

The EPA Acting Administrator, Andrew R. Wheeler, signed the following notice on 10/4/2018, and EPA is submitting it for publication in the *Federal Register* (FR). While we have taken steps to ensure the accuracy of this Internet version of the rule, it is not the official version of the rule for purposes of compliance. Please refer to the official version in a forthcoming FR publication, which will appear on the Government Printing Office's FDSys website (<http://gpo.gov/fdsys/search/home.action>) and on Regulations.gov (<http://www.regulations.gov>) in Docket No. EPA-HQ-OAR-2012-0133. Once the official version of this document is published in the FR, this version will be removed from the Internet and replaced with a link to the official version.

6560-50-P

## **ENVIRONMENTAL PROTECTION AGENCY**

### **40 CFR Part 63**

**[EPA-HQ-OAR-2012-0133; FRL-XXXX-XX-OAR]**

**RIN 2060-AS79**

### **National Emission Standards for Hazardous Air Pollutants: Manufacture of Amino/Phenolic Resins Risk and Technology Review Reconsideration**

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

**ACTION:** Final rule; notification of final action on reconsideration.

**SUMMARY:** This action finalizes amendments to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Manufacture of Amino/Phenolic Resins (APR).

These final amendments are in response to petitions for reconsideration regarding the APR NESHAP rule revisions that were promulgated on October 8, 2014. In this action, we are revising the maximum achievable control technology (MACT) standard for continuous process vents (CPVs) at existing affected sources. In addition, we are extending the compliance date for CPVs at existing sources. We also are revising the requirements for storage vessels at new and existing sources during periods when an emission control system used to control vents on fixed roof storage vessels is undergoing planned routine maintenance. To improve the clarity of the APR NESHAP, we are also finalizing five minor technical rule corrections. In this action, we have not reopened any other aspects of the October 2014 final amendments to the NESHAP for

the Manufacture of APR, including other issues raised in petitions for reconsideration of the October 2014 rule.

**DATES:** This final rule is effective on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. The incorporation by reference of certain publications listed in the rule is approved by the Director of the Federal Register as of **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** The Environmental Protection Agency (EPA) has established a docket for this action under Docket ID No. EPA-HQ-OAR-2012-0133. All documents in the docket are listed on the <https://www.regulations.gov> website. Although listed, some information is not publicly available, *e.g.*, confidential business information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through <https://www.regulations.gov> or in hard copy at the EPA Docket Center (EPA/DC), EPA WJC West Building, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the EPA Docket Center is (202) 566-1742.

**FOR FURTHER INFORMATION CONTACT:** For questions about this final action, please contact Mr. Art Diem, Sector Policies and Programs Division (Mail Code E143-01), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-1185; email address:

*diem.art@epa.gov*. For information about the applicability of the NESHAP to a particular entity,

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contact Ms. Maria Malave, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, EPA WJC South Building, Mail Code 2227A, 1200 Pennsylvania Ave., NW, Washington, DC 20460; telephone number: (202) 564-7027; fax number: (202) 564-0050; and email address: *malave.maria@epa.gov*.

**SUPPLEMENTARY INFORMATION:** *Acronyms and Abbreviations.* A number of acronyms and abbreviations are used in this preamble. While this may not be an exhaustive list, to ease the reading of this preamble and for reference purposes, the following terms and acronyms are defined:

APR	amino/phenolic resin
CAA	Clean Air Act
CFR	Code of Federal Regulations
CPV	continuous process vent
CRA	Congressional Review Act
EPA	U.S. Environmental Protection Agency
FR	Federal Register
HAP	hazardous air pollutants
HON	Hazardous Organic NESHAP
ICR	information collection request
MACT	maximum achievable control technology
MIR	maximum individual risk
MON	Miscellaneous Organic NESHAP
NAICS	North American Industry Classification System
NESHAP	national emission standards for hazardous air pollutants
NTTAA	National Technology Transfer and Advancement Act
OMB	Office of Management and Budget
PRA	Paperwork Reduction Act
RFA	Regulatory Flexibility Act
RTO	regenerative thermal oxidizer
TRE	total resource effectiveness
UMRA	Unfunded Mandates Reform Act
UPL	upper predictive limit
VCS	voluntary consensus standards

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

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## **I. General Information**

### *A. Does this action apply to me?*

Categories and entities potentially affected by this final rule include, but are not limited to, facilities having a North American Industry Classification System (NAICS) code 325211.

