, and (e) introductory text to read as follows:

§ 63.5160 What performance tests must I complete?

TABLE 1 TO § 63.5160—REQUIRED PERFORMANCE TESTING SUMMARY

If you control HAP on your coil coating line by:	You must:
1. Limiting HAP or Volatile matter content of coatings.	Determine the HAP or volatile matter and solids content of coating materials according to the procedures in § 63.5160(b) and (c).
2. Using a capture system and add-on control device.	Except as specified in paragraph (a) of this section, conduct an initial performance test within 180 days of the applicable compliance date in § 63.5130, and conduct periodic performance tests within 5 years following the previous performance test, as follows: Conduct the first periodic performance test before [date 3 years after date of publication 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 publication of final rule in the **Federal Register**]; thereafter, conduct a performance test no later than 5 years following the previous performance test. For each performance test: (1) For each capture and control system, determine the destruction or removal efficiency of each control device according to § 63.5160(d) and the capture efficiency of each capture system according to § 63.5160(e), and (2) confirm or re-establish the operating limits.

* * * * *

(b) * * *

(1) * * *

(i) Count only those organic HAP in Table 3 to this subpart that are measured to be present at greater than or equal to 0.1 weight percent and greater than or equal to 1.0 weight percent for other organic HAP compounds.

* * * * *

(2) *Method 24 in appendix A–7 of part 60.* For coatings, you may determine the total volatile matter content as weight fraction of nonaqueous volatile matter and use it as a substitute for organic HAP, using Method 24 in appendix A–7 of part 60. As an alternative to using Method 24, you may use ASTM D2369–10 (2015), ''Test Method for Volatile Content of Coatings'' (incorporated by reference, see § 63.14). The determination of total volatile matter content using a method specified in this paragraph (b)(2) or as provided in paragraph (b)(3) of this section may be performed by the manufacturer of the coating and the results provided to you.

* * * * *

(4) *Formulation data.* You may use formulation data provided that the information represents each organic HAP in Table 3 to this subpart that is present at a level equal to or greater than 0.1 percent and equal to or greater than 1.0 percent for other organic HAP compounds in any raw material used, weighted by the mass fraction of each raw material used in the material. Formulation data may be provided to you by the manufacturer of the coating material. In the event of any inconsistency between test data obtained with the test methods specified in paragraphs (b)(1) through (3) of this section and formulation data, the test data will govern.

(c) *Solids content and density.* You must determine the solids content and the density of each coating material applied. You may determine the volume solids content using ASTM D2697–03(2014) Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings (incorporated by reference, see § 63.14) or ASTM 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), or an EPA approved alternative method. You must determine the density of each coating using ASTM D1475–13 Standard Test Method for Density of Liquid Coatings, Inks, and Related Products (incorporated by reference, see § 63.14) or ASTM D2111–10 (2015) Standard Test Methods for Specific Gravity of Halogenated Organic Solvents and Their Admixtures (incorporated by reference, see § 63.14). The solids determination using ASTM D2697–03(2014) or ASTM D6093–97 (2016) and the density determination using ASTM D1475–13 or ASTM 2111–10 (2015) may be performed by the manufacturer of the material and the results provided to you. Alternatively, you may rely on formulation data provided by material providers to determine the volume solids. In the event of any inconsistency between test data obtained with the ASTM test methods specified in this section and formulation data, the test data will govern.

(d) *Control device destruction or removal efficiency.* If you are using an add-on control device, such as an oxidizer, to comply with the standard in § 63.5120, you must conduct performance tests according to Table 1 to § 63.5160 to establish the destruction or removal efficiency of the control device or the outlet HAP concentration achieved by the oxidizer, according to the methods and procedures in paragraphs (d)(1) and (2) of this section. During performance tests, you must establish the operating limits required by § 63.5121 according to paragraph (d)(3) of this section.

(1) Performance tests conducted to determine the destruction or removal efficiency of the control device must be performed such that control device inlet and outlet testing is conducted simultaneously. To determine the outlet organic HAP concentration achieved by the oxidizer, only oxidizer outlet testing must be conducted. The data must be reduced in accordance with the test methods and procedures in paragraphs (d)(1)(i) through (ix).

