

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 <sup>1</sup>		Maximum screening acute noncancer HQ <sup>2</sup>
	Based on actual emissions	Based on allowable emissions	Based on actual emissions	Based on allowable emissions	Based on actual emissions	Based on allowable emissions	Based on actual emissions	Based on allowable emissions	Based on actual emissions
Source Category .....	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	.....	

<sup>1</sup> 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.

<sup>2</sup> 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 <sup>1</sup>		Maximum screening acute noncancer HQ <sup>2</sup>
	Based on actual emissions	Based on allowable emissions	Based on actual emissions	Based on allowable emissions	Based on actual emissions	Based on allowable emissions	Based on actual emissions	Based on allowable emissions	
									Based on actual emissions
Source Category .....	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	.....	

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

<sup>2</sup> The maximum estimated acute exposure concentration was divided by available short-term threshold values to develop HQ values (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 (HVLP, 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 0.000002 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 0.000007 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
<b>White and Minority by Percent</b>			
White .....	62	54	0
Minority .....	38	46	0
<b>Minority Detail by Percent</b>			
African American .....	12	39	0
Native American .....	0.8	0.02	0
Hispanic .....	18	5	0
Other and Multiracial .....	7	2	0
<b>Income by Percent</b>			
Below Poverty Level .....	14	26	0
Above Poverty Level .....	86	74	0
<b>Education by Percent</b>			
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
<b>White and Minority by Percent</b>			
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
<b>Minority Detail by Percent</b>			
African American .....	12	7	0
Native American .....	0.8	0	0
Hispanic .....	18	30	0
Other and Multiracial .....	7	2	0
<b>Income by Percent</b>			
Below Poverty Level .....	14	23	0
Above Poverty Level .....	86	77	0
<b>Education by Percent</b>			
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)<sup>e</sup>, "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<sub>volatiles</sub>" and "D<sub>avg</sub>" 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) \* \* \*

(i) Count each organic HAP in Table 5 to this subpart that is measured to be present at 0.1 percent by mass or more and at 1.0 percent by mass or more for other 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<sub>volatiles</sub> = 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<sub>avg</sub> = 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

(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 test results from ASTM D1475-13 or ASTM D2111-10 (R2015) and the supplier's or manufacturer's information, the test results will take precedence.

\* \* \* \* \*

■ 10. Section 63.4142 is amended by revising paragraph (c) to read as follows:

**§ 63.4142 How do I demonstrate continuous compliance with the emission limitations?**

\* \* \* \* \*

(c) As part of each semiannual compliance report required by § 63.4120, you must submit a statement that you were in compliance with the emission limitations during the reporting period because, during the compliance period, you used no thinners or cleaning materials that contained organic HAP, and you used no coatings for which the organic HAP content exceeded the applicable emission limit in § 63.4090.

\* \* \* \* \*

■ 11. Section 63.4151 is amended by revising paragraph (h) to read as follows:

**§ 63.4151 How do I demonstrate initial compliance with the emission limitations?**

\* \* \* \* \*

(h) The organic HAP emission rate for the initial compliance period must be less than or equal to the applicable emission limit in § 63.4090. You must keep all records as required by §§ 63.4130 and 63.4131. As part of the Notification of Compliance Status required by § 63.4110, you must identify the coating operation(s) for which you used the emission rate without add-on controls option and, if there were no deviations from the emission limitations, submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in § 63.4090.

■ 12. Section 63.4152 is amended by revising paragraphs (a) and (c) to read as follows:

**§ 63.4152 How do I demonstrate continuous compliance with the emission limitations?**

(a) To demonstrate continuous compliance, for the compliance period, the organic HAP emission rate determined according to § 63.4151(a) through (g) must be less than or equal to the applicable emission limit in § 63.4090. Each month following the initial compliance period described in § 63.4150 is a compliance period.

\* \* \* \* \*

(c) As part of each semiannual compliance report required by § 63.4120, if there were no deviations from the emission limitations, you must submit a statement that you were in compliance with the emission limitations during the reporting period because, during the compliance period, the organic HAP emission rate was less than or equal to the applicable emission limit in § 63.4090.

\* \* \* \* \*

■ 13. Section 63.4160 is amended by revising the section heading and paragraphs (a)(1) and (b)(1) to read as follows:

**§ 63.4160 By what date must I conduct initial performance tests and other initial compliance demonstrations?**

(a) \* \* \*

(1) All emission capture systems, add-on control devices, and CPMS you use to demonstrate compliance must be installed and operating no later than the applicable compliance date specified in § 63.4083. Except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.4161(h), you must conduct a performance test of each capture system and add-on control device according to the procedures in §§ 63.4164, 63.4165, and 63.4166, and establish the operating limits required by § 63.4092 no later than the compliance date specified in § 63.4083. For a solvent recovery system for which you conduct liquid-liquid material balances according to § 63.4161(h), you must initiate the first material balance no later than the compliance date specified in § 63.4083.

\* \* \* \* \*

(b) \* \* \*

(1) All emission capture systems, add-on control devices, and CPMS you use to demonstrate compliance must be

installed and operating no later than the applicable compliance date specified in § 63.4083. Except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.4161(h), you must conduct a performance test of each capture system and add-on control device according to the procedures in §§ 63.4164, 63.4165, and 63.4166, and establish the operating limits required by § 63.4092 no later than 180 days after the applicable compliance date specified in § 63.4083. For a solvent recovery system for which you conduct liquid-liquid material balances according to § 63.4161(h), you must initiate the first material balance no later than 180 days after the applicable compliance date specified in § 63.4083.