Facilities with this NAICS code are described as plastics material and resin manufacturing establishments, which includes facilities engaged in manufacturing amino resins and phenolic resins, as well as other plastic and resin types.

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To determine whether your facility would be affected by this final action, you should examine the applicability criteria in 40 CFR 63.1400. If you have any questions regarding the applicability of any aspect of this final action, please contact the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section of this preamble.

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

The docket number for this final action regarding the APR NESHAP is Docket ID No. EPA-HQ-OAR-2012-0133.

In addition to being available in the docket, an electronic copy of this final action will also be available on the Internet. Following signature by the EPA Administrator, the EPA will post a copy of this final action at <https://www.epa.gov/stationary-sourcesair-pollution/manufactureaminophenolic-resins-nationalemission-standards>. Following publication in the **Federal Register**, the EPA will post the **Federal Register** version and key technical documents on this same website.

*C. Judicial Review and Administrative Reconsideration*

Under Clean Air Act (CAA) section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit (the Court) by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Under CAA section 307(d)(7)(B), only an objection to this final rule that was raised with reasonable specificity during the period for public comment can be raised during judicial review. Note, under CAA section 307(b)(2), the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce these requirements.

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This section also provides a mechanism for the EPA to reconsider the rule “[i]f the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within [the period for public comment] or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule.” Any person seeking to make such a demonstration should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, EPA WJC South Building, 1200 Pennsylvania Ave., NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave., NW, Washington, DC 20460.

## **II. Background Information**

On October 8, 2014, the EPA completed the residual risk and technology review of the January 20, 2000, APR MACT standards (65 FR 3276), and published its final rule amending the NESHAP for the APR Production source category at 40 CFR part 63, subpart OOO (79 FR 60898). Following promulgation of the October 2014 final rule, the EPA received three petitions for reconsideration from the Sierra Club, Tembec BTLRS (“Tembec”) (now Rayonier Advanced Materials Inc.), and Georgia-Pacific LLC (“Georgia-Pacific”), requesting administrative reconsideration of amended 40 CFR part 63, subpart OOO under CAA section 307(d)(7)(B).

In partial response to the petitions, the EPA reconsidered and requested comment on two distinct issues in the proposed rule amendments, published in the **Federal Register** on August 24, 2017 (82 FR 40103). These issues included: (1) the analysis, supporting data, and resulting emission standards for CPVs at existing sources; and (2) planned routine maintenance of

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emission control systems used to reduce hazardous air pollutants (HAP) emissions from storage vessels.

In addition, while the EPA granted reconsideration on the pressure relief device issues raised in one of the petitions for reconsideration, the EPA did not address this issue in the August 24, 2017, proposal and intends to address those issues separately in a future action.

We received public comments on the proposed rule amendments from five parties. Copies of all comments submitted are available at the EPA Docket Center Public Reading Room. Comments are also available electronically through <https://www.regulations.gov> by searching Docket ID No. EPA-HQ-OAR-2012-0133.

In this document, the EPA is taking final action with respect to the issues on reconsideration addressed in the August 2017 proposal. Section III of this preamble summarizes the proposed rule amendments and the final rule amendments, presents public comments received on the proposed amendments and the EPA's responses to those comments, and explains our rationale for the rule revisions published here.

### **III. Summary of Final Action on Issues Reconsidered**

The two reconsideration issues for which amendments are being finalized in this rulemaking are: (1) the analysis, supporting data, and resulting emission standards for CPVs at existing sources; and (2) planned routine maintenance of emission control systems used to reduce HAP emissions from storage vessels. In this rulemaking, we are also finalizing several minor technical corrections to the regulation text of 40 CFR part 63, subpart OOO.

#### *A. Analysis, Supporting Data, and Resulting Emission Standards for CPVs at Existing Sources*

##### **1. What changes did we propose regarding CPV standards at existing sources?**

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In the August 2017 proposed amendments to 40 CFR part 63, subpart OOO, we proposed a revised emissions limit for CPVs at existing sources, addressing only back-end CPVs.