* * * * *

(vi) Method 25 or 25A in appendix A–7 of part 60 is used to determine total gaseous non-methane organic matter concentration. You may use Method 18 in appendix A–6 of part 60 to subtract methane emissions from measured total gaseous organic mass emissions as carbon. Use the same test method for both the inlet and outlet measurements, which must be conducted simultaneously. You must submit notification of the intended test method to the Administrator for approval along with notification of the performance test required under § 63.7 (b). You must use Method 25A if any of the conditions described in paragraphs (d)(1)(vi)(A) through (D) of this section apply to the control device.

* * * * *

(vii) Each performance test must consist of three separate runs, except as provided by § 63.7(e)(3); each run must be conducted for at least 1 hour under the conditions that exist when the affected source is operating under normal operating conditions. For the purpose of determining volatile organic matter concentrations and mass flow rates, the average of the results of all runs will apply. If you are demonstrating compliance with the outlet organic HAP concentration limit in § 63.5120(a)(3), only the average

outlet volatile organic matter concentration must be determined.

* * * * *

(2) You must record such process information as may be necessary to determine the conditions in existence at the time of the performance test. Before [date 181 days after publication of final rule in the **Federal Register**], operations during periods of start-up, shutdown, and malfunction will not constitute representative conditions for the purpose of a performance test. On and after [date 181 days after publication of final rule in the **Federal Register**], you must conduct the performance test under representative operating conditions for the coating operation. Operations during periods of start-up, shutdown, or nonoperation do not constitute representative conditions for the purpose of 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.

(3) *Operating limits.* If you are using a capture system and add-on control device other than a solvent recovery system for which you conduct a liquid-liquid material balance to comply with the requirements in § 63.5120, you must establish the applicable operating limits required by § 63.5121. These operating limits apply to each capture system and to each add-on emission control device that is not monitored by CEMS, and you must establish the operating limits during performance tests required by paragraph (d) of this section according to the requirements in paragraphs (d)(3)(i) through (iii) of this section.

(i) * * *

(A) 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.

* * * * *

(ii) * * *

(D) You must develop and implement an inspection and maintenance plan for your catalytic oxidizer(s) for which you elect to monitor according to paragraph (d)(3)(ii)(C) of this section. The plan must address, at a minimum, the elements specified in paragraphs (d)(3)(ii)(D)(*1*)–(*3*) of this section.

* * * * *

(e) *Capture efficiency.* If you are required to determine capture efficiency to meet the requirements of § 63.5170(e)(2), (f)(1) and (2), (g)(2) through (4), or (i)(2) and (3), you must determine capture efficiency using the procedures in paragraph (e)(1), (2), or (3) of this section, as applicable.

* * * * *

■ 35. Section 63.5170 is amended by revising table 1 and paragraphs (c)(1) and (2), (c)(4) introductory text, (e)(2) introductory text, (f)(1) introductory text, (f)(2), (g)(2) introductory text, (g)(3) introductory text, (g)(4) introductory text, Equation 11 of paragraph (h)(6), (i) introductory text, and (i)(1) to read as follows:

§ 63.5170 How do I demonstrate compliance with the standards?

* * * * *

TABLE 1 TO § 63.5170—COMPLIANCE DEMONSTRATION REQUIREMENTS INDEX

If you choose to demonstrate compliance by:	Then you must demonstrate that:
1. Use of ''as purchased'' compliant coatings	a. Each coating material used during the 12-month compliance period does not exceed 0.046 kg HAP per liter solids, as purchased. Paragraph (a) of this section.
2. Use of ''as applied'' compliant coatings	a. Each coating material used does not exceed 0.046 kg HAP per liter solids on a rolling 12-month average as applied basis, determined monthly. Paragraphs (b)(1) of this section; or b. Average of all coating materials used does not exceed 0.046 kg HAP per liter solids on a rolling 12-month average as applied basis, determined monthly. Paragraph (b)(2) of this section.
3. Use of a capture system and control device	Overall organic HAP control efficiency is at least 98 percent on a monthly basis for individual or groups of coil coating lines; or overall organic HAP control efficiency is at least 98 percent during performance tests conducted according to Table 1 to § 63.5170 and operating limits are achieved continuously for individual coil coating lines; or oxidizer outlet HAP concentration is no greater than 20 ppmv and there is 100 percent capture efficiency during performance tests conducted according to Table 1 to § 63.5170 and operating limits are achieved continuously for individual coil coating lines. Paragraph (c) of this section.
4. Use of a combination of compliant coatings and control devices and maintaining an acceptable equivalent emission rate.	Average equivalent emission rate does not exceed 0.046 kg HAP per liter solids on a rolling 12-month average as applied basis, determined monthly. Paragraph (d) of this section.

