

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA-HQ-OAR-2017-0668, EPA-HQ-OAR-2017-0669, EPA-HQ-OAR-2017-0670; FRL-9988-80-OAR]

RIN 2060-AT72

National Emission Standards for Hazardous Air Pollutants: Surface Coating of Large Appliances; Printing, Coating, and Dyeing of Fabrics and Other Textiles; and Surface Coating of Metal Furniture Residual Risk and Technology Reviews

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is taking final action on the residual risk and technology reviews (RTRs) conducted for the Surface Coating of Large Appliances; the Printing, Coating, and Dyeing of Fabrics and Other Textiles; and the Surface Coating of Metal Furniture source categories regulated under national emission standards for hazardous air pollutants (NESHAP). In addition, we are taking final action addressing emissions during periods of startup, shutdown, and malfunction (SSM); electronic reporting for performance test results and compliance reports; the addition of EPA Method 18 and updates to several measurement methods; and the addition of requirements for periodic performance testing. Additionally, several miscellaneous technical amendments will be made to improve the clarity of the rule requirements. We are making no revisions to the numerical emission limits based on these risk analyses or technology reviews.

DATES: This final rule is effective on March 15, 2019. The incorporation by reference of certain publications listed in this rule is approved by the Director of the Federal Register as of March 15, 2019.

ADDRESSES: The EPA has established dockets for this action under Docket ID Nos. EPA-HQ-OAR-2017-0668 for 40 Code of Federal Regulations (CFR) part 63, subpart OOOO, Printing, Coating, and Dyeing of Fabrics and Other Textiles; EPA-HQ-OAR-2017-0669 for 40 CFR part 63, subpart RRRR, Surface Coating of Metal Furniture; or EPA-HQ-OAR-2017-0670, for 40 CFR part 63, subpart NNNN, Surface Coating of Large Appliances, as applicable. All documents in the docket are listed on the <https://www.regulations.gov>

website. Although listed in the index, some information is not publicly available, e.g., confidential business information 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 form. Publicly available docket materials are available either electronically through <https://www.regulations.gov>, or in hard copy at the EPA Docket Center, EPA WJC West Building, Room Number 3334, 1301 Constitution Ave. NW, Washington, DC. The Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m. Eastern Standard Time (EST), Monday through Friday. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Docket Center is (202) 566-1742.

FOR FURTHER INFORMATION CONTACT: For questions about the final rule for the Surface Coating of Large Appliances source category, contact Ms. Kim Teal, Minerals and Manufacturing Group, Sector Policies and Programs Division (Mail Code D243-04), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, 109 T.W. Alexander Dr., Research Triangle Park, North Carolina 27711; telephone number: (919) 541-5580; fax number: (919) 541-4991; and email address: teal.kim@epa.gov.

For questions about the final rule for the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category, contact Ms. Paula Hirtz, Minerals and Manufacturing Group, Sector Policies and Programs Division (Mail Code D243-04), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, 109 T.W. Alexander Dr., Research Triangle Park, North Carolina 27711; telephone number: (919) 541-2618; fax number: (919) 541-4991; and email address: hirtz.paula@epa.gov.

For questions about the final rule for the Surface Coating of Metal Furniture source category, contact Ms. J. Kaye Whitfield, Minerals and Manufacturing Group, Sector Policies and Programs Division (Mail Code D243-04), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, 109 T.W. Alexander Dr., Research Triangle Park, North Carolina 27711; telephone number: (919) 541-2509; fax number: (919) 541-4991; and email address: whitfield.kaye@epa.gov.

For specific information regarding the risk modeling methodology, contact Mr. Chris Sarsony, Health and Environmental Impacts Division (C539-

02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-4843; fax number: (919) 541-0840; and email address: sarsony.chris@epa.gov.

For information about the applicability of the NESHAP to a particular entity, contact Mr. John Cox, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, EPA WJC South Building (Mail Code 2221A), 1200 Pennsylvania Avenue NW, Washington, DC 20460; telephone number: (202) 564-1395; and email address: cox.john@epa.gov.

SUPPLEMENTARY INFORMATION:

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:

- ASTM—ASTM International
- CAA—Clean Air Act
- CDX—Central Data Exchange
- CEDRI—Compliance and Emissions Data Reporting Interface
- CFR—Code of Federal Regulations
- CRA—Congressional Review Act
- EPA—Environmental Protection Agency
- ERT—Electronic Reporting Tool
- FR—Federal Register
- gal—gallon
- HAP—hazardous air pollutant(s)
- HCl—hydrochloric acid
- HF—hydrogen fluoride
- HI—hazard index
- HQ—hazard quotient
- HQREL—hazard quotient recommended exposure limit
- HVLP—high-volume, low-pressure
- IBR—incorporation by reference
- ICR—Information Collection Request
- kg—kilogram
- km—kilometer
- lb—pound
- MACT—maximum achievable control technology
- MIR—maximum individual risk
- NAICS—North American Industry Classification System
- NESHAP—national emission standards for hazardous air pollutants
- NTTAA—National Technology Transfer and Advancement Act
- OAQPS—Office of Air Quality Planning and Standards
- OMB—Office of Management and Budget
- OSHA—Occupational Safety and Health Administration
- PB-HAP—hazardous air pollutants known to be persistent and bioaccumulative in the environment
- ppmv—parts per million by volume
- PRA—Paperwork Reduction Act
- RFA—Regulatory Flexibility Act
- RTR—residual risk and technology review
- SSM—startup, shutdown, and malfunction
- TOSHI—target organ-specific hazard index

tpy—tons per year
 UMRA—Unfunded Mandates Reform Act
 VOC—volatile organic compound

Background information. On September 12, 2018, the EPA proposed revisions to the Surface Coating of Large Appliances; the Printing, Coating, and Dyeing of Fabrics and Other Textiles (Fabrics); and the Surface Coating of Metal Furniture NESHAP, based on our RTR. In this action, we are finalizing decisions and revisions for the rules. We summarize some of the more significant comments we timely received regarding the proposed rule and provide our responses in this preamble. A summary of all other public comments on the proposed rules and the EPA's responses to those comments are available in "Summary of Public Comments and Responses for the Risk and Technology Reviews for the Surface Coating of Large Appliances; the Printing, Coating, and Dyeing of Fabrics and Other Textiles; and the Surface Coating of Metal Furniture," in Docket ID Nos. EPA-HQ-OAR-2017-0668, EPA-HQ-OAR-2017-0669, and EPA-HQ-OAR-2017-0670. A "track changes" version of the regulatory language that incorporates the changes in this action is available in the docket for each subpart.

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

- I. General Information
 - A. Does this action apply to me?
 - B. Where can I get a copy of this document and other related information?
 - C. Judicial Review and Administrative Reconsideration

- II. Background
 - A. What is the statutory authority for this action?
 - B. What are the source categories and how does the NESHAP regulate its HAP emissions?
 - C. What changes did we propose for the source categories in our September 12, 2018, RTR proposal?
- III. What is included in these final rules?
 - A. What are the final rule amendments based on the risk review for the Surface Coating of Large Appliances; Printing, Coating, and Dyeing of Fabrics and Other Textile; and Surface Coating of Metal Furniture source categories?
 - B. What are the final rule amendments based on the technology review for the source categories?
 - C. What are the final rule amendments addressing emissions during periods of SSM?
 - D. What other changes have been made to the NESHAP?
 - E. What are the effective and compliance dates of the standards?
 - F. What are the requirements for submission of performance test data to the EPA?
- IV. What is the rationale for our final decisions and amendments for these three surface coating source categories?
 - A. Residual Risk Reviews
 - B. Technology Reviews
 - C. Ongoing Emissions Compliance Demonstrations
 - D. Work Practice During Periods of Malfunction
- V. Summary of Cost, Environmental, and Economic Impacts and Additional Analyses Conducted
 - A. What are the affected facilities?
 - B. What are the air quality impacts?
 - C. What are the cost impacts?
 - D. What are the economic impacts?

- E. What are the benefits?
- F. What analysis of environmental justice did we conduct?
- G. What analysis of children's environmental health did we conduct?
- VI. Statutory and Executive Order Reviews
 - A. Executive Orders 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review
 - B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs
 - C. Paperwork Reduction Act (PRA)
 - D. Regulatory Flexibility Act (RFA)
 - E. Unfunded Mandates Reform Act (UMRA)
 - F. Executive Order 13132: Federalism
 - G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments
 - H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks
 - I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use
 - J. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR Part 51
 - K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations
 - L. Congressional Review Act (CRA)

I. General Information

A. Does this action apply to me?

Regulated entities. Categories and entities potentially regulated by this action are shown in Table 1 of this preamble.

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

NESHAP Source category	NAICS ¹ code	Regulated entities ²
Surface Coating of Large Appliances	335221	Household laundry equipment.
	335222	Household cooking equipment.
	335224	Household refrigerators and freezers.
	335228	Other major household appliances.
	333312	Commercial laundry, dry cleaning, and pressing equipment.
	333415	Air-conditioners (except motor vehicle), comfort furnaces, and industrial refrigeration units and freezers (except heat transfer coils and large commercial and industrial chillers).
	333319	Other commercial/service industry machinery, e.g., commercial dishwashers, ovens, and ranges, etc.
Printing, Coating, and Dyeing of Fabrics and Other Textiles.	31321	Broadwoven fabric mills.
	31322	Narrow fabric mills and Schiffli machine embroidery.
	313241	Weft knit fabric mills.
	313311	Broadwoven fabric finishing mills.
	313312	Textile and fabric finishing (except broadwoven fabric) mills.
	313320	Fabric coating mills.
	314110	Carpet and rug mills.
	326220	Rubber and plastics hoses and belting and manufacturing.
	339991	Gasket, packing, and sealing device manufacturing.
	337124	Metal Household Furniture Manufacturing.
Surface Coating of Metal Furniture	337214	Nonwood Office Furniture Manufacturing.
	337127	Institutional Furniture Manufacturing.
	337215	Showcase, Partition, Shelving, and Locker Manufacturing.
	337127	Institutional Furniture Manufacturing.
	332951	Hardware Manufacturing.
	332116	Metal Stamping.

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

NESHAP Source category	NAICS ¹ code	Regulated entities ²
	332612	Wire Spring Manufacturing.
	337215	Showcase, Partition, Shelving, and Locker Manufacturing.
	335121	Residential Electric Lighting Fixture Manufacturing.
	335122	Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing.
	339111	Laboratory Furniture Manufacturing.
	339114	Dental Equipment Manufacturing.
	337127	Institutional Furniture Manufacturing.
	81142	Reupholstery and Furniture Repair.
	922140	State correctional institutions that apply coatings to metal furniture.

¹ North American Industry Classification System.

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

³ Excluding special industry machinery, industrial and commercial machinery and equipment, and electrical machinery equipment and supplies not elsewhere classified.

Table 1 of this preamble is not intended to be exhaustive, but rather to provide a guide for readers regarding entities likely to be affected by the final action for the source categories listed. To determine whether your facility is affected, you should examine the applicability criteria in the appropriate NESHAP. If you have any questions regarding the applicability of any aspect of this NESHAP, please contact the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section of this preamble.

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

In addition to being available in the docket, an electronic copy of this final action will also be available on the internet. Following signature by the EPA Administrator, the EPA will post a copy of this final action at: <https://www.epa.gov/stationary-sources-air-pollution/printing-coating-and-dyeing-fabrics-and-other-textiles-national#rule-summary>, <https://www.epa.gov/stationary-sources-air-pollution/surface-coating-large-appliances-national-emission-standards>, and <https://www.epa.gov/stationary-sources-air-pollution/surface-coating-metal-furniture-national-emission-standards>. Following publication in the **Federal Register**, the EPA will post the **Federal Register** version and key technical documents at this same website.

Additional information is available on the RTR website at <https://www3.epa.gov/ttn/atw/rrisk/rtrpg.html>. This information includes an overview of the RTR program, links to project websites for the RTR source categories, and detailed emissions and other data we used as inputs to the risk assessments.

C. Judicial Review and Administrative Reconsideration

Under Clean Air Act (CAA) section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit (the Court) by May 14, 2019. Under CAA section 307(b)(2), the requirements established by these final rules may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce the requirements.

Section 307(d)(7)(B) of the CAA further provides that only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. This section also provides a mechanism for the EPA to reconsider the rule if the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within the period for public comment or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule. Any person seeking to make such a demonstration should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, EPA WJC South Building, 1200 Pennsylvania Ave. NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave. NW, Washington, DC 20460.

II. Background

A. What is the statutory authority for this action?

Section 112 of the CAA establishes a two-stage regulatory process to address emissions of hazardous air pollutants (HAP) from stationary sources. In the first stage, we must identify categories of sources emitting one or more of the HAP listed in CAA section 112(b) and then promulgate technology-based NESHAP for those sources. "Major sources" are those that emit, or have the potential to emit, any single HAP at a rate of 10 tons per year (tpy) or more, or 25 tpy or more of any combination of HAP. For major sources, these standards are commonly referred to as maximum achievable control technology (MACT) standards and must reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts). In developing MACT standards, CAA section 112(d)(2) directs the EPA to consider the application of measures, processes, methods, systems, or techniques, including but not limited to those that reduce the volume of or eliminate HAP emissions through process changes, substitution of materials, or other modifications; enclose systems or processes to eliminate emissions; collect, capture, or treat HAP when released from a process, stack, storage, or fugitive emissions point; are design, equipment, work practice, or operational standards; or any combination of the above.

For these MACT standards, the statute specifies certain minimum stringency requirements, which are referred to as MACT floor requirements, and which may not be based on cost considerations. See CAA section 112(d)(3). For new sources, the MACT floor cannot be less stringent than the emission control achieved in practice by the best-controlled similar source. The

MACT standards for existing sources can be less stringent than floors for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources in the category or subcategory (or the best-performing five sources for categories or subcategories with fewer than 30 sources). In developing MACT standards, we must also consider control options that are more stringent than the floor under CAA section 112(d)(2). We may establish standards more stringent than the floor, based on the consideration of the cost of achieving the emissions reductions, any non-air quality health and environmental impacts, and energy requirements.