In addition, we requested comments on the following issues: (1) whether the existing compliance date or another date for back-end CPVs is appropriate if the standard is revised; and (2) whether the EPA should promulgate a separate standard for front-end CPVs at existing sources and whether there are other front-end CPVs in the source category beyond those identified by the EPA.

For back-end CPVs at existing sources, we proposed a production-based HAP emission limit of 8.6 pounds of HAP per ton of resin produced. This emissions limit represents the MACT floor based on 2015 test data provided by Georgia-Pacific and Tembec, the only two companies in the source category with back-end CPVs. We also solicited comments on whether existing facilities would need additional time to comply with the proposed revised back-end CPV standards, noting that the compliance date in the October 2014 final rule is October 9, 2017, and that the APR NESHAP at 40 CFR 63.1401(d) provides the opportunity for existing facilities, on a case-by-case basis, to request a compliance extension from their permitting authorities of up to 1 year, if necessary, to install controls to meet a standard.

The EPA identified two front-end CPVs at APR production existing sources at proposal and requested information about any other front-end CPVs in the source category. Due to the characteristics of these two CPVs, we noted that these CPVs could be subcategorized into two types—reactor and non-reactor front-end CPVs, and separate standards for the two types of front-end CPVs would be consistent with how reactor and non-reactor vents have been regulated for batch processes for the APR Production source category. We also stated that if no other reactor or non-reactor front-end CPVs at existing affected sources were identified, or if no

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additional data were provided for any such CPVs, the EPA would consider adopting final revised standards for front-end CPVs at existing sources based on existing information. Based on our analysis of the data provided by Georgia-Pacific for its front-end reactor CPVs, we proposed that the MACT floor for front-end reactor CPVs at existing sources would be 0.61 pounds of HAP per hour. Based on our analysis of the data provided by INEOS Melamines for its front-end non-reactor CPV, we proposed that the MACT floor for front-end non-reactor CPVs at existing sources would be 0.022 pounds of HAP per hour. We received no information about any additional front-end CPVs during the comment period.

2. What comments did we receive regarding proposed amendments to CPV standards at existing sources?

The following is a summary of the significant comments received on the proposed amendments to CPV standards at existing sources and our responses to these comments.

*Comment:* One commenter stated that the EPA's updated risk analysis for INEOS Melamines and for the category are underestimated for reasons it has stated in comments on the October 2014 rule for this source category. The commenter also said the new analysis for INEOS Melamines only considers risks from formaldehyde and fails to consider the risks from other HAP emitted by the facility or the cumulative risks to the community from other pollution sources.

*Response:* We addressed the commenter's concerns regarding cumulative risks (and the various reasons the commenter claimed the risks were underestimated) in previous analyses in our October 2014 response to comments (Document EPA-HQ-OAR-2012-0133-0066). These same responses still apply and are not repeated here. Regarding the risk analysis for INEOS Melamines, the commenter is mistaken in asserting that the analysis only included formaldehyde.

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The risk analysis for the facility included all HAP emissions from equipment in the source category, and these HAP include both formaldehyde and methanol. As we noted in the August 2017 proposal, the 2014 risk modeling analysis indicated that the INEOS Melamines facility maximum individual risk (MIR) was estimated to be 0.4-in-1 million. As the risk driver was formaldehyde, we mentioned in the August 2017 proposal that the input files included 0.375 tons of formaldehyde emissions. We also discussed in the proposal that information received from INEOS Melamines indicated there were additional emissions of less than 0.03 tons per year from its non-reactor front-end CPV that were not accounted for in the 2014 modeling analysis. We explained in the proposal that when including these additional emissions in the risk estimate for the facility, the facility MIR would be about the same (less than 1-in-1 million), and we determined that additional quantitative risk analyses for this facility are not necessary. No updates to the risk analysis were made to other facilities, and the overall estimation of risks for the source category remain unchanged.

*Comment:* Several commenters were concerned about the proposed elimination of the use of the Total Resource Effectiveness (TRE) value as a compliance option for continuous process vents at an existing affected source. The commenters noted that the TRE provision is found in numerous other rules, such as the Hazardous Organic NESHAP (HON) and the Miscellaneous Organic NESHAP (MON). The commenters stated that the TRE provides facilities with the flexibility to reduce emissions in the most cost-effective manner. The commenters also stated that the EPA has not articulated a rational basis for eliminating the TRE and that the EPA should maintain the current TRE for this and all other rules affecting continuous process vents. The commenters further stated that by keeping the TRE for continuous process vents at a new

affected source, but eliminating it for existing sources, the requirements for existing sources would become more restrictive and costly than those for new affected sources.