\* \* \* \* \*

■ 14. Section 63.4161 is amended by revising paragraphs (g) introductory text and (h)(3) to read as follows:

**§ 63.4161 How do I demonstrate initial compliance?**

\* \* \* \* \*

(g) Calculate the organic HAP emissions reduction for controlled coating operations not using liquid-liquid material balance. For each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances, calculate organic HAP emissions reduction, using Equation 1 of this section, by applying the emission capture system efficiency and add-on control device efficiency to the mass of organic HAP contained in the coatings, thinners, and cleaning materials that are used in the coating operation served by the emission capture system and add-on control device during the compliance period. For any period of time a deviation specified in § 63.4163(c) or (d) occurs in the controlled coating operation, you must assume zero efficiency for the emission capture system and add-on control device. For the purposes of completing the compliance calculations, you must treat the materials used during a deviation on a controlled coating operation as if they were used on an uncontrolled coating operation for the time period of the deviation. You must not include those materials in the calculations of organic HAP emissions reduction in Equation 1 of this section.

$$H_c = (A_f + B_f + C_f) \left( \frac{CE}{100} \times \frac{DRE}{100} \right) \quad (Eq. 1)$$

Where:

$H_c$  = mass of organic HAP emissions reduction for the controlled coating operation during the compliance period, kg.

$A_f$  = total mass of organic HAP in the coatings used in the controlled coating operation, kg, as calculated in Equation 1A of this section.

$B_f$  = total mass of organic HAP in the thinners used in the controlled coating operation, kg, as calculated in Equation 1B of this section.

$C_f$  = total mass of organic HAP in the cleaning materials used in the controlled coating operation during the compliance period, kg, as calculated in Equation 1C of this section.

CE = capture efficiency of the emission capture system vented to the add-on control device, percent. Use the test methods and procedures specified in §§ 63.4164 and 63.4165 to measure and record capture efficiency.

DRE = organic HAP destruction or removal efficiency of the add-on control device, percent. Use the test methods and procedures in §§ 63.4164 and 63.4166 to measure and record the organic HAP destruction or removal efficiency.

\* \* \* \* \*

(h) \* \* \*

(3) Determine the mass fraction of volatile organic matter for each coating used in the coating operation controlled by the solvent recovery system during the compliance period, kg volatile organic matter per kg coating. You may determine the volatile organic matter mass fraction using Method 24 in appendix A-7 of part 60, ASTM D2369-10 (R2015), "Test Method for Volatile Content of Coatings" (incorporated by reference, see § 63.14), or an EPA approved alternative method. Alternatively, you may use information provided by the manufacturer or supplier of the coating. In the event of any inconsistency between information provided by the manufacturer or supplier and the results of Method 24, ASTM D2369-10 (R2015), or an approved alternative method, the test method results will govern.

\* \* \* \* \*

■ 15. Section 63.4163 is amended by revising the section heading and paragraph (c) introductory text, adding paragraph (c)(3), and revising paragraphs (e) and (h) to read as follows:

**§ 63.4163 How do I conduct periodic performance tests and demonstrate continuous compliance with the emission limitations?**

\* \* \* \* \*

(c) You must demonstrate continuous compliance with each operating limit required by § 63.4092 that applies to you as specified in Table 1 to this subpart, and you must conduct periodic performance tests as specified in paragraph (c)(3) of this section.

\* \* \* \* \*

(3) Except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.4161(h), you must conduct according to the procedures in §§ 63.4164, 63.4165, and 63.4166 periodic performance tests of each capture system and add-on control device used to demonstrate compliance, and you must establish the operating limits required by § 63.4092. You must conduct the first periodic performance test and establish the operating limits required by § 63.4092 before March 15, 2022, unless you are already required to complete periodic performance tests as a requirement of renewing your facility's operating permit under 40 CFR part 70 or 40 CFR part 71 and have conducted a performance test on or after March 15, 2017. Thereafter you must conduct a performance test no later than 5 years following the previous performance test. Operating limits must be confirmed or reestablished during each performance test.

\* \* \* \* \*

(e) You must demonstrate continuous compliance with the work practice standards in § 63.4093. If you did not develop a work practice plan, did not implement the plan, or did not keep the records required by § 63.4130(k)(8), this is a deviation from the work practice standards that must be reported as specified in §§ 63.4110(b)(6) and 63.4120(g).

\* \* \* \* \*

(h) Before September 12, 2019, consistent with §§ 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction of the emission capture system, add-on control device, or coating operation that may affect emission capture or control device efficiency are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with § 63.6(e). The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations according to the provisions in § 63.6(e). On and after September 12, 2019, as specified in § 63.4100(b), 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, and determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator.

\* \* \* \* \*

■ 16. Section 63.4164 is amended by revising paragraphs (a) introductory text and (a)(1) to read as follows:

**§ 63.4164 What are the general requirements for performance tests?**

(a) You must conduct each performance test required by § 63.4160 according to the requirements in this section unless you obtain a waiver of the performance test according to the provisions in § 63.7(h).