In the second stage of the regulatory process, the CAA requires the EPA to undertake two different analyses, which we refer to as the technology review and the residual risk review. Under the technology review, we must review the technology-based standards and revise them "as necessary (taking into account developments in practices, processes, and control technologies)" no less frequently than every 8 years, pursuant to CAA section 112(d)(6). Under the residual risk review, we must evaluate the risk to public health remaining after application of the technology-based standards and revise the standards, if necessary, to provide an ample margin of safety to protect public health or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. The residual risk review is required within 8 years after promulgation of the technology-based standards, pursuant to CAA section 112(f). In conducting the residual risk review, if the EPA determines that the current standards provide an ample margin of safety to protect public health, it is not necessary to revise the MACT standards pursuant to CAA section 112(f).¹ For more information on the statutory authority for these final rules, see 83 **Federal Register** (FR) 46262, September 12, 2018.

¹ The Court has affirmed this approach of implementing CAA section 112(f)(2)(A): *NRDC v. EPA*, 529 F.3d 1077, 1083 (D.C. Cir. 2008) ("If EPA determines that the existing technology-based standards provide an 'ample margin of safety,' then the Agency is free to readopt those standards during the residual risk rulemaking.").

B. What are the source categories and how does the NESHAP regulate its HAP emissions?

1. What is the Surface Coating of Large Appliances source category and how does the current NESHAP regulate its HAP emissions?

The EPA promulgated the Surface Coating of Large Appliances source category NESHAP on July 23, 2002 (67 FR 48254). The standards are codified at 40 CFR part 63, subpart NNNN. The Surface Coating of Large Appliances industry consists of facilities that are engaged in the surface coating of a large appliance part or product. The source category covered by this MACT standard currently includes ten facilities.

The Surface Coating of Large Appliances NESHAP (40 CFR 63.4081) defines a "large appliance part or product" as "a component of a large appliance product manufactured for household, recreational, institutional, commercial, or industrial use," and defines a coating as a "material that is applied to a substrate for decorative, protective or functional purposes." This source category is further described in the September 12, 2018, RTR proposal. See 83 FR 46262, 46266–67.

The primary HAP emitted from this source category are organic HAP and include xylene, glycol ethers, toluene, methanol, ethyl benzene, methylene chloride, and methyl isobutyl ether with approximately 80 percent of the HAP emissions coming from coating operations and from the mixing and storage areas. The EPA estimates that HAP emissions are currently about 120 tpy. Most large appliance coating is currently applied either by using a spray gun in a spray booth, by dipping the substrate in a tank of coating, or by powder coating.

The Surface Coating of Large Appliances NESHAP specifies numerical emission limits for organic HAP emissions from surface coating application operations. The organic HAP emission limit for existing sources is 0.13 kilogram (kg) organic HAP/liter (1.1 pound/gallon (lb/gal)) of coating solids and for new or reconstructed sources is 0.022 kg organic HAP/liter (0.18 lb/gal) of coating solids.

The Surface Coating of Large Appliances NESHAP provides three compliance options for existing sources: (1) Compliant coatings, *i.e.*, all coatings have less than or equal to 0.13 kg organic HAP/liter (1.1 lb/gal) of coating solids; (2) emission rate without add-on controls; or (3) emission rate with add-on controls. Facilities using the compliant material option or the

emission rate without add-on controls option are not required to meet any work practice standards, but facilities that use add-on controls to demonstrate compliance must develop and implement a work practice plan and comply with site-specific operating limits for the emission capture and control system.

2. What is the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category and how does the current NESHAP regulate its HAP emissions?

The EPA promulgated the Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP on May 29, 2003 (68 FR 32172). The standards are codified at 40 CFR part 63, subpart OOOO. The Printing, Coating, and Dyeing of Fabrics and Other Textiles industry consists of facilities that are engaged in the printing, coating, slashing, dyeing, or finishing of fabrics and other textiles. The source category covered by this MACT standard currently includes 43 facilities.

The Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP (40 CFR 63.4371) defines a fabric as any woven, knitted, plaited, braided, felted, or non-woven material made of filaments, fibers, or yarns, including thread, and further defines textile as any one of the following: (1) Staple fibers and filaments suitable for conversion to or use as yarns, or for the preparation of woven, knit, or nonwoven fabrics; (2) yarns made from natural or manufactured fibers; (3) fabrics and other manufactured products made from staple fibers and filaments and from yarn; and (4) garments and other articles fabricated from fibers, yarns, or fabrics. The NESHAP also defines a coating material as an elastomer, polymer, or prepolymer material applied as a thin layer to a textile web. This source category is further described in the September 12, 2018, RTR proposal. See 83 FR 46264.

The primary HAP emitted from printing, coating, and dyeing operations are organic HAP and include toluene, phenol, methanol, and N,N-dimethylformamide. The majority of organic HAP emissions (greater than 95 percent) come from the coating and printing subcategories, with the remainder coming from dyeing and finishing. The EPA estimates that HAP emissions are currently about 737 tpy.

The Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP specifies numerical emission limits for organic HAP emissions from three subcategories: Printing and coating; dyeing and finishing; and slashing. The

organic HAP emissions limit for existing affected sources is 0.12 kg organic HAP/kg (lb/lb) of coating solids applied, and for new or reconstructed affected sources the emissions limit is 0.08 kg organic HAP/kg (lb/lb) of coating solids applied. Printing or coating-affected sources also may demonstrate compliance by achieving at least a 98-percent HAP reduction for new affected sources or a 97-percent HAP reduction for existing sources. Alternatively, new and existing sources using a thermal oxidizer may demonstrate compliance by achieving a HAP concentration at the oxidizer outlet of no greater than 20 parts per million by volume (ppmv) on a dry basis and having an emission capture system with 100-percent efficiency.

For new, reconstructed, or existing dyeing and finishing operations, the emissions limit for conducting dyeing operations is 0.016 kg organic HAP/kg (lb/lb) dyeing materials applied; the emissions limit for conducting finishing operations is 0.0003 kg organic HAP/kg (lb/lb) finishing materials applied; and the emissions limit for conducting both dyeing and finishing operations is 0.016 kg organic HAP/kg (lb/lb) dyeing and finishing materials applied.

For new, reconstructed, or existing slashing operations, the slashing materials 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).

Facilities using the compliant material option or the emission rate without add-on controls option are not required to meet any work practice standards, but facilities that use add-on controls to demonstrate compliance must develop and implement a work practice plan and comply with site-specific operating limits for the emission capture and control system.

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

The EPA promulgated the Surface Coating of Metal Furniture NESHAP on May 23, 2003 (68 FR 28606). The standards are codified at 40 CFR part 63, subpart RRRR. The Surface Coating of Metal Furniture industry consists of facilities that engage, either in part or in whole, in the surface coating of metal furniture. The Surface Coating of Metal Furniture NESHAP (40 CFR 63.4881) defines metal furniture as furniture or components of furniture constructed either entirely or partially from metal.

The source category covered by this MACT standard currently includes 16 facilities. This source category is further described in the September 12, 2018, RTR proposal. See 83 FR 46264.

Most of the organic HAP emissions from metal furniture surface coating operations occur from coating application operations and drying and curing ovens. Xylene, glycol ethers, ethylbenzene, toluene, and cumene account for more than 95 percent of the HAP emitted from the source category. The EPA estimates that HAP emissions are currently about 145 tpy.

The Surface Coating of Metal Furniture NESHAP provides existing sources three compliance options: (1) Use only compliant coatings, *i.e.*, all coatings have less than or equal to 0.10 kg organic HAP/liter (0.83 lb/gal) of coating solids used; (2) collectively manage the coatings such that the monthly emission rate of organic HAP is less than or equal to 0.10 kg organic HAP/liter (0.83 lb/gal) coating solids used; or (3) use emission capture systems and control devices to achieve an organic HAP emissions rate of less than or equal to 0.10 kg organic HAP/liter (0.83 lb/gal) coating solids used.

Facilities using the compliant material option or the emission rate without add-on controls option are not required to meet any work practice standards, but facilities that use add-on controls to demonstrate compliance must develop and implement a work practice plan and comply with site-specific operating limits for the emission capture and control system.

C. What changes did we propose for the source categories in our September 12, 2018, RTR proposal?

On September 12, 2018, the EPA published a proposed rule in the **Federal Register** for the Surface Coating of Large Appliances NESHAP; the Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP; and the Surface Coating of Metal Furniture NESHAP, 40 CFR part 63, subpart NNNN, 40 CFR part 63, subpart OOOO, and 40 CFR part 63, subpart RRRR, respectively, that took into consideration the RTR analyses.

We proposed to find that the risks from each of the source categories are acceptable, and that additional emission controls for each source category are not necessary to provide an ample margin of safety.

We also proposed the following amendments:

- Pursuant to the technology reviews for the Surface Coating of Large Appliances source category and the Surface Coating of Metal Furniture

source category, a requirement that, for each coating operation for which coatings are spray applied, high-efficiency spray equipment must be used if the source is not using the emission rate with add-on control compliance option;

- For each source category, a requirement for electronic submittal of notifications, semi-annual reports, and compliance reports (which include performance test reports);

- For each source category, revisions to the SSM provisions of each NESHAP in order to ensure that they are consistent with the Court decision in *Sierra Club v. EPA*, 551 F. 3d 1019 (D.C. Cir. 2008), which vacated two provisions that exempted source owners and operators from the requirement to comply with otherwise applicable CAA section 112(d) emission standards during periods of SSM;

- For each source category, adding 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;

- For each source category, removing references to paragraph (d)(4) of OSHA's Hazard Communication standard (29 CFR 1910.1200), which dealt with OSHA-defined carcinogens, and replacing that reference with a list of HAP that must be regarded as potentially carcinogenic based on EPA guidelines;

- For each source category, IBR of alternative test methods and references to updated alternative test methods; and
- Several minor editorial and technical changes in each subpart.

In the same notice, we requested comment on the following, although we did not propose actual rule amendments:

- Whether the EPA should change the reporting frequency for all reports submitted to the EPA from semi-annual to annual, for all three source categories;

- Whether, for all three source categories, additional performance testing should be required, with a specific request for comment on a requirement to conduct performance testing any time a source plans to undertake an operational change that may adversely affect compliance with an applicable standard, operating limit, or parametric monitoring value;

- Whether the Agency should ban the use of ethylene oxide in the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category under the technology review;

- Whether the Agency should establish a work practice for sources in the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category for periods of malfunction when an immediate line shutdown may not be feasible due to safety concerns, and concerns that an immediate shutdown would result in the unnecessary generation of hazardous waste; and

- The relationship between CAA sections 112(d)(6), technology review, and CAA section 112(f), residual risk review; specifically, the extent to which findings that underlie a CAA section 112(f) determination should be considered in making any determinations under CAA section 112(d)(6).

III. What is included in these final rules?

This action amends and finalizes the EPA's determinations pursuant to the RTR provisions of CAA section 112 for three rules—the Surface Coating of Large Appliances; the Printing, Coating, and Dyeing of Fabrics and Other Textiles; and the Surface Coating of Metal Furniture. This action also finalizes the following changes for each source category:

- A requirement for periodic performance testing of capture and control devices every 5 years;
- A requirement for electronic submittal of notifications, semi-annual reports, and compliance reports (which include performance test reports);
- Revising the SSM provisions of each NESHAP;
- Adding the option to conduct 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;
- Removing references to paragraph (d)(4) of OSHA's Hazard Communication standard (29 CFR 1910.1200), which dealt with OSHA-defined carcinogens, and replacing that reference with a list of HAP that must be regarded as potentially carcinogenic based on EPA guidelines;
- IBR of alternative test methods and references to updated alternative test methods and updated appendices; and
- Several minor technical amendments and clarifications of the applicability of the NESHAP and definitions.

A. What are the final rule amendments based on the risk review for the Surface Coating of Large Appliances; Printing, Coating, and Dyeing of Fabrics and Other Textile; and Surface Coating of Metal Furniture source categories?

This section describes the final amendments to the Surface Coating of Large Appliances NESHAP (40 CFR part 63, subpart NNNN); the Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP (40 CFR part 63, subpart OOOO); and the Surface Coating of Metal Furniture NESHAP (40 CFR part 63, subpart RRRR) being promulgated pursuant to CAA section 112(f). The EPA proposed no changes to these three subparts based on the risk reviews conducted pursuant to CAA section 112(f). In this action, we are finalizing our proposed determination that risks from these three subparts are acceptable, and that the standards provide an ample margin of safety to protect public health and prevent an adverse environmental effect. The EPA received no new data or other information during the public comment period that causes us to change that proposed determination. Therefore, we are not requiring additional controls under CAA section 112(f)(2) for any of the three subparts in this action.

B. What are the final rule amendments based on the technology review for the source categories?

For 40 CFR part 63, subpart NNNN, 40 CFR part 63, subpart OOOO, and 40 CFR part 63, subpart RRRR, we are not finalizing any revisions to the MACT standards under CAA section 112(d)(6) pursuant to our technology reviews.

C. What are the final rule amendments addressing emissions during periods of SSM?

We are finalizing, as proposed, changes to the Surface Coating of Large Appliances; the Printing, Coating, and Dyeing of Fabrics and Other Textiles; and the Surface Coating of Metal Furniture source categories NESHAP to eliminate the SSM exemption. Consistent with *Sierra Club v. EPA* 551 F. 3d 1019 (D.C. Cir. 2008), the EPA is establishing standards in these rules that apply at all times. Table 2 to Subpart NNNN of Part 63, Table 3 to Subpart OOOO of Part 63, and Table 2 to Subpart RRRR of Part 63 (General Provisions applicability table) are being revised to change several references related to requirements that apply during periods of SSM. We eliminated or revised certain recordkeeping and reporting requirements related to the eliminated SSM exemption. The EPA

also made changes to the rule to remove or modify inappropriate, unnecessary, or redundant language in the absence of the SSM exemption. We determined that facilities in these source categories can meet the applicable emission standards in the Surface Coating of Large Appliances; the Printing, Coating, and Dyeing of Fabrics and Other Textiles; and the Surface Coating of Metal Furniture NESHAP at all times, including periods of startup and shutdown. Therefore, the EPA determined that no additional standards are needed to address emissions during these periods. The legal rationale and detailed changes for SSM periods that we are finalizing today are set forth in the proposed rule. See 83 FR 46284 through 46288, 46295 through 46298, and 46305 through 46308.