*Response:* In the development of the MACT requirements for this NESHAP and in other rules, such as the HON and the MON, a TRE was included in the rule to help define the regulated process vents. In those rules, data for only a portion of the process vents in the existing source category were available to base the MACT floor and beyond-the-floor analyses upon. To ensure the rule required control for all process vents in the source category that were similar to those for which the MACT floor and the level of the standard was set, the TRE was used. This value ensures that all the process vents in the source category with comparable characteristics, such as flow rate, emission rate, net heating value, etc., as the process vents used to establish the level of the standard are the ones required to meet the established level of control. In this case, the EPA now has information for every CPV at an existing source in this source category, and the characteristics of every CPV were considered in establishing the proposed revised MACT standards. Therefore, a TRE value is not necessary to define the regulated CPVs at existing sources.

For CPVs at new sources, the EPA did not propose to eliminate the TRE. Keeping the TRE for CPVs at these sources will continue to ensure the representativeness of the process vent on which the emission standards were based to the process vents regulated by that standard, as it is unknown what characteristics any future process vents will have. The commenters are not correct in their assertion that without the inclusion of the TRE, the proposed revised existing source requirements will become more restrictive and costly than the standards for new sources. The CPVs at new sources with characteristics similar to the vent on which the standard is based will be required to have greater emissions reductions than the reductions effectively required for

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existing sources (*i.e.*, 85-percent reduction for new sources compared to approximately 50-percent reduction in emissions for the two existing CPVs that require control to meet the MACT standard).

*Comment:* One commenter expressed dissatisfaction with the EPA's beyond-the-floor analysis for the proposed existing source standards for back-end CPVs. The commenter stated that the EPA only examined new regenerative thermal oxidizers (RTOs) and did not consider less costly options, such as using existing controls or conducting process changes. The commenter also stated that the EPA did not address whether additional beyond-the-floor reductions would be achievable. The commenter further stated that cost effectiveness is a measure of whether the benefits of a particular action are worth the cost, and the EPA's practice of comparing marginal cost for beyond-the-floor options relative to the costs of the reductions achieved by the MACT floor does not answer the question of whether the beyond-the-floor option is cost effective.

*Response:* In evaluating the beyond-the-floor emissions control options, we considered control technologies and strategies that would be technologically feasible for the facilities in the source category that have these process vents. In this case, RTO is the only control technology known that could treat the low HAP concentration, high air flow exhaust from these vents. We explained in the memorandum, "Proposed Revised MACT Floor and Beyond-the-Floor Analysis for Back-End Continuous Process Vents at Existing Sources in the Amino and Phenolic Resins Production Source Category," which is available in the docket for this action, that we also considered scrubbers and carbon adsorbers in this analysis, but found them to be technologically infeasible for this application. While it may be possible that a facility could make process changes to reduce emissions, this would be highly facility-specific, and the EPA does not have

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information to suggest any particular type of process change would reduce HAP from these vents. We did explain that RTOs are capable of achieving emission rates beyond the MACT floor. We used the EPA's control cost manual to evaluate costs of control. We did not have enough information to evaluate the cost effectiveness of process changes that could be used to meet the standard. Regarding the cost effectiveness of the technologically available option, *i.e.*, an RTO, we described the estimated cost of the beyond-the-floor option in the above-referenced memorandum. As shown in this memorandum, cost effectiveness was determined using capital and annual costs of an RTO, and the emissions reductions were determined using a baseline of no control compared to control using an RTO. The beyond-the-floor option was found to not be cost effective using these estimates.

#### *Back-end CPVs*

*Comment:* One commenter generally supported the levels of the back-end CPV standards for existing sources, but has some concerns regarding the associated compliance assurance measures and definitions. For the back-end CPVs, the commenter requested that an option to achieve an 85 percent reduction be included to ensure the standards for existing sources are not more stringent than those for new sources. The commenter also requested that the EPA keep the formerly included 12-month rolling average emission rate for back-end CPVs to account for emissions variability between resin types. Additionally, the commenter suggested that the EPA not change the definitions for reactor batch process vent and non-reactor batch process vent to ensure there is no confusion regarding applicability of the batch process vent provisions. Further, the commenter stated that the EPA should specify that initial compliance performance tests be conducted at "maximum representative operating conditions."