(1) *Representative coating operation operating conditions.* You must conduct the performance test under representative operating conditions for the coating operation. Operations during periods of startup, shutdown, or nonoperation do not constitute representative conditions for purposes of conducting a performance test. The owner or operator may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

\* \* \* \* \*

■ 17. Section 63.4166 is amended by revising paragraphs (a)(1) through (4) and (b) introductory text to read as follows:

**§ 63.4166 How do I determine the add-on control device emission destruction or removal efficiency?**

(a) \* \* \*

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

(2) Use Method 2, 2A, 2C, 2D, or 2F in appendix A-1, or Method 2G in appendix A-2, of part 60, as

appropriate, to measure gas volumetric flow rate.

(3) Use Method 3, 3A, or 3B in appendix A-2 of part 60, as appropriate, for gas analysis to determine dry molecular weight. You may also use as an alternative to Method 3B, the manual method for measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas in ANSI/ASME, PTC 19.10-1981, "Flue and Exhaust Gas Analyses" (incorporated by reference, see § 63.14).

(4) Use Method 4 in appendix A-3 of part 60 to determine stack gas moisture.

(b) Measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-on control device simultaneously, using either Method 25 or 25A in appendix A-7 of part 60, as specified in paragraphs (b)(1) through (3) of this section. You must use the same method for both the inlet and outlet measurements. You may use Method 18 in appendix A-6 of part 60 to subtract methane emissions from measured total gaseous organic mass emissions as carbon.

■ 18. Section 63.4167 is amended by revising the section heading, introductory text, and paragraph (f)(1) to read as follows:

**§ 63.4167 How do I establish the emission capture system and add-on control device operating limits during performance tests?**

During the performance tests required by §§ 63.4160 and 63.4163, and described in §§ 63.4164, 63.4165, and 63.4166, you must establish the operating limits required by § 63.4092 according to this section unless you have received approval for alternative monitoring and operating limits under § 63.8(f) as specified in § 63.4092.

(f) \* \* \*

(1) During the capture efficiency determination required by §§ 63.4160 and 63.4163, and described in

§§ 63.4164 and 63.4165, you must monitor and record either the gas volumetric flow rate or the duct static pressure for each separate capture device in your emission capture system at least once every 15 minutes during each of the three test runs at a point in the duct between the capture device and the add-on control device inlet.

■ 19. Section 63.4168 is amended by revising paragraphs (a)(4) and (5) and (c)(2) and (3) to read as follows:

**§ 63.4168 What are the requirements for continuous parameter monitoring system installation, operation, and maintenance?**

(a) \* \* \*

(4) You must maintain the CPMS at all times in accordance with § 63.4100(b) and have readily available necessary parts for routine repairs of the monitoring equipment.

(5) Before September 12, 2019, you must operate the CPMS and collect emission capture system and add-on control device parameter data at all times in accordance with § 63.4100(b).

(c) \* \* \*

(2) For a catalytic oxidizer, install a gas temperature monitor in the gas stream immediately before the catalyst bed, and if you establish operating limits according to § 63.4167(b)(1) and (2), also install a gas temperature monitor in the gas stream immediately after the catalyst bed.

(3) For each gas temperature monitoring device, you must comply with the requirements in paragraphs (c)(3)(i) through (vii) of this section. For

the purposes of this paragraph (c)(3), a thermocouple is part of the temperature sensor.

■ 20. Section 63.4181 is amended by revising the definition of "Deviation" to read as follows:

**§ 63.4181 What definitions apply to this subpart?**

*Deviation* means:

(1) Before September 12, 2019, any instance in which an affected source subject to this subpart or an owner or operator of such a source:

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

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

(iii) Fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction regardless of whether or not such failure is permitted by this subpart; and

(2) On and after September 12, 2019, any instance in which an affected source subject to this subpart or an owner or operator of such a source:

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

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

■ 21. Table 2 to subpart NNNN of part 63 is revised to read as follows:

**TABLE 2 TO SUBPART NNNN OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART NNNN**  
[You must comply with the applicable General Provisions requirements according to the following table:]

Citation	Subject	Applicable to subpart NNNN	Explanation
§ 63.1(a)(1)–(12)	General Applicability	Yes.	Applicability to subpart NNNN is also specified in § 63.4081.
§ 63.1(b)(1)–(3)	Initial Applicability Determination	Yes	
§ 63.1(c)(1)	Applicability After Standard Established	Yes.	Area sources are not subject to subpart NNNN.
§ 63.1(c)(2)–(3)	Applicability of Permit Program for Area Sources.	No	
§ 63.1(c)(4)–(5)	Extensions and Notifications	Yes.	
§ 63.1(e)	Applicability of Permit Program Before Relevant Standard is Set.	Yes.	