* * * * *

(c) * * *

(1) If the affected source uses one compliance procedure to limit organic HAP emissions to the level specified in § 63.5120(a)(1) or (3) and has only always-controlled work stations, then you must demonstrate compliance with the provisions of paragraph (e) of this section when emissions from the affected source are controlled by one or more solvent recovery devices.

(2) If the affected source uses one compliance procedure to limit organic HAP emissions to the level specified in § 63.5120(a)(1) or (3) and has only always-controlled work stations, then you must demonstrate compliance with the provisions of paragraph (f) of this section when emissions are controlled by one or more oxidizers.

* * * * *

(4) The method of limiting organic HAP emissions to the level specified in § 63.5120(a)(3) is the installation and operation of a PTE around each work station and associated curing oven in the coating line and the ventilation of all organic HAP emissions from each PTE to an oxidizer with an outlet organic HAP concentration of no greater than 20 ppmv on a dry basis. An enclosure that meets the requirements in § 63.5160(e)(1) is considered a PTE. Compliance of the oxidizer with the outlet organic HAP concentration limit is demonstrated either through continuous emission monitoring according to paragraph (c)(4)(ii) of this section or through performance tests according to the requirements of § 63.5160(d) and Table 1 to § 63.5160. If this method is selected, you must meet the requirements of paragraph (c)(4)(i) of

this section to demonstrate continuing achievement of 100 percent capture of organic HAP emissions and either paragraph (c)(4)(ii) or paragraph (c)(4)(iii) of this section, respectively, to demonstrate continuous compliance with the oxidizer outlet organic HAP concentration limit through continuous emission monitoring or continuous operating parameter monitoring:

* * * * *

(e) * * *

(2) *Continuous emission monitoring of control device performance.* Use continuous emission monitors to demonstrate recovery efficiency, conduct performance tests of capture efficiency and volumetric flow rate, and continuously monitor a site specific operating parameter to ensure that capture efficiency and volumetric flow rate are maintained following the procedures in paragraphs (e)(2)(i) through (xi) of this section:

* * * * *

(f) * * *

(1) *Continuous monitoring of capture system and control device operating parameters.* Demonstrate compliance through performance tests of capture efficiency and control device efficiency and continuous monitoring of capture system and control device operating parameters as specified in paragraphs (f)(1)(i) through (xi) of this section:

* * * * *

(2) *Continuous emission monitoring of control device performance.* Use continuous emission monitors, conduct performance tests of capture efficiency, and continuously monitor a site specific operating parameter to ensure that capture efficiency is maintained. Compliance must be demonstrated in accordance with paragraph (e)(2) of this section.

(g) * * *

(2) *Solvent recovery system using performance test and continuous monitoring compliance demonstration.* For each solvent recovery system used to control one or more coil coating stations for which you choose to comply by means of performance testing of capture efficiency, continuous emission monitoring of the control device, and continuous monitoring of a capture system operating parameter, each month of the 12-month compliance period you must meet the requirements of paragraphs (g)(2)(i) and (ii) of this section:

* * * * *

(3) *Oxidizer using performance tests and continuous monitoring of operating parameters compliance demonstration.* For each oxidizer used to control emissions from one or more work stations for which you choose to demonstrate compliance through performance tests of capture efficiency, control device efficiency, and continuous monitoring of capture system and control device operating parameters, each month of the 12-month compliance period you must meet the requirements of paragraphs (g)(3)(i) through (iii) of this section:

* * * * *

(4) *Oxidizer using continuous emission monitoring compliance demonstration.* For each oxidizer used to control emissions from one or more work stations for which you choose to demonstrate compliance through capture efficiency testing, continuous emission monitoring of the control device, and continuous monitoring of a capture system operating parameter, each month of the 12-month compliance period you must meet the requirements in paragraphs (g)(4)(i) and (ii) of this section:

* * * * *

(h) * * *

(6) * * *

$$He = \sum_{A=1}^{w_i}\left[\left(\sum_{i=1}^{p} M_{ci}C_{hi} + \sum_{j=1}^{q} M_{cj}C_{hj}\right)(1 - DRE_k CE_A)\right] + \left[\sum_{i=1}^{p} M_{Bi}C_{hi} + \sum_{j=1}^{q} M_{Bj}C_{hj}\right] \quad \text{(Eq. 11)}$$

* * * * *

(i) *Capture and control system compliance demonstration procedures using a CPMS for a coil coating line.* If you use an add-on control device, to demonstrate compliance for each capture system and each control device through performance tests and continuous monitoring of capture system and control device operating parameters, you must meet the requirements in paragraphs (i)(1) through (3) of this section.

(1) Conduct performance tests according to the schedule in Table 1 to § 63.5160 to determine the control device destruction or removal efficiency, DRE, according to § 63.5160(d) and Table 1 to § 63.5160.

* * * * *

■ 36. Section 63.5180 is amended by:

■ a. Revising paragraphs (f) introductory text and (f)(1);

■ b. Removing and reserving paragraph (f)(2);

■ c. Revising paragraphs (g)(2)(v), (h) introductory text, (h)(2) and (3);

■ d. Adding paragraph (h)(4); and

■ e. Revising paragraphs (i) introductory text, (i)(1) through (4), (i)(6), and (i)(9).

The revisions and addition read as follows:

§ 63.5180 What reports must I submit?

* * * * *

(f) Before [date 181 days after publication of final rule in the **Federal Register**], you must submit start-up, shutdown, and malfunction reports as specified in § 63.10(d)(5) if you use a control device to comply with this subpart.

(1) Before [date 181 days after publication of final rule in the **Federal Register**], if your actions during a start-up, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not completely consistent with the procedures specified in the source's start-up, shutdown, and malfunction plan specified in § 63.6 (e)(3) and required before [date 181 days after publication of final rule in the **Federal Register**], you must state such information in the report. The start-up, shutdown, or malfunction report will consist of a letter containing the name, title, and signature of the responsible official who is certifying its accuracy, that will be submitted to the Administrator. Separate start-up, shutdown, or malfunction reports are not required if the information is included in the report specified in paragraph (g) of this section. The startup, shutdown, and malfunction plan and start-up, shutdown, and malfunction report are no longer required on and after [date 181 days after publication of final rule in the **Federal Register**].

* * * * *

(g) * * *

(2) * * *

(v) A statement that there were no deviations from the applicable emission

limit in § 63.5120 or the applicable operating limit(s) established according to § 63.5121 during the reporting period, and that no CEMS were inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted.

(h) You must submit, for each deviation occurring at an affected source where you are not using CEMS to comply with the standards in this subpart, the semi-annual compliance report containing the information in paragraphs (g)(2)(i) through (iv) of this section and the information in paragraphs (h)(1) through (4) of this section:

* * * * *

(2) Before [date 181 days after publication of final rule in the **Federal Register**], you must provide information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable, and the corrective action taken. On and after [date 181 days after publication of final rule in the **Federal Register**], you must provide information on the number, date, time, duration, and cause of deviations from an emission limit in § 63.5120 or any applicable operating limit established according to § 63.5121 (including unknown cause, if applicable) as applicable, and the corrective action taken.

(3) Before [date 181 days after publication of final rule in the **Federal Register**], you must provide information on the number, duration, and cause for continuous parameter monitoring system downtime incidents (including unknown cause other than downtime associated with zero and span and other daily calibration checks, if applicable). On and after [date 181 days after publication of final rule in the **Federal Register**], you must provide the information specified in paragraphs (h)(3)(i) and (ii) of this section.

(i) Number, date, time, duration, cause (including unknown cause), and descriptions of corrective actions taken for continuous parameter monitoring systems that are inoperative (except for zero (low-level) and high-level checks).