We are finalizing a revision to the performance testing requirements at 40 CFR 63.4164, 40 CFR 63.4360, and 40 CFR 63.4963. The final performance testing provisions prohibit performance testing during startup, shutdown, or malfunction as these conditions are not representative of normal operating procedures. The final rules will also require that operators maintain records to document that operating conditions during the test represent normal operations.

D. What other changes have been made to the NESHAP?

These rules also finalize, as proposed, revisions to several other NESHAP requirements. We describe the revisions that apply to all the affected source categories in the following paragraphs.

To increase the ease and efficiency of data submittal and data accessibility, we are finalizing a requirement that owners and operators of facilities in the Surface Coating of Large Appliances; Printing, Coating, and Dyeing of Fabrics and Other Textiles; and Surface Coating of Metal Furniture source categories submit electronic copies of certain required performance test reports through the EPA's Central Data Exchange (CDX) website using an electronic performance test report tool called the Electronic Reporting Tool (ERT). We also are finalizing, as proposed, provisions that allow facility operators the ability to seek extensions for submitting electronic reports for circumstances beyond the control of the facility, *i.e.*, for a possible outage in the CDX or Compliance and Emissions Data Reporting Interface (CEDRI) or for a force majeure event in the time just prior to a report's due date, as well as the process to assert such a claim.

We are finalizing amendments to 40 CFR 63.4166(b), 40 CFR 63.4362(b), and

40 CFR 63.4965(b) to add the option of conducting EPA Method 18 of appendix A to 40 CFR part 60, "Measurement of Gaseous Organic Compound Emissions by Gas Chromatography," to measure and then subtract methane emissions from measured total gaseous organic mass emissions, as carbon, for those facilities using the emission rate with add-on control compliance option and EPA Method 25A to measure control device destruction efficiency. We also are finalizing the format of references to test methods in 40 CFR part 60, appendix A to indicate where, in the eight sections of appendix A, each method is found.

For each subpart, we are finalizing the proposal to remove the reference to paragraph (d)(4) of OSHA's Hazard Communication standard (29 CFR 1910.1200) and replace with a reference to a new table in each subpart (Table 5 to 40 CFR part 63, subpart NNNN, Table 6 to 40 CFR part 63, subpart OOOO, and Table 5 to 40 CFR part 63, subpart RRRR) that lists the organic HAP that must be included in calculating total organic HAP content of a coating material present at 0.1 percent or greater by mass. We are finalizing the a provision to include organic HAP in these tables 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),² 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 are including in the final rule for each subpart a requirement for facilities to conduct control device performance testing no less frequently than once every 5 years when using the emission rate with add-on controls compliance option. Facilities will be able to conduct these performance tests on the same schedule as their title V operating permit renewals. If the title V permit already requires performance testing, no additional testing will be required.

1. What other changes have been made to the Surface Coating of Large Appliances source category NESHAP?

We are finalizing several miscellaneous technical amendments to

² See <https://www.epa.gov/fera/dose-response-assessment-assessing-health-risks-associated-exposure-hazardous-air-pollutants>.

improve the clarity of the rule requirements:

- Clarifying that a thermocouple is part of the temperature sensor referred to in 40 CFR 63.4168(c)(3) for purposes of performing periodic calibration and verification checks;

- Renumbering 40 CFR 63.4130(k)(8) and (9) to be 40 CFR 63.4130(k)(7) and (8) because the current paragraph 40 CFR 63.4130(k) is missing a paragraph (k)(7);

- Revising the rule citation "§ 63.4130(k)(9)" in 40 CFR 63.4163(e) to be "§ 63.4130(k)(8)," consistent with the proposed renumbering of 40 CFR 63.4130(k)(9) to (k)(8);

- Clarifying that 40 CFR 63.4131(a) applies to all records that were submitted as reports electronically via the EPA's CEDRI and adding text to the same provision to clarify that the 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; and

- Revising 40 CFR 63.4141(b) and (c) to update ASTM International (ASTM) D1475-90 to ASTM D1475-13, including IBR of the newer version of the method.

We are finalizing corrections to several erroneous rule citations:

- Revising one instance in 40 CFR 63.4160(a)(1) and three instances in 40 CFR 63.4160(b)(1) that an erroneous rule citation "§ 63.4183" is specified. Section 63.4183 does not exist in 40 CFR part 63, subpart NNNN, and the corrected citation is "§ 63.4083";

- Revising one instance in 40 CFR 63.4110(b)(10) of an erroneous rule citation "§ 63.4081(d)." The corrected citation is "§ 63.4081(e)";

- Revising one instance in 40 CFR 63.4130(f) and one instance in 40 CFR 63.4130(g) of an erroneous rule citation of "§ 63.4141(a)." The corrected citation is "§ 63.4141";

- Revising one instance in 40 CFR 63.4168(c)(2) where an erroneous rule citation "§ 63.6167(b)(1) and (2)" is specified. The corrected citation is to "§ 63.4167(b)(1) and (2)";

- Revising the rule citation for "§ 63.4120(b)" specified in the fourth column of the table entry for "§ 63.10(d)(2)." The corrected citation is "§ 63.4120(h)";

- Revising the rule citation "§ 63.4120(b)" specified in the fourth column of the table entry for "§ 63.10(e)(3)." The corrected citation is "§ 63.4120(g)"; and

- Clarifying that 40 CFR 63.4152(c) requires a statement that the source was in compliance with the emission

limitations during the reporting period applies only if there were no deviations from the emission limitations.

The above clarifications and corrections were proposed in the September 12, 2018, RTR proposal. No comments were received during the public comment period and these changes are being finalized as proposed.

2. What other changes have been made to the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category NESHAP?

We are finalizing the proposal to amend 40 CFR 63.4350(a)(3) and (b)(3); and 40 CFR 63.4351(a) and (e) to correct the references to the alternative control device outlet organic HAP concentration limit from 20 parts per million by weight to 20 ppmv.

In addition, we are finalizing several miscellaneous technical amendments to improve the clarity of the rule requirements:

- Clarifying that a thermocouple is part of the temperature indicator referred to in 40 CFR 63.4364(c) for purposes of performing periodic calibration and verification checks;

- Clarifying that 40 CFR 63.4313(a) applies to all records that were submitted as reports electronically via the EPA's CEDRI and adding text to the same provision to clarify that the 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;

- Amending a reporting requirement in 40 CFR 63.4342(f) to harmonize the requirement with the same reporting requirement in 40 CFR 63.4311(a)(4) that requires the same statement to be reported if "there were no deviations from the emission limitations in §§ 63.4290, 63.4292, and 63.4293";

- Revising one instance in 40 CFR 63.4311(a)(7)(i)(B) to add a reference for an equation that is missing by adding "6" to the list of equations cited in 40 CFR 63.4311(a)(7)(i)(B) so that the citation reads "Equations 4, 4A, 5, 6, and 7 of § 63.4331";

- Revising one instance in 40 CFR 63.4340(b)(3) in which an erroneous rule citation to "§ 63.4561" is corrected to "§ 63.4341"; and

- Correcting Table 3 to 40 CFR part 63, subpart OOOO in the fourth column of the table entry for "§ 63.8(g)(1)-(5)" that erroneously refers to "sections 63.4342 and 63.4352." The correct reference is "Sections 63.4363 and 63.4364."

The above clarifications and corrections were proposed in the

September 12, 2018, RTR proposal. No comments were received during the public comment period and these changes are being finalized as proposed.

3. What other changes have been made to the Surface Coating of Metal Furniture source category NESHAP?

We are finalizing several proposed miscellaneous technical amendments to improve the clarity of the rule requirements:

- Clarifying that a thermocouple is part of the temperature sensor referred to in 40 CFR 63.4967(c)(3) for purposes of performing periodic calibration and verification checks;
- Clarifying that 40 CFR 63.4931(a) applies to all records that were submitted as reports electronically via the EPA's CEDRI and adding text to the same provision to clarify that the 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;
- Revising the second sentence of 40 CFR 63.4920(a)(4) to correct an erroneous reference to "the emission limitations in § 63.4890." The correct reference is to the applicable emission limitations in 40 CFR 63.4890, 63.4892, and 63.489;
- Changing "emission limitations" in the first sentence of 40 CFR 63.4920(a)(4) to "emission limits";
- Revising 40 CFR 63.4941(c) to update ASTM D1475-90 to ASTM D1475-13, including IBR of the newer version of the method;
- Revising 40 CFR 63.4951(c) to remove repetition with the cross-referenced 40 CFR 63.4941(c); and
- Correcting Table 2 to 40 CFR part 63, subpart RRRR in the fourth column of the table entry for "§ 63.10(e)(3)" for an erroneous rule citation of "§ 63.4920(b)." The correct rule citation is "§ 63.4920(a)."

The above clarifications and corrections were proposed in the September 12, 2018, RTR proposal. No comments were received during the public comment period and these changes are being finalized as proposed.

E. What are the effective and compliance dates of the standards?

The effective date of all three final rules is March 15, 2019. We are finalizing two changes that would

impact ongoing compliance requirements for each of these three subparts. We are adding a requirement that notifications, performance test results, and semiannual compliance reports be submitted electronically using the new template for each subpart that was included in the docket for each proposed rule. We are also changing 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. From our assessment of the timeframe needed for implementing the entirety of the revised requirements, the EPA proposed a period of 180 days to be the most expeditious compliance period practicable. No comments were received during the public comment period and the 180-day period is being finalized as proposed. Thus, the compliance date of the final amendments for all affected sources will be September 11, 2019.

F. What are the requirements for submission of performance test data to the EPA?

As proposed, the EPA is taking a step to increase the ease and efficiency of data submittal and data accessibility. Specifically, the EPA is finalizing the requirement for owners and operators of facilities in the Surface Coating of Large Appliances; the Printing, Coating, and Dyeing of Fabrics and Other Textiles; and the Surface Coating of Metal Furniture source categories to submit electronic copies of certain required performance test reports.

Data will be collected by direct computer-to-computer electronic transfer using EPA-provided software. This EPA-provided software is an electronic performance test report tool called the ERT (Electronic Reporting Tool). The ERT will generate an electronic report package which will be submitted to CEDRI, and then archived to the EPA's CDX. A description of the ERT and instructions for using ERT can be found at <https://www3.epa.gov/ttn/chief/ert/index.html>. CEDRI can be accessed through the CDX website (<https://cdx.epa.gov/>).

The requirement to submit performance test data electronically to the EPA does not create any additional performance testing and will apply only to those performance tests conducted using test methods that are supported by the ERT. A listing of the pollutants and

test methods supported by the ERT is available at the ERT website. Through this approach, industry will save time in the performance test submittal process. Additionally, this rulemaking will benefit industry by reducing recordkeeping costs, as the performance test reports that are submitted to the EPA using CEDRI are no longer required to be kept in hard copy.

State, local, and tribal agencies may benefit from a more streamlined and accurate review of performance test data that will become available to the public through WebFIRE. Having such data publicly available enhances transparency and accountability. For a more thorough discussion of electronic reporting of performance tests using direct computer-to-computer electronic transfer and using EPA-provided software, see the discussion in the preamble of the proposal.

In summary, in addition to supporting regulation development, control strategy development, and other air pollution control activities, having an electronic database populated with performance test data will save industry, state, local, tribal agencies, and the EPA significant time, money, and effort while improving the quality of emission inventories and air quality regulations.

IV. What is the rationale for our final decisions and amendments for these three surface coating source categories?

A. Residual Risk Reviews

1. What did we propose pursuant to CAA section 112(f)?

a. Surface Coating of Large Appliances (40 CFR part 63, Subpart NNNN) Source Category

Pursuant to CAA section 112(f), the EPA conducted a residual risk review and presented the results of this review, along with our proposed decisions regarding risk acceptability and ample margin of safety, in the September 12, 2018, proposed rule for 40 CFR part 63, subpart NNNN (83 FR 46262). The results of the risk assessment for the proposal are presented briefly below in Table 2 of this preamble. More detail is in the residual risk technical support document, "Residual Risk Assessment for the Surface Coating of Large Appliances Source Category in Support of the May 2018 Risk and Technology Review Proposed Rule," available in the docket for this rulemaking.

TABLE 2—SURFACE COATING OF LARGE APPLIANCES SOURCE CATEGORY INHALATION RISK ASSESSMENT RESULTS AT PROPOSAL

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	0.9	1	0	50	0.0001	0.0002	0.07	0.08	HQREL = 2
Whole Facility	6	.....	600	.....	0.0002	.....	0.2	.....

¹ The target organ-specific hazard index (TOSHI) is the sum of the chronic noncancer hazard quotients (HQ) values 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 (HQREL = hazard quotient recommended exposure level).

The results of the proposal 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 0.9-in-1 million, the maximum chronic noncancer TOSHI value based on actual emissions could be up to 0.07, and the maximum screening acute noncancer HQ value (off-facility site) could be up to 2 (driven by glycol ethers). At proposal, the total annual cancer incidence (national) from these facilities based on actual emission levels was estimated to be 0.0001 excess cancer cases per year, or one case in every 10,000 years.

The results of the proposal inhalation risk modeling using allowable emissions data, as shown in Table 2 of this preamble, indicate that the maximum individual cancer risk based on allowable emissions (lifetime) could be up to 1-in-1 million, and the maximum chronic noncancer TOSHI value based on allowable emissions could be up to 0.08. At proposal, the total annual cancer incidence (national) from these facilities based on allowable emission levels was estimated to be 0.0002 excess cancer cases per year, or one case in every 5,000 years.