TABLE 2 TO SUBPART NNNN OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART NNNN—Continued  
 [You must comply with the applicable General Provisions requirements according to the following table:]

Citation	Subject	Applicable to subpart NNNN	Explanation
§ 63.2	Definitions	Yes	Additional definitions are specified in § 63.4181.
§ 63.3(a)–(c)	Units and Abbreviations	Yes.	
§ 63.4(a)(1)–(5)	Prohibited Activities	Yes.	
§ 63.4(b)–(c)	Circumvention/Severability	Yes.	
§ 63.5(a)	Construction/Reconstruction	Yes.	
§ 63.5(b)(1)–(6)	Requirements for Existing, Newly Constructed, and Reconstructed Sources.	Yes.	
§ 63.5(d)	Application for Approval of Construction/Reconstruction.	Yes.	
§ 63.5(e)	Approval of Construction/Reconstruction	Yes.	
§ 63.5(f)	Approval of Construction/Reconstruction Based on Prior State Review.	Yes.	
§ 63.6(a)	Compliance With Standards and Maintenance Requirements—Applicability.	Yes.	
§ 63.6(b)(1)–(7)	Compliance Dates for New and Reconstructed Sources.	Yes	Section 63.4083 specifies the compliance dates.
§ 63.6(c)(1)–(5)	Compliance Dates for Existing Sources	Yes	Section 63.4083 specifies the compliance dates.
§ 63.6(e)(1)(i)	Operation and Maintenance	Yes, before September 12, 2019. No on and after September 12, 2019.	See § 63.4100(b) for general duty requirement.
§ 63.6(e)(1)(ii)	Operation and Maintenance	Yes, before September 12, 2019. No on and after September 12, 2019.	
§ 63.6(e)(1)(iii)	Operation and Maintenance	Yes.	
§ 63.6(e)(3)	Startup, shutdown, malfunction plan (SSMP).	Yes, before September 12, 2019. No on and after September 12, 2019.	
§ 63.6(f)(1)	Compliance Except During Startup, Shutdown, and Malfunction.	Yes, before September 12, 2019. No on and after September 12, 2019.	
§ 63.6(f)(2)–(3)	Methods for Determining Compliance	Yes.	
§ 63.6(g)(1)–(3)	Use of an Alternative Standard	Yes	
§ 63.6(h)	Compliance With Opacity/Visible Emission standards.	No	Subpart NNNN does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).
§ 63.6(i)(1)–(16)	Extension of Compliance	Yes.	
§ 63.6(j)	Presidential Compliance Exemption	Yes.	
§ 63.7(a)(1)	Performance Test Requirements—Applicability.	Yes	Applies to all affected sources. Additional requirements for performance testing are specified in §§ 63.4164, 63.4165, and 63.4166.
§ 63.7(a)(2)	Performance Test Requirements—Dates	Yes	Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standards. Section 63.4160 specifies the schedule for performance test requirements that are earlier than those specified in § 63.7(a)(2).
§ 63.7(a)(3)	Performance Tests Required By the Administrator.	Yes.	
§ 63.7(b)–(d)	Performance Test Requirements—Notification, Quality Assurance Facilities Necessary for Safe Testing, Conditions During Test.	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.
§ 63.7(e)(1)	Conduct of performance tests	Yes, before September 12, 2019. No on and after September 12, 2019.	See § 63.4164(a)(1).
§ 63.7(e)(2)–(4)	Conduct of performance tests	Yes.	
§ 63.7(f)	Performance Test Requirements—Use of Alternative Test Method.	Yes	Applies to all test methods except those used to determine capture system efficiency.

TABLE 2 TO SUBPART NNNN OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART NNNN—Continued  
 [You must comply with the applicable general provisions requirements according to the following table:]

Citation	Subject	Applicable to subpart NNNN	Explanation
§ 63.7(g)–(h) .....	Performance Test Requirements—Data Analysis, Recordkeeping, Reporting, Waiver of Test.	Yes .....	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.
§ 63.8(a)(1)–(3) .....	Monitoring Requirements—Applicability .....	Yes .....	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for monitoring are specified in § 63.4168.
§ 63.8(a)(4) .....	Additional Monitoring Requirements .....	No .....	Subpart NNNN does not have monitoring requirements for flares.
§ 63.8(b) .....	Conduct of Monitoring .....	Yes.	
§ 63.8(c)(1) .....	Continuous Monitoring Systems (CMS) Operation and Maintenance.	Yes, before September 12, 2019. No on and after September 12, 2019.	
§ 63.8(c)(2)–(3) .....	Continuous Monitoring Systems (CMS) Operation and Maintenance.	Yes .....	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for CMS operations and maintenance are specified in § 63.4168.
§ 63.8(c)(4) .....	CMS .....	No .....	Section 63.4168 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(5) .....	COMS .....	No .....	Subpart NNNN does not have opacity or visible emission standards.
§ 63.8(c)(6) .....	CMS Requirements .....	No .....	Section 63.4168 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(7) .....	CMS Out-of-Control Periods .....	Yes.	
§ 63.8(c)(8) .....	CMS Out-of-Control Periods and Reporting	No .....	Section 63.4120 requires reporting of CMS out-of-control periods.
§ 63.8(d)–(e) .....	Quality Control Program and CMS Performance Evaluation.	No .....	Subpart NNNN does not require the use of CEMS.
§ 63.8(f)(1)–(5) .....	Use of an Alternative Monitoring Method ...	Yes .....	
§ 63.8(f)(6) .....	Alternative to Relative Accuracy Test .....	No .....	Subpart NNNN does not require the use of CEMS.
§ 63.8(g)(1)–(5) .....	Data Reduction .....	No .....	Sections 63.4167 and 63.4168 specify monitoring data reduction.
§ 63.9(a)–(d) .....	Notification Requirements .....	Yes.	
§ 63.9(e) .....	Notification of Performance Test .....	Yes .....	Applies only to capture system and add-on control device performance tests at sources using these to comply with the standard.
§ 63.9(f) .....	Notification of Visible Emissions/Opacity Test.	No .....	Subpart NNNN does not have opacity or visible emission standards.
§ 63.9(g)(1)–(3) .....	Additional Notifications When Using CMS	No .....	Subpart NNNN does not require the use of CEMS.
§ 63.9(h) .....	Notification of Compliance Status .....	Yes .....	Section 63.4110 specifies the dates for submitting the notification of compliance status.
§ 63.9(i) .....	Adjustment of Submittal Deadlines .....	Yes.	
§ 63.9(j) .....	Change in Previous Information .....	Yes.	
§ 63.10(a) .....	Recordkeeping/Reporting—Applicability and General Information.	Yes.	
§ 63.10(b)(1) .....	General Recordkeeping Requirements .....	Yes .....	Additional requirements are specified in §§ 63.4130 and 63.4131.
§ 63.10(b)(2)(i) .....	Recordkeeping of Occurrence and Duration of Startups and Shutdowns.	Yes, before September 12, 2019. No on and after September 12, 2019.	See § 63.4130(j).
§ 63.10(b)(2)(ii) .....	Recordkeeping of Failures to Meet Standards.	Yes, before September 12, 2019. No on and after September 12, 2019.	See § 63.4130(j).