*Response:* We are not revising the format of the proposed standard for existing source back-end CPVs as the commenter requested. The 12-month rolling average emissions rate, formerly included in the October 2014 rule, was used to help account for variability in emission rates before the EPA had the information submitted by the facilities for each CPV, in which the highest HAP emitting resin was tested. The proposed standard accounted for variability in emissions while the highest HAP emitting resin was produced. Therefore, there is no need for compliance to be determined over a long period to account for variability in resins produced or the conditions present while producing high HAP emitting resins. The EPA is also not adding an 85-percent reduction compliance option for existing source back-end CPVs. In calculating the MACT floor, we determined the emissions limitation achieved by the best performing existing sources in the category based on the emissions per unit of resin produced. This production-based standard accounts for variability associated with the manufacturing process, including fluctuations in the amount of product produced and different types of product produced (*i.e.*, various resin types), as well as possible future process modifications to alter other production variables. An 85-percent emissions reduction compliance option does not reflect the MACT floor level of control for back-end CPVs at existing sources.

The proposed revised rule contains definitions for “batch process vent,” “continuous process vent,” “non-reactor process vent,” and “reactor process vent.” It is clear from these definitions that the rule provisions pertaining to “reactor batch process vents” and “non-reactor batch process vents” include only those vents that are “batch process vents.” It is also clear that the rule provisions pertaining to “reactor continuous process vents” and “non-reactor continuous process vents” include only those vents that are “continuous process vents.” Therefore, as the

applicability of the rule provisions is sufficiently clear with these definitions, we have not added or changed the definitions related to these vents in the final rule beyond what was proposed.

We agree with the commenter that the initial compliance performance test should be conducted at “maximum representative operating conditions.” However, as this is already a specified condition for performance tests in 40 CFR 63.1413(a)(2)(ii)(A), we have not further revised the regulatory text.

*Comment:* One commenter stated that use of an upper predictive limit (UPL) in the standards for back-end CPVs at existing sources is not justified, since the EPA has extensive data for all the sources subject to the standard. The commenter stated that with such a comprehensive data set, it is likely that all variability is already accounted for, and there is no justification to assume there is additional variability that needs to be accounted for. The commenter also stated that the EPA did not disclose the actual emissions levels obtained by the sources in the category in the units of measurement used for the proposed standards and only presents the emission rates estimated by the UPL. The commenter stated that the standards are further weakened by not being required to determine compliance using the resin resulting in the highest HAP emissions, the way the MACT floor was calculated, but instead requiring compliance based on the resin with the highest HAP content. The commenter also stated that the alternative percent-reduction and concentration-based limits do not reflect emissions reductions achieved by best-performing sources.

*Response:* While we agree with the commenter that the EPA has a comprehensive data set for the back-end CPVs in the source category, the use of the UPL is justified to account for variability that occurs due to process conditions when producing the highest HAP-emitting resins. We calculated the UPL values for each back-end CPV with that CPV’s highest HAP-

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emitting resin to take this variability into consideration. As discussed in detail in the MACT floor memorandum, “Proposed Revised MACT Floor and Beyond-the-Floor Analysis for Back-End Continuous Process Vents at Existing Sources in the Amino and Phenolic Resins Production Source Category,” which is available in the docket for this action, we used the arithmetic average of the UPLs of the five best-performing back-end CPVs to calculate the MACT floor. To respond to the commenter’s concerns about the calculation of the UPL, we have summarized the emissions information used to calculate the UPL values for each back-end CPV and included this information in a memorandum titled “Addendum to Proposed Revised MACT Floor and Beyond-the-Floor Analysis for Back-End Continuous Process Vents at Existing Sources in the Amino and Phenolic Resins Production Source Category” to the docket for this action.