The maximum whole-facility cancer maximum individual risk (MIR) was determined to be 6-in-1 million at proposal, driven by chromium (VI) compounds from a cleaning/pretreatment operation. At proposal, the total estimated cancer incidence from whole facility emissions was determined to be 0.0002 excess cancer cases per year, or one excess case in every 5,000 years. Approximately 600 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 the 10 facilities in

this source category. The maximum facility-wide TOSHI for the source category was estimated to be 0.2, driven by emissions of methylene diphenyl diisocyanate from foam produced as part of plastic products manufacturing.

There are no persistent and bioaccumulative HAP (PB HAP) emitted by facilities in this source category. Therefore, we did not estimate any human health multi-pathway risks from this source category. Two environmental HAP are emitted by sources within this source category: Hydrogen chloride (HCl) and hydrogen fluoride (HF). Therefore, at proposal we conducted a screening-level evaluation of the potential adverse environmental risks associated with emissions of HCl and HF. Based on this evaluation, we proposed that we do not expect an adverse environmental effect as a result of HAP emissions from this source category.

We weighed all health risk factors, including those shown in Table 2 of this preamble, in our risk acceptability determination and proposed that the residual risks from the Surface Coating of Large Appliances source category are acceptable (section IV.A.2.a of proposal preamble, 83 FR 46279, September 12, 2018).

We then considered whether 40 CFR part 63, subpart NNNN provides an ample margin of safety to protect public health and prevents, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. In considering whether the standards should be tightened to provide an ample margin of safety to protect public health, we considered the same risk factors that we considered for our acceptability determination and also considered the costs, technological feasibility, and other relevant factors related to

emissions control options that might reduce risk associated with emissions from the source category.

As discussed further in section III.B. of this preamble, the only development identified in the technology review was the use of high-efficiency spray equipment. We estimated no changes in costs or emissions would occur due to switching to high-efficiency application methods for this source category, because we expected that large appliance surface coating facilities already are using high-efficiency coating application methods due to state volatile organic compound (VOC) rules and the economic incentives of using more efficient application methods. Because quantifiable reductions in risk are unlikely, we proposed that additional emissions controls for this source category are not necessary to provide an ample margin of safety (section IV.A.2.b. of proposal preamble, 83 FR 46279, September 12, 2018).

b. Printing, Coating, and Dyeing of Fabrics and Other Textiles (40 CFR Part 63, Subpart OOOO) Source Category

Pursuant to CAA section 112(f), the EPA conducted a residual risk review and presented the results of this review, along with our proposed decisions regarding risk acceptability and ample margin of safety, in the September 12, 2018, proposed rule for 40 CFR part 63, subpart OOOO (83 FR 46262). The results of the risk assessment for the proposal are presented briefly below in Table 3 of this preamble. More detail is in the residual risk technical support document, "Residual Risk Assessment for the Printing, Coating, and Dyeing of Fabrics and Other Textiles Source Category in Support of the May 2018 Risk and Technology Review Proposed Rule," available in the docket for this rulemaking.

TABLE 3—PRINTING, COATING, AND DYEING OF FABRICS AND OTHER TEXTILES SOURCE CATEGORY INHALATION RISK ASSESSMENT RESULTS AT PROPOSAL

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	9	10	8,500	10,000	0.002	0.002	0.3	0.3	HQREL = 0.6
Whole Facility	9	.....	12,200	.....	0.003	.....	0.3	.....

¹ The target organ-specific hazard index (TOSHI) is the sum of the chronic noncancer hazard quotient (HQ) values 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 (HQREL = hazard quotient recommended exposure level).

The results of the proposal inhalation risk modeling using actual emissions data, as shown in Table 3 of this preamble, indicate that the maximum individual cancer risk based on actual emissions (lifetime) could be up to 9-in-1 million (driven by ethylene oxide), the maximum chronic noncancer TOSHI value based on actual emissions could be up to 0.3, and the maximum screening acute noncancer HQ value (off-facility site) could be up to 0.6. At proposal, the total annual cancer incidence (national) from these facilities based on actual emission levels was estimated to be 0.002 excess cancer cases per year, or one case in every 500 years.

The results of the proposal inhalation risk modeling using allowable emissions data, as shown in Table 3 of this preamble, indicate that the maximum individual cancer risk based on allowable emissions (lifetime) could be up to 10-in-1 million (driven by ethylene oxide), the maximum chronic noncancer TOSHI value based on allowable emissions could be up to 0.3. At proposal, the total annual cancer incidence (national) from these facilities based on allowable emission levels was estimated to be 0.002 excess cancer cases per year, or one case in every 500 years.

The maximum facility-wide cancer MIR was 9-in-1 million at proposal, driven by ethylene oxide from fabric finishing. The results of our facility-wide assessment at proposal indicated that 12 facilities have a facility-wide cancer MIR greater than or equal to 1-in-1 million. At proposal the total estimated cancer incidence from whole facility emissions was determined to be 0.003 excess cancer cases per year, or one excess case in every 330 years. Approximately 12,200 people were

estimated to have cancer risks above 1-in-1 million from exposure to HAP emitted from both MACT and non-MACT sources collocated at the 43 facilities in this source category. The maximum facility-wide TOSHI for the source category was estimated to be 0.3, driven by emissions of trichloroethylene from adhesive application.

There are no PB-HAP emitted by facilities in this source category. Therefore, we did not estimate any human health multi-pathway risks from this source category. Environmental HAP are not emitted by sources within this source category; therefore, we do not expect an adverse environmental effect as a result of HAP emissions from this source category.

We weighed all health risk factors, including those shown in Table 3 of this preamble, in our risk acceptability determination, and proposed that the residual risks from the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category are acceptable (section IV.B.2.a of proposal preamble, 83 FR 46292, September 12, 2018).

We then considered whether 40 CFR part 63, subpart OOOO provides an ample margin of safety to protect public health and prevents, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. In considering whether the standards should be tightened to provide an ample margin of safety to protect public health, we considered the same risk factors that we considered for our acceptability determination and also considered the costs, technological feasibility, and other relevant factors related to emissions control options that might reduce risk associated with emissions from the source category.

Based on our review, we did not identify any developments in add-on control technologies, other equipment or work practices and procedures since the promulgation of the Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP. We note, however, that the only facility that previously reported ethylene oxide emissions no longer emits this HAP as a result of a process change. Therefore, we proposed that additional emissions controls for this source category are not necessary to provide an ample margin of safety (section IV.B.2.b. of proposal preamble, 83 FR 46293, September 12, 2018). However, we solicited comment on whether the Agency should ban the use of ethylene oxide in this source category under the technology review (section VI of proposal preamble, 83 FR 46313, September 12, 2018). Our response to these comments and rationale for our final decision are found in section IV.B of this preamble.

c. Surface Coating of Metal Furniture (40 CFR Part 63, Subpart RRRR) Source Category

Pursuant to CAA section 112(f), the EPA conducted a residual risk review and presented the results of this review, along with our proposed decisions regarding risk acceptability and ample margin of safety, in the September 12, 2018, proposed rule for 40 CFR part 63, subpart RRRR (83 FR 46262). The results of the risk assessment for the proposal are presented briefly below in Table 4 of this preamble. More detail is in the residual risk technical support document, "Residual Risk Assessment for the Surface Coating of Metal Furniture Source Category in Support of the May 2018 Risk and Technology Review Proposed Rule," available in the docket for this rulemaking.

TABLE 4—SURFACE COATING OF METAL FURNITURE SOURCE CATEGORY INHALATION RISK ASSESSMENT RESULTS AT PROPOSAL

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	Based on allowable emissions	
Source Category	7	10	2,100	4,200	0.0004	0.0008	0.2	0.3	HQREL = 2
Whole Facility	7	.....	2,200	.....	0.0005	.....	0.1	.....

¹ The TOSHI is the sum of the chronic noncancer HQ values 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 (HQREL = hazard quotient recommended exposure level).

The results of the proposal 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 7-in-1 million (driven by ethyl benzene), the maximum chronic noncancer TOSHI value based on actual emissions could be up to 0.2, and the maximum screening acute noncancer HQ value (off-facility site) could be up to 2 (driven by glycol ethers). At proposal, the total annual cancer incidence (national) from these facilities based on actual emission levels was estimated to be 0.0004 excess cancer cases per year, or one case in every 2,500 years.

The results of the proposal inhalation risk modeling using allowable emissions data, as shown in Table 4 of this preamble, indicate that the maximum individual cancer risk based on allowable emissions (lifetime) could be up to 10-in-1 million (driven by ethyl benzene), the maximum chronic noncancer TOSHI value based on allowable emissions could be up to 0.3. At proposal, the total annual cancer incidence (national) from these facilities based on allowable emission levels was estimated to be 0.0008 excess cancer cases per year, or one case in every 1,250 years.

The maximum facility-wide cancer MIR was 7-in-1 million at proposal, driven by ethyl benzene. Four facilities had a facility-wide cancer MIR greater than or equal to 1-in-1 million. At proposal, the total cancer incidence from whole facility emissions was estimated to be 0.0005 excess cancer cases per year, or one excess case in every 2,000 years. Approximately 2,200 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 the 16 facilities in this source category. The maximum facility-wide TOSHI for the source category was estimated to be 0.1.

There are no PB-HAP emitted by facilities in this source category.

Therefore, we did not estimate any human health multi-pathway risks from this source category. Environmental HAP are not emitted by sources within this source category; therefore, we do not expect an adverse environmental effect as a result of HAP emissions from this source category.

We weighed all health risk factors, including those shown in Table 4 of this preamble, in our risk acceptability determination, and proposed that the residual risks from the Surface Coating of Metal Furniture source category are acceptable (section IV.C.2.a of proposal preamble, 83 FR 46301, September 12, 2018).

We then considered whether 40 CFR part 63, subpart RRRR provides an ample margin of safety to protect public health and prevents, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. In considering whether the standards should be tightened to provide an ample margin of safety to protect public health, we considered the same risk factors that we considered for our acceptability determination and also considered the costs, technological feasibility, and other relevant factors related to emissions control options that might reduce risk associated with emissions from the source category.

As discussed in detail in section III.B of this preamble, the only development identified in the technology review was the use of high-efficiency spray equipment. We estimated no changes in costs or emissions reductions would occur due to switching to high-efficiency application methods for this source category because we expected that metal furniture surface coating facilities were already using high-efficiency coating application methods due to state VOC rules and the economic incentives of using these more efficient application methods. Because quantifiable reductions in risk are unlikely, we proposed that additional emissions controls for this source

category were not necessary to provide an ample margin of safety (section IV.C.2.b. of proposal preamble, 83 FR 46302, September 12, 2018).

2. How did the risk review change?

We have not changed any aspect of the risk assessment since the September 2018 proposal for any of the three source categories.

3. What key comments did we receive on the risk reviews, and what are our responses?

We received comments in support of and against the proposed residual risk review and our determination that no revisions were warranted under CAA section 112(f)(2) for all three source categories. Generally, the comments that were not supportive of the determination from the risk reviews suggested changes to the underlying risk assessment methodology. For example, some commenters stated that the EPA should lower the acceptability benchmark so that risks below 100-in-1 million are unacceptable, include emissions outside of the source categories in question in the risk assessment, and assume that pollutants with noncancer health risks have no safe level of exposure. After review of all the comments received, we determined that no changes were necessary. The comments and our specific responses can be found in the document, "Summary of Public Comments and Responses for the Risk and Technology Reviews for Surface Coating of Large Appliances; Printing, Coating, and Dyeing of Fabrics and Other Textiles; and Surface Coating of Metal Furniture," available in the dockets for these actions (Docket ID Nos. EPA-HQ-OAR-2017-0668, EPA-HQ-OAR-2017-0669, and EPA-HQ-OAR-2017-0670).

4. What is the rationale for our final approach and final decisions for the risk reviews?

As noted in our proposal, the EPA sets standards under CAA section 112(f)(2) using “a two-step standard-setting approach, with an analytical first step to determine an ‘acceptable risk’ that considers all health information, including risk estimation uncertainty, and includes a presumptive limit on MIR of “approximately 1-in-10 thousand” (see 54 FR 38045, September 14, 1989). We weigh all health risk factors in our risk acceptability determination, including the cancer MIR, cancer incidence, the maximum cancer TOSHI, the maximum acute noncancer HQ, the extent of noncancer risks, the distribution of cancer and noncancer risks in the exposed population, and the risk estimation uncertainties.

Since proposal, neither the risk assessment nor our determinations regarding risk acceptability, ample margin of safety, or adverse environmental effects have changed. For the reasons explained in the proposed rule, we determined that the risks from each of these three source categories are acceptable, and the current standards provide an ample margin of safety to protect public health and prevent an adverse environmental effect. Therefore, we are not revising any of these three subparts to require additional controls pursuant to CAA section 112(f)(2) based on the residual risk review, and we are readopting the existing standards under CAA section 112(f)(2).

B. Technology Reviews

1. What did we propose pursuant to CAA section 112(d)(6)?

The Surface Coating of Large Appliances NESHAP and the Surface Coating of Metal Furniture NESHAP do not contain any standards specifying the type of spray application equipment that must be used when coatings are spray applied. Sources subject to the Printing, Coating, and Dyeing of Fabric and Other Textiles NESHAP do not spray apply coatings. However, many facilities complying with these NESHAP also are required by state VOC regulations to use high-efficiency spray guns for coatings that are spray applied. We expected that other large appliance surface coating and metal furniture surface coating facilities in other states are also using high-efficiency application equipment for spray-applied coatings to reduce coating and spray booth filter consumption and to reduce the amount of solid waste generated in the form of used spray booth filters.

Although we expected that switching to high-efficiency spray application equipment would have lower costs at facilities not already using it, we are uncertain of other factors that facilities may need to consider if choosing to switch to high-efficiency application equipment.