TABLE 2 TO SUBPART NNNN OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART NNNN—Continued  
 [You must comply with the applicable General Provisions requirements according to the following table:]

Citation	Subject	Applicable to subpart NNNN	Explanation
§ 63.10(b)(2)(iii)	Recordkeeping Relevant to Maintenance of Air Pollution Control and Monitoring Equipment.	Yes.	
§ 63.10(b)(2)(iv)–(v)	Actions Taken to Minimize Emissions During SSM.	Yes, before September 12, 2019. No, on and after September 12, 2019.	See § 63.4130(j)(4) for a record of actions taken to minimize emissions during a deviation from the standard.
§ 63.10(b)(2)(vi)	Records for CMS malfunctions	Yes, before September 12, 2019. No, on and after September 12, 2019.	See § 63.4130(j) for records of periods of deviation from the standard, including instances where a CMS is inoperative or out-of-control.
§ 63.10(b)(2)(vii)–(xi)	Records	Yes.	Subpart NNNN does not require the use of CEMS.
§ 63.10(b)(2)(xii)	Records	Yes.	
§ 63.10(b)(2)(xiii)		No	
§ 63.10(b)(2)(xiv)		Yes.	See § 63.4130(j)(1) for records of periods of deviation from the standard, including instances where a CMS is inoperative or out-of-control.
§ 63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations.	Yes.	
§ 63.10(c)(1)–(6)	Additional Recordkeeping Requirements for Sources with CMS.	Yes.	
§ 63.10(c)(7)–(8)	Additional Recordkeeping Requirements for Sources with CMS.	No	See § 63.4130(j)(1) for records of periods of deviation from the standard, including instances where a CMS is inoperative or out-of-control.
§ 63.10(c)(10)–(14)	Additional Recordkeeping Requirements for Sources with CMS.	Yes.	
§ 63.10(c)(15)	Records Regarding the SSMP	Yes, before September 12, 2019. No, on and after September 12, 2019.	
§ 63.10(d)(1)	General Reporting Requirements	Yes	Additional requirements are specified in § 63.4120.
§ 63.10(d)(2)	Report of Performance Test Results	Yes	Additional requirements are specified in § 63.4120(h).
§ 63.10(d)(3)	Reporting Opacity or Visible Emissions Observations.	No	Subpart NNNN does not require opacity or visible emissions observations.
§ 63.10(d)(4)	Progress Reports for Sources With Compliance Extensions.	Yes.	See § 63.4120(g).
§ 63.10(d)(5)	Startup, Shutdown, and Malfunction Reports.	Yes, before September 12, 2019. No, on and after September 12, 2019.	
§ 63.10(e)(1)–(2)	Additional CMS Reports	No	Subpart NNNN does not require the use of CEMS.
§ 63.10(e)(3)	Excess Emissions/CMS Performance Reports.	No	Section 63.4120(g) specifies the contents of periodic compliance reports.
§ 63.10(e)(4)	COMS Data Reports	No	Subpart NNNN does not specify requirements for opacity or COMS.
§ 63.10(f)	Recordkeeping/Reporting Waiver	Yes.	Subpart NNNN does not specify use of flares for compliance.
§ 63.11	Control Device Requirements/Flares	No	
§ 63.12	State Authority and Delegations	Yes.	
§ 63.13	Addresses	Yes.	
§ 63.14	Incorporation by Reference	Yes.	
§ 63.15	Availability of Information/Confidentiality	Yes.	