(ii) Number, date, time, duration, cause (including unknown cause), and descriptions of corrective actions taken for continuous parameter monitoring systems that are out of control as specified in § 63.8(c)(7).

(4) On and after [date 181 days after publication of final rule in the **Federal Register**], for each deviation from an emission limit in § 63.5120 or any applicable operating limit established according to § 63.5121, you must provide a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit in § 63.5120, a description of the method used to estimate the emissions, and the actions you took to minimize emissions in accordance with § 63.5140(b).

(i) You must submit, for each deviation from the applicable emission limit in § 63.5120 or the applicable operation limit(s) established according to § 63.5121 occurring at an affected source where you are using CEMS to comply with the standards in this subpart, the semi-annual compliance report containing the information in paragraphs (g)(2)(i) through (iv) of this section, and the information in paragraphs (i)(1) through (12) of this section:

(1) The date and time that each malfunction of the capture system or add-on control devices started and stopped.

(2) Before [date 181 days after publication of final rule in the **Federal Register**], the date and time that each CEMS was inoperative, except for zero (low-level) and high-level checks. On and after [date 181 days after publication of final rule in the **Federal Register**], for each instance that the CEMS was inoperative, except for zero (low-level) and high-level checks, the date, time, and duration that the CEMS was inoperative; the cause (including unknown cause) for the CEMS being inoperative; and a description of corrective actions taken.

(3) Before [date 181 days after publication of final rule in the **Federal Register**], the date and time that each CEMS was out-of-control, including the information in § 63.8(c)(8). On and after [date 181 days after publication of final rule in the **Federal Register**], for each instance that the CEMS was out-of-control, as specified in § 63.8(c)(7), the date, time, and duration that the CEMS was out-of-control; the cause (including unknown cause) for the CEMS being out-of-control; and descriptions of corrective actions taken.

(4) Before [date 181 days after publication of final rule in the **Federal Register**], the date and time that each deviation started and stopped, and whether each deviation occurred during a period of start-up, shutdown, or malfunction or during another period. On and after [date 181 days after publication of final rule in the **Federal Register**], the date, time, and duration of each deviation from an emission limit in § 63.5120. For each deviation, an estimate of the quantity of each regulated pollutant emitted over any emission limit in § 63.5120 to this subpart, and a description of the method used to estimate the emissions.

* * * * *

(6) Before [date 181 days after publication of final rule in the **Federal Register**], a breakdown of the total duration of the deviations during the reporting period into those that are due to start-up, shutdown, control equipment problems, process problems, other known causes, and other unknown causes. On and after [date 181 days after publication of final rule in the **Federal Register**], a breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

* * * * *

(9) Before [date 181 days after publication of final rule in the **Federal Register**], a brief description of the metal coil coating line. On and after [date 181 days after publication of final rule in the **Federal Register**], a list of the affected source or equipment, including a brief description of the metal coil coating line.

* * * * *

■ 37. Section 63.5181 is added to read as follows:

§ 63.5181 What are my electronic reporting requirements?

(a) Beginning no later than [date 181 days after publication of final rule in the **Federal Register**], you must submit the results of each performance test as required in § 63.5180(e) following the procedure specified in paragraphs (a)(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 Compliance and Emissions Data Reporting Interface (CEDRI). The CEDRI interface 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 in portable document format (PDF)

using the attachment module of the ERT.

(3) If you claim that some of the performance test information being submitted under paragraph (a)(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/OAQPS/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 (a)(1) of this section.

(b) Beginning on [date 181 days after 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 § 63.5180(d) 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 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 confidential business information (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.

(c) Beginning on [date 1 year after 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 § 63.5180(g) through (i), as applicable, 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 (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*). The date on which the 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 confidential business information (CBI) shall submit a complete report generated using the appropriate form in CEDRI, 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.

(d) If you are required to electronically submit a report through the Compliance and Emissions Data Reporting Interface (CEDRI) in the EPA's Central Data Exchange (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.

(e) 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.

■ 38. Section 63.5190 is amended by adding paragraphs (a)(5) and (c) to read as follows:

§ 63.5190 What records must I maintain?

(a) * * *

(5) 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 § 63.5180(h) or (i), a record of the information specified in paragraphs (a)(5)(i) through (iv) of this section, as applicable.