Based on these findings, we proposed to revise the Surface Coating of Large Appliances NESHAP and the Surface Coating of Metal Furniture NESHAP for coating application operations pursuant to CAA section 112(d)(6) to require that, for each coating operation for which coatings are spray applied, high-efficiency spray equipment must be used if the source is not using the emission rate with add-on control compliance option. Specifically, all spray-applied coating operations, where the source is not using the emission rate with add-on control compliance option, would have been required to achieve transfer efficiency equivalent to or better than 65 percent. At proposal four types of high-efficiency spray equipment technologies were identified that the EPA believed could achieve transfer efficiency equivalent to or better than 65 percent, including high volume, low pressure (HVLP) spray equipment; electrostatic application; airless spray equipment; and air-assisted airless spray equipment. Alternative spray equipment technologies would have had to provide documentation demonstrating at least 65-percent transfer efficiency. Spray application equipment sources using alternative spray application equipment technologies other than the four listed would have had to follow procedures in the California South Coast Air Quality Management District’s, “Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989,” to demonstrate that their spray application equipment is capable of achieving transfer efficiency equivalent to, or better than, 65 percent. Equivalency documentation would have been certified by manufacturers of the spray equipment, on behalf of facilities using spray-applied coatings, by following the aforementioned procedure in conjunction with California South Coast Air Quality Management District’s, “Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns, September 26, 2002.” We proposed that all spray equipment used for spray-applied coating operations be required to be operated according to company procedures, local specified operating procedures, or the manufacturer’s specifications, whichever achieved 65-percent transfer

efficiency. Further, we proposed related definitions for “airless and air-assisted airless spray,” “electrostatic application,” “high-volume, low-pressure (HVLP) spray equipment,” “spray-applied coating operations,” and “transfer efficiency.”

For the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category, we identified one potential development in technology: A process change that eliminated the use of ethylene oxide at one facility. In our residual risk analysis for this source category, we estimated the maximum facility-wide cancer MIR to be 9-in-1 million, driven by ethylene oxide emissions from fabric finishing at one facility. During a site visit to the facility that reported ethylene oxide emissions in the National Emission Inventory, we learned that the ethylene oxide emissions were overstated by the facility. The facility confirmed that it no longer uses the ethylene oxide-containing material due to cost. We noted this was the only facility that reported ethylene oxide emissions, and we concluded that ethylene oxide-containing materials are no longer used in the industry, based on our information. We solicited comment on whether the Agency should ban the use of ethylene oxide in this source category under the technology review.

We also solicited comment on the relationship between the CAA section 112(d)(6) technology review and the CAA section 112(f) risk review. We solicited comment on whether revisions to the NESHAP are “necessary,” as the term is used in CAA section 112(d)(6), in situations where the EPA has determined that CAA section 112(d) standards evaluated pursuant to CAA section 112(f) provide an ample margin of safety to protect public health and prevent an adverse environmental effect. In other words, we solicited comment on whether it is “necessary” to revise the standards based on developments in technologies, practices, or processes under CAA section 112(d)(6) if remaining risks associated with air emissions from a source category have already been reduced to levels that provide an ample margin of safety under CAA section 112(f). See CAA section 112(d)(6) (“The Administrator shall review, and revise as necessary . . .”). We also solicited comment on whether further revisions under CAA section 112(d)(6) would be necessary if the CAA section 112(f) ample margin of safety analysis shows lifetime excess cancer risks to the individual most exposed to emissions from a source in the category is less than 1-in-1 million or if other, either higher

or lower, cancer risk levels would be appropriate to consider if they assured an ample margin of safety.

2. How did the technology review change?

We are not finalizing the proposal to require the use of high-efficiency application equipment for spray-applied coatings in the Surface Coating of Large Appliances NESHAP and the Surface Coating of Metal Furniture NESHAP.

We solicited comment on the potential process change that eliminated the use of ethylene oxide at one facility, but did not propose this requirement for the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category. Based on the comments we received, we are making no changes as a result of the technology review to the Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP.

3. What key comments did we receive on the technology reviews, and what are our responses?

Comment: One commenter supported the EPA's proposal to require Large Appliances and Metal Furniture facilities to use high-efficiency spray equipment as a technology development under CAA section 112(d)(6). However, the commenter disagreed with the EPA's conclusion that all or most sources are likely using high-efficiency spray equipment. They argued that the EPA provided no evidence there would be no emission reduction, and argued that the proposed requirement would prevent emission increases in the future if economic incentives or state rules currently encouraging the use of high-efficiency spray equipment change.

Another commenter objected to the proposed language that all "spray application equipment must be operated according to company procedures, local specified operating procedures, and/or the manufacturer's specifications, whichever is most stringent, at all times." The commenter argued that it was unclear how facilities would ensure the equipment is operated according to the more stringent approach so as to avoid having a potential permit deviation/violation even though they may still be complying with the underlying numerical emission standard.

Response: The EPA has determined not to finalize the proposed requirement for all sources to use high-efficiency spray application technology that has a transfer efficiency of at least 65 percent because we believe our assumptions at proposal may not be appropriate for all coating-related processes in the metal furniture and large appliances source

categories. We do not have sufficient data at this time to determine if the high-efficiency spray application technology requirement is reasonable from a technological perspective.

At proposal, a critical assumption we made was that the four high-efficiency spray equipment technologies required in the proposed rulemaking (HVLV, electrostatic application, airless and air assisted airless spray equipment) would achieve at least 65-percent transfer efficiency when used by all facilities in the Surface Coating of Metal Furniture and Surface Coating of Large Appliances source categories. New information, however, leads us to conclude that the transfer efficiency of the proposed high-efficiency spray application technologies may be less than 65 percent, as it is dependent on parameters such as part size, part shape, distance of the spray gun from the parts, atomizing air pressure, fluid pressure, painting technique, type of coating, viscosity of the coating, and more. Generally, the smaller and narrower the part being coated, the lower the transfer efficiency. Conversely, the larger and wider the part being painted, the higher the transfer efficiency. Therefore, transfer efficiency varies greatly source category-by-source category. In both the Surface Coating of Metal Furniture and Surface Coating of Large Appliances source categories, parts are of various shapes and sizes; therefore, transfer efficiency using high-efficiency spray application technologies could be lower than the 65-percent transfer efficiency requirement in the proposed rule, depending on the size and shape of the parts being coated.

Additionally, we did not receive any data that would allow us to determine the actual average transfer efficiency of the spray application technologies we identified in the proposed rule. In light of this uncertainty, we conclude it would be difficult, if not impossible, to determine at this time the appropriate high-efficiency spray application technologies or transfer efficiency to require. Absent more data and information, we are not able to adequately estimate the technical feasibility of the proposed 65-percent transfer efficiency requirement for the Surface Coating of Metal Furniture and Surface Coating of Large Appliances source categories.

The situation for the Surface Coating of Metal Furniture and Surface Coating of Large Appliances source categories is different from other rules where we have required use of high-efficiency spray application. For example, the high-efficiency spray application requirements in the Aerospace

Manufacturing and Rework Operations NESHAP were based on available data that allowed us to estimate the technological feasibility of the requirements. Absent similar data for the Surface Coating of Metal Furniture and Surface Coating of Large Appliances source categories, we believe it is not reasonable to require the use of the high-efficiency spray application technologies proposed pursuant to CAA section 112(d)(6) at this time. The EPA, in the future, may be able to determine the technological capabilities of high-efficiency spray application equipment for the Surface Coating of Metal Furniture and Surface Coating of Large Appliances source categories and revisit the need to require such spray application equipment when we have sufficient data and information.

Finally, as noted in the proposed rule, we believe that most, if not all, sources in the Surface Coating of Metal Furniture and Surface Coating of Large Appliances source categories are already using the types of spray application technologies in the proposed rule pursuant to state requirements. We believe that sources will continue to use these technologies, even if it is not required in this final rule, because of the lower coating consumption and waste disposal costs. Nothing in the record supports the comments that states may remove these existing spray application technology requirements from current regulations. We do not expect sources to change from high-efficiency spray technology to lower-efficiency spray equipment, even if state requirements changed, unless there was a specific application that did not work with high-efficiency spray technology. In those cases, the limits on the HAP content of coatings would still apply. We do not think it is reasonable to assume sources would choose higher the coating and waste disposal costs associated with non-high-efficiency spray technology and incur the costs to switch back to non-high-efficiency spray technology, even if state requirements were removed.

For all these reasons, we are not finalizing the proposed requirement for sources in the Surface Coating of Metal Furniture and Surface Coating of Large Appliances source categories to use high-efficiency spray application equipment.

Comment: One commenter argued that the EPA should revise the Coating, Printing, and Dyeing of Fabric and Other Textiles NESHAP to ban the use of ethylene oxide. The commenter argued that failing to ban the use of ethylene oxide would allow facilities to

begin using and emitting this chemical in the future.

Two commenters argued that they saw no justification or rationale to support a ban on the use of ethylene oxide in the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category because the decision by one company to stop using materials containing ethylene oxide based on cost did not represent a development in new control technologies, processes, or practices that could be deemed applicable and achievable by the rest of the source category. One of the commenters argued that, unlike technology changes where efficiency gains, emissions reductions, and similar advances are not easily reversed, market forces frequently change the business justification for and against using particular products.

The two commenters argued that the record reflects only a decision by one company based on a set of factors that may be applicable to only that one company and does not provide the statement of basis and purpose required by CAA section 307(d)(3). The commenters argued that additional information and data would be needed on potential costs and emissions reductions and stated that the EPA has not shown whether similar reductions are achievable across the source category. They argued that this information would need to be available for public review and comment. Otherwise, the EPA's proposal would be arbitrary and capricious.

Response: We received no additional information from other facilities in the Printing, Coating, and Dyeing of Fabric and Other Textiles source category on whether they use materials containing ethylene oxide. In addition, we cannot determine whether one facility's decision to stop using the material containing ethylene oxide as a cost savings measure demonstrates that all applications of ethylene oxide should be foreclosed as a development in technology. If sources in this category were to later determine that materials with ethylene oxide are necessary for a particular application, the sources would still be required to comply with the NESHAP limits on the HAP content of materials or HAP emissions for sources using add-on controls. Therefore, total HAP emissions are unlikely to increase even if sources were to start using ethylene oxide containing materials. Under these circumstances, we have determined it is not reasonable to conclude that ethylene oxide containing coatings should be prohibited for use by all sources in the category as an advancement in

technology. Finally, we cannot determine whether finalizing a ban on the use of materials containing ethylene oxide would reduce HAP from the source category or otherwise achieve any environmental or risk reduction benefits. For these reasons, we are not finalizing a ban on the use of materials containing ethylene oxide.

Comment: We received several substantive and extensive comments in response to our request for comments on the relationship between the technology review conducted under CAA section 112(d)(6) and the risk analysis under CAA section 112(f)(2) and whether it is necessary for the EPA to amend rules based on CAA section 112(d) to reflect the results of the CAA section 112(d)(6) technology review if the results of the risk analysis under CAA section 112(f)(2) show that the current rule provides an ample margin of safety and no adverse environmental effect. One commenter argued that the EPA must complete the technology review and propose standards based on the findings of that review, regardless of the results of the risk analysis. Other commenters argued that the results of the risk analysis should be considered in the "necessity" determination that should be completed in the process of deciding whether to amend a subpart as a result of the technology review.

Response: The EPA is not taking final action on the proposed interpretation discussed in this comment. Instead, the EPA has determined for the reasons described in this notice not to implement the proposed amendments to 40 CFR part 63, subparts NNNN, OOOO, or RRRR based on our technology review. As we are not relying on the proposed interpretation in our final action, we are not addressing the comments we received regarding the relationship between the technology review conducted under CAA section 112(d)(6) and the risk analysis under CAA section 112(f)(2).

4. What is the rationale for our final approach for the technology reviews?

As noted above, we are not finalizing the proposed requirement to use high-efficiency spray application equipment with a 65-percent or better transfer efficiency. We received no information in response to our request for comment on whether any facilities in this source category do not currently use high-efficiency spray application methods, so it is unclear whether the proposed requirement is achievable for all sources in the category. We also received information indicating that the four types of high-efficiency spray application equipment described in our

proposed rule do not always achieve the 65-percent transfer efficiency that we proposed to require for high-efficiency spray equipment.

We are not including in the final rule amendments for the Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP any requirements to ban the use of ethylene oxide in this source category. We received no additional information from other facilities on whether they use materials containing ethylene oxide, so we cannot determine whether a ban would achieve any environmental or risk reduction benefits.

C. Ongoing Emissions Compliance Demonstrations

1. What did we propose?

The EPA requested comment for all three source categories on whether additional performance testing should be required for any source using the add-on control option based on information from pollution control manufacturers indicating that periodic performance tests are necessary to ensure HAP removal efficiency for the controls is maintained over time. See Proposed Rule, 83 FR 46289. We specifically requested comment on whether we should require performance testing for a source that is planning to undertake an operational change that may adversely affect compliance with an applicable standard, operating limit, or parametric monitoring value. Any such requirement would have included provisions to allow a source to make the change, but it would have limited the change to a specific time before a test is required. We anticipated that a reasonable time limit under the new operations change would be approximately 30 days to allow adequate time for testing and developing a test report. The source would submit temperature and flow rate data during the test to establish new operating parameters, including the time a source would be allowed to operate under the new parameters before the test is performed, and what would constitute an operational change requiring testing.

This approach on which we requested comment could have also allowed an exception from periodic testing for facilities using instruments to continuously measure actual emissions, such as continuous emission monitoring systems (CEMS). Use of CEMS to demonstrate compliance would obviate the need for periodic oxidizer testing.

2. What changed since proposal?

In the final rule amendments for each subpart, the EPA is requiring performance testing of control devices at least every 5 years for facilities complying with the emission rate with add-on controls compliance option. The EPA solicited comment on the need for additional performance testing in the proposed rule (see sections IV.A.4.d, IV.B.4.d, and IV.C.4.d of the Surface Coating of Large Appliances; Printing, Coating, and Dyeing of Fabrics and Other Textiles; and Surface Coating of Metal Furniture Residual Risk and Technology Reviews, 83 FR 46289, 46299, and 46309, September 12, 2018).