■ 22. Table 5 to subpart NNNN of part 63 is added to read as follows:

TABLE 5 TO SUBPART NNNN OF PART 63—LIST OF HAZARDOUS AIR POLLUTANTS THAT MUST BE COUNTED TOWARD TOTAL ORGANIC HAP CONTENT IF PRESENT AT 0.1 PERCENT OR MORE BY MASS

Chemical name	CAS No.
1,1,2,2-Tetrachloroethane	79–34–5
1,1,2-Trichloroethane	79–00–5
1,1-Dimethylhydrazine	57–14–7

TABLE 5 TO SUBPART NNNN OF PART 63—LIST OF HAZARDOUS AIR POLLUTANTS THAT MUST BE COUNTED TOWARD TOTAL ORGANIC HAP CONTENT IF PRESENT AT 0.1 PERCENT OR MORE BY MASS—Continued

Chemical name	CAS No.
1,2-Dibromo-3-chloropropane	96-12-8
1,2-Diphenylhydrazine	122-66-7
1,3-Butadiene	106-99-0
1,3-Dichloropropene	542-75-6
1,4-Dioxane	123-91-1
2,4,6-Trichlorophenol	88-06-2
2,4/2,6-Dinitrotoluene (mixture)	25321-14-6
2,4-Dinitrotoluene	121-14-2
2,4-Toluene diamine	95-80-7
2-Nitropropane	79-46-9
3,3'-Dichlorobenzidine	91-94-1
3,3'-Dimethoxybenzidine	119-90-4
3,3'-Dimethylbenzidine	119-93-7
4,4'-Methylene bis(2-chloroaniline)	101-14-4
Acetaldehyde	75-07-0
Acrylamide	79-06-1
Acrylonitrile	107-13-1
Allyl chloride	107-05-1
alpha-Hexachlorocyclohexane (a-HCH)	319-84-6
Aniline	62-53-3
Benzene	71-43-2
Benzidine	92-87-5
Benzotrichloride	98-07-7
Benzyl chloride	100-44-7
beta-Hexachlorocyclohexane (b-HCH)	319-85-7
Bis(2-ethylhexyl)phthalate	117-81-7
Bis(chloromethyl)ether	542-88-1
Bromoform	75-25-2
Captan	133-06-2
Carbon tetrachloride	56-23-5
Chlordane	57-74-9
Chlorobenzilate	510-15-6
Chloroform	67-66-3
Chloroprene	126-99-8
Cresols (mixed)	1319-77-3
DDE	3547-04-4
Dichloroethyl ether	111-44-4
Dichlorvos	62-73-7
Epichlorohydrin	106-89-8
Ethyl acrylate	140-88-5
Ethylene dibromide	106-93-4
Ethylene dichloride	107-06-2
Ethylene oxide	75-21-8
Ethylene thiourea	96-45-7
Ethylidene dichloride (1,1-Dichloroethane)	75-34-3
Formaldehyde	50-00-0
Heptachlor	76-44-8
Hexachlorobenzene	118-74-1
Hexachlorobutadiene	87-68-3
Hexachloroethane	67-72-1
Hydrazine	302-01-2
Isophorone	78-59-1
Lindane (hexachlorocyclohexane, all isomers)	58-89-9
m-Cresol	108-39-4
Methylene chloride	75-09-2
Naphthalene	91-20-3
Nitrobenzene	98-95-3
Nitrosodimethylamine	62-75-9
o-Cresol	95-48-7
o-Toluidine	95-53-4
Parathion	56-38-2
p-Cresol	106-44-5
p-Dichlorobenzene	106-46-7
Pentachloronitrobenzene	82-68-8
Pentachlorophenol	87-86-5
Propoxur	114-26-1
Propylene dichloride	78-87-5
Propylene oxide	75-56-9
Quinoline	91-22-5
Tetrachloroethene	127-18-4
Toxaphene	8001-35-2

TABLE 5 TO SUBPART NNNN OF PART 63—LIST OF HAZARDOUS AIR POLLUTANTS THAT MUST BE COUNTED TOWARD TOTAL ORGANIC HAP CONTENT IF PRESENT AT 0.1 PERCENT OR MORE BY MASS—Continued

Chemical name	CAS No.
Trichloroethylene .....	79-01-6
Trifluralin .....	1582-09-8
Vinyl bromide .....	593-60-2
Vinyl chloride .....	75-01-4
Vinylidene chloride .....	75-35-4

**Subpart OOOO—National Emission Standards for Hazardous Air Pollutants: Printing, Coating, and Dyeing of Fabrics and Other Textiles**

■ 23. Section 63.4300 is amended by revising paragraphs (a)(3)(i), (b), and (c) to read as follows:

**§ 63.4300 What are my general requirements for complying with this subpart?**

- (a) \* \* \*
- (3) \* \* \*

(i) Before September 12, 2019, the web coating/printing or dyeing/finishing operation(s) must be in compliance with the applicable emission limit in Table 1 to this subpart or minimize emissions at all times as required by § 63.6(e)(1). On and after September 12, 2019, the web coating/printing or dyeing/finishing operation(s) must be in compliance with the applicable emission limit in Table 1 to this subpart at all times.

\* \* \* \* \*

(b) Before September 12, 2019, you must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in § 63.6(e)(1)(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.

(c) 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 web coating/printing or dyeing/finishing operation equipment such as conveyors that move the substrate among enclosures that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions. A startup, shutdown, and malfunction plan is not required on and after September 12, 2019.