(i) The date, time, and duration of the deviation, as reported under § 63.5180(h) and (i).

(ii) A list of the affected sources or equipment for which the deviation occurred and the cause of the deviation, as reported under § 63.5180(h) and (i).

(iii) An estimate of the quantity of each regulated pollutant emitted over any applicable emission limit in § 63.5120 to this subpart or any applicable operating limit established according to § 63.5121 to this subpart, and a description of the method used to calculate the estimate, as reported under § 63.5180(h) and (i).

(iv) A record of actions taken to minimize emissions in accordance with § 63.5140(b) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

* * * * *

(c) 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.

■ 39. Table 2 to subpart SSSS of part 63 is revised to read as follows:

Table 2 to Subpart SSSS of Part 63—Applicability of General Provisions to Subpart SSSS

You must comply with the applicable General Provisions requirements according to the following table:

General provisions reference	Subject	Applicable to subpart SSSS	Explanation
§ 63.1(a)(1)–(4)	General Applicability	Yes.	
§ 63.1(a)(6)	Source Category Listing	Yes.	
§ 63.1(a)(10)–(12)	Timing and Overlap Clarifications	Yes.	
§ 63.1(b)(1)	Initial Applicability Determination	Yes	Applicability to Subpart SSSS is also specified in § 63.5090.
§ 63.1(b)(3)	Applicability Determination Recordkeeping.	Yes.	
§ 63.1(c)(1)	Applicability after Standard Established.	Yes.	
§ 63.1(c)(2)	Applicability of Permit Program for Area Sources.	Yes.	
§ 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 § 63.5110.
§ 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	Only total HAP emissions in terms of tons per year are required for § 63.5(d)(1)(ii)(H).
§ 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 63.5130 specifies the compliance dates.
§ 63.6(c)(1), (2), (5)	Compliance Dates for Existing Sources.	Yes	Section 63.5130 specifies the compliance dates.
§ 63.6(e)(1)(i)–(ii)	General Duty to Minimize Emissions and Requirement to Correct Malfunctions As Soon As Possible.	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 § 63.5140(b) for general duty requirement.
§ 63.6(e)(1)(iii)	Operation and Maintenance Requirements.	Yes.	

General provisions reference	Subject	Applicable to subpart SSSS	Explanation
§ 63.6(e)(3)(i), (e)(3)(iii)–(ix)	SSMP Requirements	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)	SSM Exemption	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 § 63.5140(b) for general duty requirement.
§ 63.6(f)(2)–(3)	Compliance with Non-Opacity Emission Standards.	Yes.	
§ 63.6(g)	Alternative Non-Opacity Emission Standard.	Yes.	
§ 63.6(h)	Compliance with Opacity/Visible Emission Standards.	No	Subpart SSSS does not establish opacity standards or visible emission standards.
§ 63.6(i)(1)–(14), (i)(16)	Extension of Compliance and Administrator's Authority.	Yes.	
§ 63.6(j)	Presidential Compliance Exemption.	Yes.	
§ 63.7(a)–(d) except (a)(2)(i)–(viii)	Performance Test Requirements	Yes.	
§ 63.7(e)(1)	Performance Testing	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 § 63.5160(d)(2).
§ 63.7(e)(2)–(4)	Conduct of Performance Tests	Yes.	
§ 63.7(f)	Alternative Test Method	Yes	EPA retains approval authority.
§ 63.7(g)–(h)	Data Analysis and Waiver of Tests.	Yes.	
§ 63.8(a)(1)–(2)	Monitoring Requirements—Applicability.	Yes	Additional requirements for monitoring are specified in § 63.5150(a).
§ 63.8(a)(4)	Additional Monitoring Requirements.	No	Subpart SSSS does not have monitoring requirements for flares.
§ 63.8(b)	Conduct of Monitoring	Yes.	
§ 63.8(c)(1)	Operation and Maintenance of Continuous Monitoring System (CMS).	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 63.5150(a) 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 § 63.5170.
§ 63.8(c)(4)–(5)	CMS Continuous Operation Procedures.	No	Subpart SSSS does not require COMS.
§ 63.8(c)(6)–(8)	CMS Requirements	Yes	Provisions only apply if CEMS are used.
§ 63.8(d)–(e)	CMS Quality Control, Written Procedures, and Performance Evaluation.	Yes	Provisions only apply if CEMS are used.
§ 63.8(f)(1)–(5)	Use of an Alternative Monitoring Method.	Yes	EPA retains approval authority.
§ 63.8(f)(6)	Alternative to Relative Accuracy Test.	No	Section 63.8(f)(6) provisions are not applicable because subpart SSSS does not require CEMS.
§ 63.8(g)	Data Reduction	No	Sections 63.5170, 63.5140, 63.5150, and 63.5150 specify monitoring data reduction.
§ 63.9(a)	Notification of Applicability	Yes.	
§ 63.9(b)(1)	Initial Notifications	Yes.	