Regarding the compliance determination based on the resin with the highest HAP content, for these back-end CPVs, the liquid resin having the highest HAP content is the condition for which the highest HAP emissions result. This occurs because no significant quantities of HAP are created or destroyed in the drying process, and the drying process moves nearly all HAP in the liquid resin to the dryer vent (*i.e.*, back-end CPV). In addition, 40 CFR 63.1413(a)(2)(ii)(A) specifies that performance tests used to demonstrate compliance must be under “maximum representative operating conditions,” as defined at 40 CFR 63.1402. This term specifies conditions which reflect the highest organic HAP emissions reasonably expected to be vented to the control device or emitted to the atmosphere.

Regarding the alternative standards included in the rule for CPVs, the alternative standard is not a percent reduction based standard and is only a concentration based alternative standard that represents the performance limits of combustion and non-combustion control technologies



for low-HAP concentration airstreams. We did not propose to amend the alternative standard and are not making any amendments to the alternative standard in this action.

*Comment:* Two commenters responded to the EPA's request for comment about whether existing facilities would need additional time to comply with the proposed revised back-end CPV standards. One commenter stated that the EPA should not extend the compliance deadline, asserting that such an extension would contravene the CAA's provisions stating that CAA section 112 standards become effective upon promulgation. The commenter also noted that sources would be in compliance with the more stringent 2014 standard by October 2017, and CAA section 307(d)(7)(B) provides that the EPA shall not delay the effective date of a regulation more than 3 months pending reconsideration. Another commenter recommended that all existing sources impacted by any of the proposed emission limits, definitions, and work practice standards have an additional year to meet the proposed compliance requirements. The commenter stated that facilities would need time to further evaluate the impact of the rule change, evaluate and/or modify its compliance strategy, and implement the compliance measures.

*Response:* Pursuant to CAA section 112(i)(3)(A), the Agency is establishing a compliance date of 1 year from the promulgation date of the final standards for back-end CPVs at existing sources. We are establishing this compliance date with recognition that the original October 2017 compliance date has already passed, that several state agencies have already given sources 1 year compliance date extensions, and that the amended emissions standard for back-end CPVs at existing sources changes the numerical emission limitation. After promulgation of these standards, facility owners or operators will require time to reevaluate compliance options, potentially revise compliance strategies, and implement the strategies, which the EPA anticipates

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will entail the purchase and installation of emissions control devices at two sources. We are providing 1 year to allow for this evaluation and implementation, which we consider as expeditious as practicable given the need to evaluate compliance options and the anticipated installation and initial compliance determination of emission control equipment in order to meet the standards in this final rule. Additionally, since we are revising the standards for front-end CPVs at existing facilities, we are also establishing the same compliance date as for the back-end CPVs at existing sources. The reasons for the revised compliance date for front-end CPVs at existing sources are the same as those for the back-end CPVs, except that the EPA anticipates that sources will not need to purchase and install emissions control devices to achieve the front-end CPV standard. Regardless of whether control devices will need to be employed to achieve the standards for front-end CPVs at existing sources, the numeric value and format of the standard is revised and owners or operators of sources subject to these revised standards will need to alter how they demonstrate compliance. For front-end CPVs, the standard is being revised from 1.9 pounds of HAP per ton of resin produced, as specified in the October 2014 rule, to less than a pound of HAP per hour standard as revised in this action. This is a logical outgrowth of the proposal's discussion of the considered options for front-end CPVs at existing sources, for which the Agency solicited comments which yielded no identification of other front-end vents and no substantive comments regarding the discussed possible standards. The need to establish an expeditious yet reasonable compliance date for a revised standard is reasonable in light of our revising the standard in both numeric value and units of measure. The revised compliance deadline for CPVs at existing sources being established in this action is specified at 40 CFR 63.1401(b). In contrast, for the storage vessel standard for periods of planned routine maintenance, the option to comply through a work practice standard would only require planning

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not substantially different from what is necessary to implement the planned routine maintenance of the emissions control system and would not require any additional equipment. Therefore, the EPA has determined that this storage vessel standard can be implemented by the compliance date previously established, and we are not amending this compliance date for the finalized storage vessel amendments in this final action.

The EPA disagrees with the commenter's opinion that providing additional time to comply with the revised CPV standards is unlawful under the CAA. Although it is true that CAA section 112 provides that standards "shall be effective upon promulgation," the commenter overlooks the fact that CAA section 112(i)(3)(A) clearly provides the EPA discretion to establish an appropriate compliance period to follow the "effective date" of standards. Similarly, although CAA section 307(d)(7)(B) speaks of potential delays of the effectiveness of a standard following receipt of a petition of reconsideration, that provision has no relevance to the decision the Agency makes under CAA section 112(i)(3)(A) to establish a compliance date following the promulgation of a standard.