■ 24. Section 63.4310 is amended by revising paragraphs (c)(9) introductory text and (c)(9)(iv) and adding paragraph (c)(9)(v) to read as follows:

**§ 63.4310 What notifications must I submit?**

- \* \* \* \* \*
- (c) \* \* \*

(9) For the emission rate with add-on controls option as specified in § 63.4291(a)(3) and (c)(3), the organic HAP overall control efficiency option as specified in § 63.4291(a)(4), and the oxidizer outlet organic HAP concentration option as specified in § 63.4291(a)(5), for each controlled web coating/printing or dyeing/finishing operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances according to § 63.4341(e)(5) or (f)(5) or § 63.4351(d)(5), you must include the information specified in paragraphs (c)(9)(i) through (v) of this section.

\* \* \* \* \*

(iv) A statement of whether or not you developed and implemented the work practice plan required by § 63.4293.

(v) Before September 12, 2019, a statement of whether or not you developed the startup, shutdown, and malfunction plan required by § 63.4300(c). This statement is not

required on and after September 12, 2019.

- 25. Section 63.4311 is amended by:
  - a. Revising paragraphs (a)(5) and (6) and (a)(7) introductory text;
  - b. Redesignating paragraph (a)(7)(i) as (a)(7)(i)(A);
  - c. Adding new paragraph (a)(7)(i) introductory text;
  - d. Redesignating paragraph (a)(7)(ii) as (a)(7)(i)(B) and revising it;
  - e. Redesignating paragraphs (a)(7)(iii) through (xv) as (a)(7)(i)(C) through (O), respectively;
  - f. Adding new paragraph (a)(7)(ii).
  - g. Revising paragraphs (a)(8) introductory text, (a)(8)(i), and (c) introductory text; and
  - h. Adding paragraphs (d) through (h).

The revisions and additions read as follows:

**§ 63.4311 What reports must I submit?**

- (a) \* \* \*

(5) *Deviations: Compliant material option.* If you use the compliant material option, and there was a deviation from the applicable organic HAP content requirements in Table 1 to this subpart, the semiannual compliance report must contain the information in paragraph (a)(5)(i) or (ii) of this section, as applicable.

(i) Before September 12, 2019, the information in paragraph (a)(5)(i)(A) through (D) of this section.

(A) Identification of each coating, printing, slashing, dyeing or finishing material applied that deviated from the emission limit and each thinning or cleaning material applied in web coating/printing operations that contained organic HAP, and the dates and time periods each was applied.

(B) The calculation of the organic HAP content using Equation 1 of § 63.4321 for each coating or printing material identified in paragraph (a)(5)(i)(A) of this section. You do not need to submit background data supporting this calculation (e.g., information provided by material suppliers or manufacturers, or test reports).

(C) The determination of mass fraction of organic HAP for each regulated material identified in

paragraph (a)(5)(i)(A) of this section. You do not need to submit background data supporting this calculation (e.g., information provided by material suppliers or manufacturers, or test reports).

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

(ii) On and after September 12, 2019, the information in paragraphs (a)(5)(ii)(A) through (E) of this section.

(A) Identification of each coating, printing, slashing, dyeing or finishing material applied that deviated from the emission limit and each thinning or cleaning material applied in web coating/printing operations that contained organic HAP, and the date, time, and duration each was applied.

(B) The calculation of the organic HAP content using Equation 1 of § 63.4321 for each coating or printing material identified in paragraph (a)(5)(ii)(A) of this section. You do not need to submit background data supporting this calculation (e.g., information provided by material suppliers or manufacturers, or test reports).

(C) The determination of mass fraction of organic HAP for each regulated material identified in paragraph (a)(5)(ii)(A) of this section. You do not need to submit background data supporting this calculation (e.g., information provided by material suppliers or manufacturers, or test reports).

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

(E) 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 Table 1 to this subpart, and a description of the method used to estimate the emissions.

(6) *Deviations: Emission rate without add-on controls option.* If you use the emission rate without add-on controls option and there was a deviation from the applicable emission limit in Table 1 to this subpart, the semiannual compliance report must contain the information in paragraph (a)(6)(i) or (ii) of this section, as applicable.

(i) Before September 12, 2019, the information in paragraphs (a)(6)(i)(A) through (C) of this section.

(A) The beginning and ending dates of each compliance period during which the organic HAP emission rate exceeded the applicable emission limit in Table 1 to this subpart.

(B) The calculations used to determine the organic HAP emission rate for the compliance period in which

the deviation occurred. You must submit the calculations for Equations 1, 1A and 1B, 2, and 3 in § 63.4331 for web coating/printing operations; and for Equations 4, 4A, 5, and 6 in § 63.4331 for dyeing/finishing operations; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to

§ 63.4331(a)(4)(iii) or (b)(3)(ii); and, for dyeing/finishing operations, if applicable, the mass of organic HAP in wastewater streams calculation for Equation 7 in § 63.4331. You do not need to submit background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports).

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

(ii) On and after September 12, 2019, the information in paragraphs (a)(6)(ii)(A) through (D) of this section.

(A) The beginning and ending dates of each compliance period, during which the organic HAP emission rate exceeded the applicable emission limit in Table 1 to this subpart.

(B) The calculations used to determine the organic HAP emission rate for the compliance period in which the deviation occurred. You must submit the calculations for Equations 1, 1A and 1B, 2, and 3 in § 63.4331 for web coating/printing operations; and for Equations 4, 4A, 5, and 6 in § 63.4331 for dyeing/finishing operations; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to § 63.4331(a)(4)(iii) or (b)(3)(ii); and, for dyeing/finishing operations, if applicable, the mass of organic HAP in wastewater streams calculation for Equation 7 in § 63.4331. You do not need to submit background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports).