3. What key comments did we receive and what are our responses?

Comment: One commenter did not support the requirement to complete additional add-on control performance testing after operational changes that may adversely affect compliance because the EPA did not define the operational changes that would trigger the need for performance testing. The commenter argued that the EPA did not define the anticipated costs, burdens, and benefits associated with this testing. The commenter also argued that the suggested 30-day period for testing and development of a test report is too short. The commenter recommended a period of at least 180 days to allow time to hire a testing contractor, to achieve stable (representative) operating conditions before the test, and to allow time for the contractor to prepare the report.

Another commenter supported the testing requirement after a process change that could affect compliance with an emission limit and noted that it was a common feature of MACT rules. The commenter suggested that examples of a process change could include venting additional equipment to the control device, an increase in line speeds, an increase in coating materials used, or use of new coating materials. However, the commenter also suggested that the 30-day timeframe to perform a test after a process change does not seem adequate to allow a facility time to schedule an outside contractor to perform the required testing, test report preparation, review by responsible official, and submission of results. The commenter recommended a 60-day or 90-day timeframe as more appropriate.

Response: The EPA is not finalizing a requirement to require add-on control performance testing after operational changes that may adversely affect compliance. The EPA acknowledges the difficulty in defining operational changes for each source category that

would trigger the need for performance testing, as the EPA proposed. However, as described in the preamble to the proposed rules, the EPA recognizes the need for periodic performance testing after the initial performance test to measure the organic HAP destruction or removal efficiency of the add-on control device, or to measure the control device outlet concentration of organic HAP. As stated in the proposed rule, pollution control manufacturers maintain that additional performance testing is needed to ensure the control devices are operating properly. Continuous compliance with the standards when a facility is using the emission rate with add-on control or the control device outlet concentration compliance options that are included in each of these three subparts depends on the proper functioning of the control device.

Periodic performance tests require the measurement of the control devices' actual destruction efficiency or the actual outlet concentration of organic HAP, depending on the compliance option chosen, in order to reaffirm or reestablish the control devices' operating limits. Periodic performance tests help identify potential degradation of the add-on control device over time and ensure the control device remains effective, reducing the potential for acute emissions episodes or non-compliance. As stated in the proposed rule, many facilities using add-on controls to demonstrate compliance with the NESHAP emission limits are currently required to conduct performance tests as a condition for renewing their title V operating permit, which is required every 5 years. Also, specifying a specific performance test interval addresses the uncertainty of when tests would be required was raised by the commenters.

Therefore, the EPA is including in the final rule for each subpart a requirement that each facility using the emission rate with add-on control compliance option or the control device outlet concentration compliance option must complete a performance test of the add-on control device no less frequently than every 5 years. This approach will balance the need to ensure ongoing compliance against providing objective criteria for when performance testing must be completed.

The periodic testing requirement is being added to each subpart but is not estimated to impose any costs on the Surface Coating of Large Appliances or Surface Coating of Metal Furniture sources categories. No facilities in the Surface Coating of Metal Furniture source category are known to be using the emission rate with add-on controls

compliance option. One facility in the Surface Coating of Large Appliances source category is using the emission rate with the add-on controls compliance option, but already is required to conduct performance testing every 5 years as a condition of renewing their title V operating permit. In the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category, we have identified 13 facilities using 18 control devices that are not currently required to perform testing as a condition of renewing their title V operating permits. We estimate that performance testing will cost approximately \$19,000 per control device once every 5 years. The annualized cost will be about \$4,400 per control device.

One environmental benefit of periodic performance testing is expected to be in the form of reduced excess emissions from sources using add-on controls, even though facilities are required to be in compliance at all times, and the overall costs and benefits of a NESHAP are calculated based on the assumption that facilities are in compliance. However, this benefit cannot be quantified because our data are not sufficient to estimate the frequency of sources using add-on control devices failing to meet the emission standards, and the magnitude of the excess emissions. If, for example, the standard has a requirement for 98-percent control (e.g., for new or reconstructed coating and printing affected sources under 40 CFR part 63, subpart OOOO), and the device is achieving only 96-percent, emissions are twice what they would be if the device was meeting the standard. This potential for significant increases in HAP from poor performing controls further supports the requirement to conduct periodic testing every 5 years.

4. What is the rationale for our final approach?

For the reasons explained in the preamble to the proposed rules (83 FR 46262, September 12, 2018) and in the comment responses above in section IV.C.3 of this preamble, we are finalizing requirements in each of these three subparts to require add-on control performance testing no less frequently than once every 5 years.

D. Work Practice During Periods of Malfunction

1. What did we propose?

The EPA requested comment on the need to establish a standard during periods of malfunction of a control device or a capture system that is used to meet the emission limits for the

Printing, Coating, and Dyeing of Fabrics and Other Textiles source category and asked for specific information to support such a standard. We solicited information from industry on best practices and the best level of emission control during malfunction events for the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category. We solicited information on the potential cost savings associated with these practices. We solicited specific supporting data on organic HAP emissions during malfunction events for this category, including the cause of malfunction, the frequency of malfunction, duration of malfunction, and the estimate of organic HAP emitted during each malfunction. We also asked specifically for comment on the use of CEMS by facilities in this source category as a method to better quantify organic HAP emissions during malfunctions and normal operation. We also requested comment on two alternative work practices: (1) During a malfunction, the facility must discontinue the coating operation, but can continue the oven curing of any coating materials already applied onto the web without the control device for the period of the malfunction so long as it continues to meet the emission limits for the current compliance period; or (2) during a malfunction, the facility could initiate repairs immediately and complete them as expeditiously as possible, without ceasing operations, until it becomes apparent that the repairs will not be completed before exceeding the 12-month rolling average compliance limit. Neither alternative provided an opportunity to exceed the emissions limit. (See section IV.B.4.b of the Surface Coating of Large Appliances; Printing, Coating, and Dyeing of Fabrics and Other Textiles; and Surface Coating of Metal Furniture Residual Risk and Technology Reviews, 83 FR 46295, September 12, 2018).

2. What changed since proposal?

The EPA is not providing a work practice standard for periods of malfunction of a control device or a capture system for the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category in the final rule amendments.

3. What key comments did we receive and what are our responses?

Comment: One commenter supported the work practice standard that would apply during malfunctions of any control device or capture system used by a web coating line, described as alternative 1 in the proposal preamble, and requested that the EPA develop a

malfunction alternative that balances the generation of waste (from inadequate drying; cured coatings in lines and guns; and generation of waste coatings) and/or worker safety with exceeding emission limits. However, the commenter did not provide any supporting data or information in response to the EPA's specific solicitation in the proposal preamble.

Another commenter did not support a work practice standard and noted that it was unlawful to add a malfunction exemption or set a so-called malfunction-based standard for any source category, including the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category, because, among other arguments, emission standards must be "continuous." A complete summary of the comments received on the EPA's proposal is included in the docket for this rulemaking.

Response: The EPA is not finalizing a separate standard for periods of malfunction, although the EPA may establish a standard for periods of malfunction if the available information supports a separate standard in the future. In this case, we requested comment and information to support the development of a work practice standard during periods of malfunction, but we did not receive sufficient information, including additional quantitative emissions data, on which to base a standard for periods of malfunction. Absent sufficient information, it is not reasonable at this time to establish a work practice standard for this source category. We will continue to review this issue to determine if any new data become available in the future.

4. What is the rationale for our final approach?

We are not finalizing a separate standard for periods of malfunction for the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category, because we did not receive sufficient information on which to base a standard for periods of malfunction.

V. Summary of Cost, Environmental, and Economic Impacts and Additional Analyses Conducted

A. What are the affected facilities?

We estimate that the 10 major sources subject to the Surface Coating of Large Appliances NESHAP, the 43 major sources subject to the Printing, Coating and Dyeing of Fabrics and Other Textiles NESHAP, and the 16 major sources subject to the Surface Coating of Metal Furniture NESHAP are operating

in the United States and will be affected by these final rules.

B. What are the air quality impacts?

We are not establishing new emission limits and are not requiring additional controls; therefore, no air quality impacts are expected as a result of the final amendments to the rule. Requiring periodic performance testing has the potential to reduce excess emissions from sources using poorly performing add-on controls, even though facilities are required to be in compliance at all times.

The final amendments will have no effect on the energy needs of the affected facilities in any of the three source categories, and would, therefore, have no indirect or secondary air emissions impacts.

C. What are the cost impacts?

We estimate that each facility in the three source categories will experience costs as a result of these final amendments for reporting. Specifically, 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 VI.C of this preamble.

We estimate that in the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category, 13 facilities using 18 control devices may be affected by the final rule requirements to conduct control device performance testing no less frequently than every 5 years. It is also assumed that 5 percent of the tests will need to be repeated, so that 19 total performance tests will be required. The total annualized cost will be about \$4,400 per control device, with additional tests of control devices at the same facility costing 25 percent less due to reduced travel costs. The total annualized cost is approximately \$77,000 per year for the source category, including retests, with an additional \$3,300 in reporting costs per test in the year in which the test occurs.

We estimate that no facilities in the Surface Coating of Large Appliances source category nor in the Surface

Coating of Metal Furniture source category will be affected by the final rule requirements to conduct control device performance testing no less frequently than every 5 years. Only one facility in those two categories is currently using add-on controls to comply, and it is already required to conduct performance tests as a condition of their operating permit.

For further information on the potential costs, see the memoranda titled *Estimated Costs/Impacts of the 40 CFR Part 63 Subparts NNNN, OOOO and RRRR Monitoring Reviews*, February 2018, in the Surface Coating of Large Appliances Docket, Printing, Coating, and Dyeing of Fabrics and Other Textiles Docket, and Surface Coating of Metal Furniture Docket.

D. What are the economic impacts?

For the final revisions to the NESHAP for the Surface Coating of Large Appliances, the total cost in 2019 is estimated to be \$23,000 (in 2016 dollars) for the 10 affected entities and is expected to range from 0.000002 to 0.02 percent of annual sales revenue per affected entity. 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 final revisions to the NESHAP for the Printing, Coating, and Dyeing of Fabrics and Other Textiles, the total cost in 2019 is estimated to be \$90,000 (in 2016 dollars) for the 43 affected entities. Thirteen facilities will also incur performance testing and additional reporting costs, which we assume will occur in 2021. The annualized cost of each performance test is approximately \$4,400, with additional tests of control devices at the same facility costing 25 percent less due to reduced travel costs. The reporting cost for each test is approximately \$3,100. The 2018 equivalent annualized value of the present value of the costs (in 2016 dollars) for the analysis period (2019–2025) is estimated to be approximately \$72,000 annually when assuming a 3-percent discount rate and \$75,000 annually when assuming a 7-percent discount rate. The estimated maximum

cost faced by affected entities is expected to range from 0.00002 to 0.42 percent of annual sales revenue per ultimate owner of affected entities. 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 final revisions to the NESHAP for the Surface Coating of Metal Furniture, the total cost in 2019 is estimated to be \$32,000 (in 2016 dollars) for the 16 affected entities and is expected to range from 0.00007 to 0.02 percent of annual sales revenue per ultimate owner of affected entities. 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.

E. What are the benefits?

As stated in section V.B. of the September 12, 2018, RTR proposal (83 FR 46311), we were unable to quantify the specific emissions reductions associated with eliminating the SSM exemption. We also are unable to quantify potential environmental benefits as a result of adding the requirement to conduct periodic add-on control device performance tests (e.g., reduced emissions of organic HAP during periods of non-compliance). However, any reduction in HAP emissions would be expected to provide health benefits in the form of improved air quality and less exposure to potentially harmful chemicals.

F. What analysis of environmental justice did we conduct?

Executive Order 12898 (59 FR 7629, February 16, 1994) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

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 kilometers (km) and within 50 km of the facilities. In the analysis, we evaluated the distribution of HAP-related cancer and noncancer risks from each source category across different demographic groups within the populations living near facilities.

1. Surface Coating of Large Appliances

The results of the demographic analysis for the Surface Coating of Large Appliances source category indicate that, for two of the 11 demographic groups, “African American” and “Below the Poverty Level,” the percentage of the population living within 5 kilometers (km) of facilities in the source category is greater than the corresponding national percentage for the same demographic groups. When examining the risk levels of those exposed to emissions from large appliance coating facilities, we find that no one is exposed to a cancer risk at or above 1-in-1 million or to a chronic noncancer hazard index (HI) greater than 1 based on actual emissions from the source category.

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 Large Appliances Source Category Operations* in the Surface Coating of Large Appliances Docket.

2. Printing, Coating, and Dyeing of Fabrics and Other Textiles

The results of the demographic analysis for the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category are summarized in Table 5 of this preamble. These results, for various demographic groups, are based on the estimated risks from actual emissions levels for the population living within 50 km of the facilities.

TABLE 5—PRINTING, COATING, AND DYEING OF FABRICS AND OTHER TEXTILES SOURCE CATEGORY DEMOGRAPHIC RISK ANALYSIS RESULTS

	Nationwide	Population with cancer risk at or above 1-in-1 million due to printing, coating, and dyeing of fabrics and other textiles	Population with chronic noncancer HI Above 1 due to printing, coating, and dyeing of fabrics and other textiles
Total Population	317,746,049	8,500	0
White and Minority by Percent			
White	62	54	0
Minority	38	46	0
Minority Detail by Percent			
African American	12	39	0
Native American	0.8	0.02	0
Hispanic	18	5	0
Other and Multiracial	7	2	0
Income by Percent			
Below Poverty Level	14	26	0
Above Poverty Level	86	74	0
Education by Percent			
Over 25 and without High School Diploma	14	21	0
Over 25 and with a High School Diploma	86	79	0

The results of the Printing, Coating, and Dyeing of Fabrics and Other Textiles source category demographic analysis indicate that emissions from the source category expose approximately 8,500 people to a cancer risk at or above 1-in-1 million and no one 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,” “Over 25 Without

a High School Diploma,” and “Below the Poverty Level.”

The methodology and the results of the demographic analysis are presented in a technical report, *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Printing, Coating, and Dyeing of Fabrics and Other Textiles Source Category Operations*, available in the Printing, Coating, and Dyeing of Fabrics and Other Textiles Docket.