General provisions reference	Subject	Applicable to subpart SSSS	Explanation
§ 63.9(b)(2)	Initial Notifications	Yes	With the exception that § 63.5180(b)(1) provides 2 years after the proposal date for submittal of the initial notification for existing sources.
§ 63.9(b)(4)(i), (b)(4)(v), (b)(5)	Application for Approval of Construction or Reconstruction.	Yes.	
§ 63.9(c)–(e)	Request for Extension of Compliance, New Source Notification for Special Compliance Requirements, and Notification of Performance Test.	Yes	Notification of performance test requirement 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 SSSS does not require opacity and visible emissions observations.
§ 63.9(g)	Additional Notifications When Using CMS.	No	Provisions for COMS are not applicable.
§ 63.9(h)(1)–(3)	Notification of Compliance Status	Yes	Section 63.5130 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 § 63.5190.
§ 63.10(b)(2)(i)–(ii)	Recordkeeping of Occurrence and Duration of Startups and Shutdowns and Recordkeeping of Failures to Meet Standards.	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 § 63.5190(a)(5).
§ 63.10(b)(2)(iii)	Maintenance Records	Yes.	
§ 63.10(b)(2)(iv)–(v)	Actions Taken to Minimize Emissions 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 after date of publication of final rule in the **Federal Register**].	See § 63.5190(a)(5).
§ 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 § 63.5190(a)(5).
§ 63.10(b)(2)(vii)–(xiv)	Other CMS Requirements	Yes.	
§ 63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations.	Yes.	
§ 63.10(c)	Additional CMS Recordkeeping Requirements.	No	See § 63.5190(a)(5).
§ 63.10(d)(1)–(2)	General Reporting Requirements and Report of Performance Test Results.	Yes	Additional requirements are specified in § 63.5180(e).
§ 63.10(d)(3)	Reporting Opacity or Visible Emissions Observations.	No	Subpart SSSS does not require opacity and visible emissions observations.
§ 63.10(d)(4)	Progress Reports for Sources with Compliance Extensions.	Yes.	
§ 63.10(d)(5)	Startup, Shutdown, 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**].	
§ 63.10(e)	Additional Reporting Requirements for Sources with CMS.	No.	
§ 63.10(f)	Recordkeeping/Reporting Waiver	Yes.	
§ 63.11	Control Device Requirements/ Flares.	No	Subpart SSSS does not specify use of flares for compliance.
§ 63.12	State Authority and Delegations	Yes.	

General provisions reference	Subject	Applicable to subpart SSSS	Explanation
§ 63.13(a)	Addresses	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**].	
§ 63.13(b)	Submittal to State Agencies	Yes.	
§ 63.13(c)	Submittal to State Agencies	Yes before [date 181 days after date of publication of final rule in the **Federal Register**]. No unless the state requires the submittal via CEDRI, on and after [date 181 days after date of publication of final rule in the **Federal Register**].	
§ 63.14	Incorporation by Reference	Yes	Subpart SSSS includes provisions for alternative ASTM and ASME test methods that are incorporated by reference.
§ 63.15	Availability of Information/Confidentiality.	Yes.	

■ 40. Table 3 to subpart SSSS of part 63 is added to read as follows:

TABLE 3 TO SUBPART SSSS 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

TABLE 3 TO SUBPART SSSS 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—Continued

Chemical name	CAS No.
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

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