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

(D) 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 Table 1 to this subpart, and a description of the method used to estimate the emissions.

(7) *Deviations: Add-on controls options.* If you use one of the add-on controls options in § 63.4291(a) or (c) 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 (a)(7)(i) or (ii) of this section, as applicable.

(i) Before September 12, 2019, the information in paragraphs (a)(7)(i)(A) through (O) of this section. This includes periods of startup, shutdown, and malfunction during which deviations occurred.

\* \* \* \* \*

(B) If you use the emission rate option, the calculations used to determine the organic HAP emission rate for each compliance period in which a deviation occurred. You must submit the calculations that apply to you, including Equations 1, 1A, 1B, and 2 of § 63.4331 and Equations 1, 1A, 1B, 1C, 2, 3, 3A and 3B and 4 of § 63.4341 for web coating/printing operations; and Equations 4, 4A, 5, 6, and 7 of § 63.4331 and Equations 5, 5A, 5B, 6, 7, and 8 of § 63.4341 for dyeing/finishing operations. You do not need to submit the background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports).

\* \* \* \* \*

(ii) On and after September 12, 2019, the information in paragraphs (a)(7)(ii)(A) through (M), (O), and (P) of this section if there was a deviation from the applicable emission limit in Table 1 to this subpart or the applicable operating limit(s) in Table 2 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 (a)(7)(ii)(N) of this section if there was a deviation from the applicable work practice standards in § 63.4293(b).

(A) The beginning and ending dates of each compliance period during which the organic HAP emission rate exceeded the applicable emission limit in Table 1 to this subpart.

(B) If you use the emission rate option, the calculations used to determine the organic HAP emission rate for each compliance period in which a deviation occurred. You must submit the calculations that apply to you, including Equations 1, 1A, 1B, and 2 of § 63.4331 and Equations 1, 1A, 1B, 1C, 2, 3, 3A and 3B and 4 of § 63.4341 for web coating/printing operations; and Equations 4, 4A, 5, 6, and 7 of § 63.4331 and Equations 5, 5A, 5B, 6, 7, and 8 of § 63.4341 for dyeing/finishing operations. You do not need to submit the background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports).

(C) If you use the organic HAP overall control efficiency option, the calculations used to determine the organic HAP overall control efficiency for each compliance period in which a deviation occurred. You must submit the calculations that apply to you, including Equations 1, 1A, and 1B of § 63.4331; Equations 1, 1A, 1B, 1C, 2, 3, 3A, and 3B of § 63.4341; and Equation 1 of § 63.4351. You do not need to submit the background data supporting these calculations (e.g., test reports).

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

(E) A brief description of the CPMS.

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

(G) 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.

(H) 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.

(I) The date, time, and duration of each deviation from an operating limit in Table 2 to this subpart, and the date, time, and duration of any bypass of the add-on control device.

(J) A summary of the total duration of each deviation from an operating limit in Table 2 to this subpart and each bypass of the add-on control device during the semiannual reporting period and the total duration as a percent of the total source operating time during that semiannual reporting period.

(K) A breakdown of the total duration of the deviations from the operating limits in Table 2 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.

(L) 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.

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

(N) For deviations from the work practice standards, the number of deviations, and, for each deviation, a description of the deviation; the date, time, and duration of the deviation; and the actions you took to minimize emissions in accordance with § 63.4300(b). The description of the deviation must include a list of the affected sources or equipment for which the deviation occurred and the cause of the deviation (including unknown cause, if applicable).

(O) For deviations from an emission limit in Table 1 to this subpart or operating limit in Table 2 to this subpart, a statement of the cause of each deviation (including unknown cause, if applicable).

(P) For each deviation from an emission limit in Table 1 to this subpart or operating limit in Table 2 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 Table 1 to this subpart, and a description of the method used to estimate the emissions.

(8) *Deviations: Equivalent Emission Rate Option.* If you use the equivalent emission rate option, and there was a deviation from the operating scenarios, as defined in § 63.4371, used to demonstrate initial compliance, the semiannual compliance report must contain the information in paragraphs (a)(8)(i) through (iv) of this section.

(i) Before September 12, 2019, the beginning and ending dates of each compliance period during which the deviation occurred. On and after September 12, 2019, the beginning and ending dates of each compliance period during which the deviation occurred, the number of deviations during the compliance period, and, for each deviation, the date, time, and duration of the deviation; a list of the affected sources or equipment; and a statement of the cause of the deviation (including an unknown cause, if applicable).

\* \* \* \* \*

(c) Before September 12, 2019, if you use one of the add-on control options in § 63.4291(a) or (c) and you have a startup, shutdown, or malfunction during the semiannual reporting period, you must submit the reports specified in paragraphs (c)(1) and (2) of this section. The reports specified in paragraphs (c)(1) and (2) of this section are not required on and after September 12, 2019.

\* \* \* \* \*

(d) Beginning no later than June 13, 2019, you must submit the results of the performance test required in paragraph

(b) of this section following the procedure specified in paragraphs (d)(1) through (3) of this section.

(1) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) 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 (d)(1) of this section is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium must be clearly marked as CBI and mailed to U.S. EPA/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 (d)(1) of this section.

(e) 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 § 63.4310(c) 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 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,