3. Surface Coating of Metal Furniture

The results of the demographic analysis for the Surface Coating of Metal Furniture source category are summarized in Table 6 below. These results, for various demographic groups, are based on the estimated risks from actual emissions levels for the population living within 50 km of the facilities.

TABLE 6—SURFACE COATING OF METAL FURNITURE SOURCE CATEGORY DEMOGRAPHIC RISK ANALYSIS RESULTS

	Nationwide	Population with cancer risk at or above 1-in-1 million due to surface coating of metal furniture source category	Population with chronic noncancer HI above 1 due to surface coating of metal furniture source category
Total Population	317,746,049	2,100	0
White and Minority by Percent			
White	62	62	0
Minority	38	38	0

TABLE 6—SURFACE COATING OF METAL FURNITURE 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 furniture source category	Population with chronic noncancer HI above 1 due to surface coating of metal furniture source category
Minority Detail by Percent			
African American	12	7	0
Native American	0.8	0	0
Hispanic	18	30	0
Other and Multiracial	7	2	0
Income by Percent			
Below Poverty Level	14	23	0
Above Poverty Level	86	77	0
Education by Percent			
Over 25 and without High School Diploma	14	34	0
Over 25 and with a High School Diploma	86	66	0

The results of the Surface Coating of Metal Furniture source category demographic analysis indicate that emissions from the source category expose approximately 2,100 people to a cancer risk at or above 1-in-1 million and no one 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: “Hispanic or Latino,” “Over 25 Without a High School Diploma,” and “Below the Poverty Level.”

The methodology and the results of the demographic analysis are presented in the technical report, Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Surface Coating of Metal Furniture Source Category Operations, available in the Surface Coating of Metal Furniture Docket.

G. What analysis of children’s environmental health did we conduct?

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 summarized in section IV.A of this preamble and are further documented in the *Large Appliances Risk Assessment Report, Fabrics and Other Textiles Risk Assessment Report,*

and Metal Furniture Risk Assessment Report in the Surface Coating of Large Appliances Docket, Printing, Coating, and Dyeing of Fabrics and Other Textiles Docket, and Surface Coating of Metal Furniture Docket, respectively.

VI. 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 Orders 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 the Office of Management and Budget (OMB) for review.

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

This action is not 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 each of these three subparts have been submitted for approval to OMB under the PRA.

1. Surface Coating of Large Appliances

The Information Collection Request (ICR) document that the EPA prepared

has been assigned EPA ICR number 1954.08. You can find a copy of the ICR in the Surface Coating of Large Appliances Docket (Docket ID No. EPA–HQ–OAR–2017–0670), and it is briefly summarized here.

As part of the RTR for the Surface Coating of Large Appliances NESHAP, the EPA is not revising the emission limitation requirements for this subpart. The EPA has revised the SSM provisions of the rule and is requiring the use of electronic data reporting for future performance test data submittals and semi-annual reporting. This information would be collected to assure compliance with 40 CFR part 63, subpart NNNN. The EPA is finalizing a requirement to conduct control device performance testing no less frequently than once every 5 years for facilities using the emission rate with add-on controls compliance option, but this is not estimated to affect any facilities in this source category.

Respondents/affected entities: Facilities performing surface coating of large appliances.

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

Estimated number of respondents: In the 3 years after the amendments are final, approximately 10 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 30. Years 2 and 3 would have no responses.

Total estimated burden: The average annual burden to the large appliance facilities over the 3 years after the amendments are final is estimated to be 77 hours (per year). The average annual burden to the Agency over the 3 years after the amendments are final is estimated to be 15 hours (per year) for the Agency. Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: The average annual cost to the large appliance facilities is \$7,700 in labor costs, in the first 3 years after the amendments are final. The total average annual Agency cost over the first 3 years after the amendments are final is estimated to be \$700.

2. Printing, Coating, and Dyeing of Fabrics and Other Textiles

The ICR document that the EPA prepared has been assigned EPA ICR number 2071.08. You can find a copy of the ICR in the Printing, Coating, and Dyeing of Fabrics and Other Textiles Docket (Docket ID No. EPA-HQ-OAR-2017-0668), and it is briefly summarized here.

As part of the RTR for the Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP, the EPA is not revising the emission limitation requirements for this subpart. The EPA has revised the SSM provisions of the rule and is requiring the use of electronic data reporting for future performance test data submittals and semiannual reports. This information is being collected to assure compliance with 40 CFR part 63, subpart OOOO. The EPA is finalizing a requirement to conduct control device performance testing no less frequently than once every 5 years for facilities using the emission rate with add-on controls compliance option.

Respondents/affected entities:

Facilities performing printing, coating, and dyeing of fabrics and other textiles.

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

Estimated number of respondents: In the 3 years after the amendments are final, approximately 43 respondents per year will be subject to the NESHAP and no additional respondents are expected to become subject to the NESHAP during that period. The EPA estimates that 13 facilities will be required to conduct performance testing for 19 control devices in the 3 years after the amendments are final.

Frequency of response: The total number of responses in year 1 is 129.

Year 2 will have no responses. Year 3 will have 19 responses related to control device performance tests.

Total estimated burden: The average annual burden to the Printing, Coating, and Dyeing of Fabrics and Other Textiles coating facilities over the 3 years after amendments are finalized is estimated to be 548 hours (per year). The average annual burden to the Agency over the 3 years after the amendments are final is estimated to be 133 hours (per year) for the Agency. Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: The average annual cost to the Printing, Coating, and Dyeing of Fabrics and Other Textiles coating facilities is \$50,000 in labor costs and \$120,000 in capital and operation and maintenance 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 \$14,000.

3. Surface Coating of Metal Furniture

The ICR document that the EPA prepared has been assigned EPA ICR number 1952.08. You can find a copy of the ICR in the Surface Coating of Metal Furniture Docket (Docket ID No. EPA-HQ-OAR-2017-0669), and it is briefly summarized here.

As part of the RTR for the Surface Coating of Metal Furniture NESHAP, the EPA is not revising the emission limitations for this subpart. The EPA has revised the SSM provisions of the rule and is requiring the use of electronic data reporting for future performance test data submittals and semi-annual reporting. This information would be collected to assure compliance with 40 CFR part 63, subpart RRRR. The EPA is finalizing a requirement to conduct control device performance testing no less frequently than once every 5 years for facilities using the emission rate with add-on controls compliance option, but this is not estimated to affect any facilities in this source category.

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

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

Estimated number of respondents: In the 3 years after the amendments are final, approximately 16 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 48. Years 2 and 3 would have no responses.

Total estimated burden: The average annual burden to the large appliance facilities over the 3 years after the amendments are finalized is estimated to be 123 hours (per year). The average annual burden to the Agency over the 3 years after the amendments are final is estimated to be 25 hours (per year) for the Agency. Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: The average annual cost to the metal furniture facilities is \$11,000 in labor costs in the first 3 years after the amendments are final. The total average annual Agency cost over the first 3 years after the amendments are final is estimated to be \$1,200.

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.

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. This action will not impose any requirements on small entities. No facilities meeting the Small Business Administration's definition of a small business will face significant control costs, based on the economic impact analysis completed for this action. More information and details of this analysis is provided in the technical documents titled *Economic Impact and Small Business Screening Assessments for the National Emission Standards for Hazardous Air Pollutants for the Surface Coating of Large Appliances (Subpart NNNN)*, *Economic Impact and Small Business Screening Assessments for the National Emission Standards for Hazardous Air Pollutants for the Printing, Coating, and Dyeing of Fabrics and Other Textiles (Subpart OOOO)*, and *Economic Impact and Small Business Screening Assessments for the National Emission Standards for Hazardous Air Pollutants for the Surface Coating of Metal Furniture (Subpart RRRR)*, available in the Surface Coating of Large Appliances Docket, Printing, Coating, and Dyeing of Fabrics and Other Textiles Docket, and Surface Coating of Metal Furniture Docket, respectively.

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 (large appliances surface coating; printing, coating, and dyeing of fabrics and other textiles; surface coating of metal furniture). 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 IV.A of this preamble.

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 action involves technical standards. The EPA amended the three NESHAP in this action to provide owners and operators with 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 subtract methane emissions from measured total gaseous organic mass emissions as carbon.

For the Surface Coating of Metal Furniture NESHAP, the Printing, Coating, and Dyeing of Fabrics and Other Textiles NESHAP, and the

Surface Coating of Large Appliances NESHAP, the EPA incorporates by reference ASTM D2369-10 (2015)^e, "Test Method for Volatile Content of Coatings," which describes a procedure for the determination of the weight percent volatile content of solvent-borne and water-borne coatings, as an acceptable alternative to EPA Method 24, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings."

For the Surface Coating of Large Appliances NESHAP, the EPA incorporates by reference ASTM D2111-10 (2015), "Standard Test Methods for Specific Gravity of Halogenated Organic Solvents and Their Admixtures." These test methods cover the determination of the specific gravity of halogenated organic solvents and solvent admixtures. In addition, the EPA incorporates by reference ASTM D1475-13, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products," which is already specified in 40 CFR part 63, subpart NNNN, and covers the measurement of density of paints, inks, varnishes, lacquers, and components thereof, other than pigments, when in fluid form.

We found three voluntary consensus standards already allowed in the Surface Coating of Large Appliances NESHAP and the Surface Coating of Metal Furniture NESHAP that have been replaced with newer versions of the methods. ASTM D1475-13, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products," has replaced ASTM D1475-90; ASTM D2697-03 (2014), "Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings," believed to be applicable to the determination of the volume of nonvolatile matter of a variety of coatings, has replaced ASTM D2697-86 (1998); and ASTM D6093-97 (2016), "Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using Helium Gas Pycnometer," which covers the determination of the percent volume nonvolatile matter of a variety of clear and pigmented coatings, has replaced ASTM D6093-97 (2003).

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 <https://www.astm.org/>.

The EPA decided not to include certain other voluntary consensus standards; these methods are impractical as alternatives because of the lack of equivalency, documentation,

validation date, and other important technical and policy considerations. The search and review results have been documented and are in the memoranda titled *Voluntary Consensus Standard Results for Surface Coating of Large Appliances*, March 2018, *Voluntary Consensus Standard Results for Printing, Coating, and Dyeing of Fabrics and Other Textiles*, March 2018, and *Voluntary Consensus Standard Results for Surface Coating of Metal Furniture*, March 2018, in the Surface Coating of Large Appliances Docket (Docket ID No. EPA-HQ-OAR-2017-0670), Printing, Coating, and Dyeing of Fabrics and Other Textiles Docket (Docket ID No. EPA-HQ-OAR-2017-0668), and Surface Coating of Metal Furniture Docket (Docket ID No. EPA-HQ-OAR-2017-0669), 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.

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

The EPA believes that these final actions do 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). This action increases the level of environmental protection for all affected populations. The results of this evaluation are contained in section IV.A of this preamble and the technical reports, *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Printing, Coating, and Dyeing of Fabrics and Other Textiles Source Category Operations*, September 2017; *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Surface Coating of Metal Furniture Source Category Operations*, October 2017; and *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Surface Coating of Large Appliances Source Category Operations Demographic Analysis*, September 2017, which are available in the dockets for this action.

L. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Appendix A, Hazardous substances, Incorporation by reference, Printing, coating, and dyeing of fabrics and other textiles, Reporting and recordkeeping requirements, Surface coating of large appliances, Surface coating of metal furniture.

Dated: December 20, 2018.

Andrew R. Wheeler,
Acting Administrator.

For the reasons stated in the preamble, part 63 of title 40, chapter I, of the Code of Federal Regulations is amended 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:
■ a. Revising paragraphs (h)(13), (21), (26), (30), and (79).
■ b. Removing in paragraph (h)(78) the text "63.4141, 63.4741(b), 63.4941(b)."
The revisions read as follows:

§ 63.14 Incorporations by reference.

* * * * *

(h) * * *
(13) ASTM D1475–13, Standard Test Method for Density of Liquid Coatings, Inks, and Related Products, approved November 1, 2013, IBR approved for §§ 63.4141(b) and (c), 63.4741(b) and (c), 63.4751(c), and 63.4941(b) and (c).

* * * * *

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

* * * * *

(26) ASTM D2369–10 (Reapproved 2015)*, Standard Test Method for Volatile Content of Coatings, approved June 1, 2015, IBR approved for §§ 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), and 63.4961(j).

* * * * *

(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 §§ 63.4141(b), 63.4741(a) and (b), and 63.4941(b).

* * * * *

(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 §§ 63.4141(b), 63.4741(a) and (b), and 63.4941(b).

* * * * *

Subpart NNNN—National Emission Standards for Hazardous Air Pollutants: Surface Coating of Large Appliances

■ 3. Section 63.4100 is amended by revising paragraphs (b) and (d) to read as follows:

§ 63.4100 What are my general requirements for complying with this subpart?

* * * * *

(b) Before September 12, 2019, 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 September 12, 2019, 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.

* * * * *

(d) Before September 12, 2019, if your affected source uses an emission capture system and add-on control device, you must develop a written startup, shutdown, and malfunction plan

according to the provisions in § 63.6(e)(3). The plan must address the startup, shutdown, and corrective actions in the event of a malfunction of the emission capture system or the add-on control device. The plan must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures. A startup, shutdown, and malfunction plan is not required on and after September 12, 2019.

■ 4. Section 63.4110 is amended by revising paragraph (b)(9)(v) to read as follows:

§ 63.4110 What notifications must I submit?

* * * * *

(b) * * *
(9) * * *

(v) Before September 12, 2019, a statement of whether or not you developed the startup, shutdown, and malfunction plan required by § 63.4100(d). This statement is not required on and after September 12, 2019.

* * * * *

■ 5. Section 63.4120 is amended by revising paragraphs (d), (e), (g), and (j) introductory text to read as follows:

§ 63.4120 What reports must I submit?

* * * * *

(d) If you use the compliant material option and there was a deviation from the applicable emission limit in § 63.4090, the semiannual compliance report must contain the information in paragraph (d)(1) or (2) of this section, as applicable.

(1) Before September 12, 2019, the information in paragraphs (d)(1)(i) through (iv) of this section.

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

(ii) The determination of the organic HAP content, according to § 63.4141(d), for each coating identified in paragraph (d)(1)(i) of this section. You do not need to submit background data supporting this calculation, for example, information provided by coating suppliers or manufacturers or test reports.

(iii) The determination of mass fraction of organic HAP for each thinner and cleaning material identified in paragraph (d)(1)(i) of this section. You do not need to submit background data supporting this calculation, for example, information provided by material

suppliers or manufacturers or test reports.

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

(2) On and after September 12, 2019, if there was a deviation from the applicable emission limit in § 63.4090, the semiannual compliance report must contain the information in paragraphs (d)(2)(i) through (v) of this section.

(i) Identification of each coating used that deviated from the emission limit, each thinner and cleaning material used that contained organic HAP, and the date, time, and duration each was used.

(ii) The determination of the organic HAP content, according to § 63.4141(d), for each coating identified in paragraph (d)(2)(i) of this section. You do not need to submit background data supporting this calculation, for example, information provided by coating suppliers or manufacturers or test reports.

(iii) The determination of mass fraction of organic HAP for each thinner and cleaning material identified in paragraph (d)(2)(i) of this section. You do not need to submit background data supporting this calculation, for example, information provided by material suppliers or manufacturers or test reports.

(iv) A statement of the cause of each deviation (including unknown cause, if applicable).

(v) 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 emission limit in § 63.4090, and a description of the method used to estimate the emissions.

(e) If you use the emission rate without add-on controls option and there was a deviation from the applicable emission limitation in § 63.4090, the semiannual compliance report must contain the information in paragraph (e)(1) or (2), as applicable.

(1) Before September 12, 2019, the information in paragraphs (e)(1)(i) through (iii) of this section.

(i) The beginning and ending dates of each compliance period during which the organic HAP emission rate exceeded the emission limit.

(ii) The calculations used to determine the organic HAP emission rate for the compliance period in which the deviation occurred. You must provide the calculations for Equations 1, 1A through 1C, 2, and 3 in § 63.4151; and, if applicable, the calculation used to determine the organic HAP in waste materials according to § 63.4151(e)(4). You do not need to submit background data supporting these calculations, for example, information provided by

materials suppliers or manufacturers or test reports.

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

(2) On and after September 12, 2019, if there was a deviation from the applicable emission limit in § 63.4090, the semiannual compliance report must contain the information in paragraphs (e)(2)(i) through (iv) of this section.

(i) The beginning and ending dates of each compliance period during which the organic HAP emission rate exceeded the emission limit.

(ii) The calculations used to determine the organic HAP emission rate for the compliance period in which the deviation occurred. You must provide the calculations for Equations 1, 1A through 1C, 2, and 3 in § 63.4151; and, if applicable, the calculation used to determine the organic HAP in waste materials according to § 63.4151(e)(4). You do not need to submit background data supporting these calculations, for example, information provided by materials suppliers or manufacturers or test reports.

(iii) A statement of the cause of each deviation (including unknown cause, if applicable).

(iv) The number of deviations, a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit in § 63.4090, and a description of the method used to estimate the emissions.

* * * * *

(g) If you use the emission rate with add-on controls option and there was a deviation from an emission limitation (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere), the semiannual compliance report must contain the information in paragraph (g)(1) or (2) of this section, as applicable.

(1) Before September 12, 2019, the information in paragraphs (g)(1)(i) through (xiv) of this section. This includes periods of startup, shutdown, and malfunction during which deviations occurred.

(i) The beginning and ending dates of each compliance period, during which the organic HAP emission rate exceeded the applicable emission limit in § 63.4090.

(ii) The calculations used to determine the organic HAP emission rate for each compliance period in which a deviation occurred. You must provide the calculation of the total mass of organic HAP emissions for the coatings, thinners, and cleaning materials used during the compliance period, using Equations 1, 1A through

1C, and 2 of § 63.4151 and, if applicable, the calculation used to determine the mass of organic HAP in waste materials according to § 63.4151(e)(4); the calculation of the total volume of coating solids used during the compliance period, using Equation 2 of § 63.4151; the calculation of the mass of organic HAP emission reduction during the compliance period by emission capture systems and add-on control devices, using Equations 1, 1A through 1C, 2, 3, and 3A through 3C of § 63.4161; and the calculation of the organic HAP emission rate, using Equation 4 of § 63.4161. You do not need to submit the background data supporting these calculations, for example, information provided by materials suppliers or manufacturers or test reports.

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

(iv) A brief description of the CPMS.

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

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

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

(viii) The date and time period of each deviation from an operating limit in Table 1 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.

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

(x) A breakdown of the total duration of the deviations from the operating limits in Table 1 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.

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

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

device since the last semiannual reporting period.

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

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

(2) On and after September 12, 2019, the information in paragraphs (g)(2)(i) through (xii), (xiv), and (xv) of this section if there was a deviation from the applicable emission limit in § 63.4090 or the applicable operating limit(s) in Table 1 to this subpart (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere) and the information in paragraph (g)(2)(xiii) of this section if there was a deviation from the work practice standards in § 63.4093(b).

(i) The beginning and ending dates of each compliance period during which the organic HAP emission rate exceeded the applicable emission limit in § 63.4090.

(ii) The calculations used to determine the organic HAP emission rate for each compliance period in which a deviation occurred. You must provide the calculation of the total mass of organic HAP emissions for the coatings, thinners, and cleaning materials used during the compliance period, using Equations 1, 1A through 1C, and 2 of § 63.4151 and, if applicable, the calculation used to determine the mass of organic HAP in waste materials according to § 63.4151(e)(4); the calculation of the total volume of coating solids used during the compliance period, using Equation 2 of § 63.4151; the calculation of the mass of organic HAP emission reduction during the compliance period by emission capture systems and add-on control devices, using Equations 1, 1A through 1C, 2, 3, and 3A through 3C of § 63.4161; and the calculation of the organic HAP emission rate, using Equation 4 of § 63.4161. You do not need to submit the background data supporting these calculations, for example, information provided by materials suppliers or manufacturers or test reports.

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

(iv) A brief description of the CPMS.

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

(vi) For each instance that the CPMS was inoperative, except for zero (low-level) and high-level checks, the date, time, and duration that the CPMS was inoperative; the cause (including

unknown cause) for the CPMS being inoperative; and descriptions of corrective actions taken.

(vii) For each instance that the CPMS was out-of-control, as specified in § 63.8(c)(7), the date, time, and duration that the CPMS was out-of-control; the cause (including unknown cause) for the CPMS being out-of-control; and descriptions of corrective actions taken.

(viii) The date, time, and duration of each deviation from an operating limit in Table 1 to this subpart; and the date, time, and duration of any bypass of the add-on control device.

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

(x) A breakdown of the total duration of the deviations from the operating limits in Table 1 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) A summary of the total duration of CPMS downtime during the semiannual reporting period and the total duration of CPMS downtime as a percent of the total source operating time during that semiannual reporting period.

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

(xiii) For deviations from the work practice standards in § 63.4093(b), the number of deviations and, for each deviation:

(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 § 63.4100(b).

(B) The description required in paragraph (g)(2)(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) For deviations from an emission limit in § 63.4090 or operating limit in Table 1 to this subpart, a statement of the cause of each deviation (including unknown cause, if applicable).

(xv) For each deviation from an emission limit in § 63.4090 or operating limit in Table 1 to this subpart, a list of the affected sources or equipment for

which a deviation occurred, an estimate of the quantity of each regulated pollutant emitted over any emission limit in § 63.4090, and a description of the method used to estimate the emissions.

* * * * *

(j) Before September 12, 2019, if you use the emission rate with add-on controls option and you have a startup, shutdown, or malfunction during the semiannual reporting period, you must submit the reports specified in paragraphs (j)(1) and (2) of this section. The reports specified in paragraphs (j)(1) and (2) of this section are not required on and after September 12, 2019.

* * * * *

■ 6. Section 63.4121 is added to read as follows:

§ 63.4121 What are my electronic reporting requirements?

(a) Beginning no later than June 13, 2019, you must submit the results of the performance test required in § 63.4120(h) 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 to the Administrator at the appropriate address listed in § 63.13, unless the Administrator agrees to or specifies an alternate reporting method.

(3) If you claim that some of the performance test information being submitted under paragraph (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 March 15, 2021, 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 § 63.4110(a)(2) and (b) to the EPA via CEDRI. The CEDRI can be accessed through the EPA's CDX (<https://cdx.epa.gov>). The owner or operator must upload to CEDRI an electronic copy of each applicable notification in portable document format (PDF). The applicable notification must be submitted by the deadline specified in this subpart, regardless of the method in which the reports are submitted. Owners or operators who claim that some of the information required to be submitted via CEDRI is CBI shall submit a complete report generated using the appropriate form in CEDRI or an alternate electronic file consistent with the 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 March 15, 2021, 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 § 63.4120 to the EPA via CEDRI. The CEDRI interface can be accessed through the EPA's CDX (<https://cdx.epa.gov>). The owner or operator must use the appropriate electronic template on the CEDRI website for this subpart or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri>). The date report templates become available will

be listed on the CEDRI website. If the reporting form for the semiannual compliance report specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate addresses listed in § 63.13. Once the form has been available in CEDRI for 1 year, you must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted. Owners or operators who claim that some of the information required to be submitted via CEDRI is CBI shall submit a complete report generated using the appropriate form in CEDRI or an alternate electronic file consistent with 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.

(d) If you are required to electronically submit a report through CEDRI in the EPA's CDX, and due to a planned or actual outage of either the EPA's CEDRI or CDX systems within the period of time beginning 5 business days prior to the date that the submission is due, you will be or are precluded from accessing CEDRI or CDX and submitting a required report within the time prescribed, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description identifying the date, time and length of the outage; a rationale for attributing the delay in reporting beyond the regulatory deadline to the EPA system outage; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the report must be submitted electronically as soon as possible after the outage is

resolved. The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(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.

- 7. Section 63.4130 is amended by:
 - a. Revising paragraphs (f), (g), (j), (k) introductory text, and (k)(1) and (2); and
 - b. Redesignating paragraphs (k)(8) and (9) as paragraphs (k)(7) and (8), respectively.

The revisions read as follows:

§ 63.4130 What records must I keep?

* * * * *

(f) A record of the volume fraction of coating solids for each coating used

during each compliance period except for zero-HAP coatings for which volume solids determination is not required as allowed in § 63.4141.

(g) A record of the density for each coating used during each compliance period except for zero-HAP coatings for which volume solids determination is not required as allowed in § 63.4141 and, if you use either the emission rate without add-on controls or the emission rate with add-on controls compliance option, a record of the density for each thinner and cleaning material used during each compliance period.

(j) Before September 12, 2019, you must keep records of the date, time, and duration of each deviation. On and after September 12, 2019, for each deviation from an emission limitation reported under § 63.4120(d), (e), and (g), a record of the information specified in paragraphs (j)(1) through (4) of this section, as applicable.

(1) The date, time, and duration of the deviation, as reported under § 63.4120(d), (e), and (g).

(2) A list of the affected sources or equipment for which the deviation occurred and the cause of the deviation, as reported under § 63.4120(d), (e), and (g).

(3) An estimate of the quantity of each regulated pollutant emitted over any applicable emission limit in § 63.4090 or any applicable operating limit in Table 1 to this subpart, and a description of the method used to calculate the estimate, as reported under § 63.4120(d), (e), and (g).

(4) A record of actions taken to minimize emissions in accordance with § 63.4100(b) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

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

(1) Before September 12, 2019, for each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction. The record in this paragraph (k)(1) is not required on and after September 12, 2019.

(2) Before September 12, 2019, the records in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. The records in this paragraph (k)(2) are not required on and after September 12, 2019.

■ 8. Section 63.4131 is amended by revising paragraph (a) to read as follows:

§ 63.4131 In what form and for how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a data base. 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 63.4141 is amended by revising paragraphs (a)(1)(i) and (ii), (a)(2) and (4), and (b)(1), the definitions of "m_{volatiles}" and "D_{avg}" in Equation 1 of paragraph (b)(3), and paragraph (c) to read as follows:

§ 63.4141 How do I demonstrate initial compliance with the emission limitations?

(a) (1) Count each organic HAP in Table 5 to this subpart that is measured to be present at 0.1 percent by mass or more and at 1.0 percent by mass or more for other organic HAP compounds. For example, if toluene (not listed in Table 5 to this subpart) is measured to be 0.5 percent of the material by mass, you do not have to count it. Express the mass fraction of each organic HAP you count as a value truncated to four places after the decimal point (for example, 0.3791).

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

(2) *Method 24 in appendix A-7 of 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 (R2015), "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 they represent each

organic HAP in Table 5 to this subpart that is present at 0.1 percent by mass or more and at 1.0 percent by mass or more for other organic HAP compounds. For example, if toluene (not listed in Table 5 to this subpart) is 0.5 percent of the material by mass, you do not have to count it. 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.

(b) (1) *ASTM D2697-03 (R2014) or D6093-97 (R2016).* You may use ASTM D2697-03 (R2014), "Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings," or D6093-97 (R2016), "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.

(3) *m_{volatiles}* = total volatile matter content of the coating, including HAP, volatile organic compounds (VOC), water, and exempt compounds, determined according to Method 24 in appendix A-7 of part 60, or according to ASTM D2369-10 (R2015) Standard Test Method for Volatile Content of Coatings (incorporated by reference, see § 63.14), grams volatile matter per liter coating.
D_{avg} = average density of volatile matter in the coating, grams volatile matter per liter volatile matter, determined from test results using ASTM D1475-13, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products," ASTM D2111-10 (R2015), "Standard Test Methods for Specific Gravity of Halogenated Organic Solvents and Their Admixtures" (both incorporated by reference, see § 63.14); if you use this method, the specific gravity must be corrected to a standard temperature, 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 D1475-13 or ASTM D2111-10 (R2015) test results and other information sources, the test results will take precedence.

(c) *Determine the density of each coating.* Determine the density of each coating used during the compliance period from test results using ASTM D1475-13, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products," ASTM D2111-10