*Comment:* One commenter noted there were several references in the proposed rule to 40 CFR 63.1405(b)(2)((i), (ii), and (iii), which were not included in the proposed rule language. The commenter also noted that there was no paragraph (i) or (ii) before 40 CFR 63.1413(h)(3)(ii)(B)(3)(iii). The commenter requested that the EPA correct the discrepancies and allow for an extended comment period on the technical corrections.

*Response:* The commenter is correct that several references to these paragraphs were included in the proposed rule language and that the paragraphs were not present in the proposed rule text. The paragraphs in which these references were located in the proposed rule text were 40 CFR 63.1413(c)(5), (c)(6), (h)(1)(i), (h)(3)(ii)(B)(4), and (h)(3)(iii), and 40 CFR

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63.1416(f)(5) and (f)(6), and 40 CFR 63.1417(f)(15). In the final rule language, we have corrected this discrepancy by revising 40 CFR 63.1405(b) and including standards for reactor and non-reactor front-end CPVs at existing sources in 40 CFR 63.1405(b)(2)(ii) and (iii). We did not propose rule language for these front-end CPVs because we were taking comment on whether it would be appropriate to establish front-end CPV standards at existing sources for the source category and the associated value of the standard if there were front-end CPVs, other than the two we had identified, at existing affected sources. In the proposal, we discussed what the standard would be based on information available to the EPA at the time and provided a memorandum in the docket regarding calculation of the MACT floor and beyond-the-floor analysis. As no comments were received regarding additional front-end CPVs, and no other information indicates there are other existing source front-end CPVs in the source category, we have included the standards for front-end CPVs in the final rule. These standards are based on the existing information available to the EPA, as discussed at proposal. We have also corrected the numbering for 40 CFR 63.1413(h)(3)(ii)(B)(3). As the levels of the front-end CPV standards now included in the rule language were explained in our proposal, and no comments on the standards were received, we are not providing additional time for comment on these provisions.

3. What are the final rule amendments and our associated rationale regarding CPV standards at existing sources?

The analyses regarding the emission standards for CPVs at existing source APR facilities has not changed since proposal, and our rationale for the standards are provided in the preamble for the proposed rule and in the responses to the comments presented above. For these reasons, we are finalizing the revised back-end CPV standards for existing sources of 8.6 pounds of HAP per ton of resin produced, as proposed in August 2017. We are also finalizing, for the reasons

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provided above, separate standards for reactor and non-reactor front-end CPVs at existing sources, as described in the August 2017 proposal. The standard for front-end reactor CPVs is 0.61 pounds of HAP per hour, and the standard for front-end non-reactor CPVs is 0.022 pounds of HAP per hour.

*B. Planned Routine Maintenance of Emission Control Systems Used to Reduce HAP Emissions from Storage Vessels*

1. What changes did we propose regarding planned routine maintenance of storage vessel emissions control systems?

In its petition for reconsideration of the October 2014 final rule, Georgia Pacific requested that the EPA reconsider the applicability of the storage vessel HAP emissions standards when the emission control system for the vent on a fixed roof storage vessel is shut down for planned routine maintenance. In response to this request, the EPA reviewed and re-evaluated the standards for storage vessels, and we proposed a separate work practice standard for storage vessels during periods of planned routine maintenance of the storage vessel control device in the August 2017 proposed amendments to 40 CFR part 63, subpart OOO. This proposed work practice would allow owners or operators to bypass the control device for up to 240 hours per year during planned routine maintenance of the emission control system, provided there are no working losses from the vessel. This proposed standard would apply to fixed roof storage vessels at new and existing APR sources and represents the MACT floor level of control.

2. What comments did we receive regarding the proposed standards for planned routine maintenance of storage vessel emissions control systems?

The following is a summary of the significant comments received on the proposed standards for planned routine maintenance of storage vessel emissions control systems and our responses to these comments.

Comment: One commenter stated that the EPA lacks authority to exempt sources from emissions standards during any period of time and asserted that the proposed work practice standard is merely an exemption for storage vessel emissions during control device planned routine maintenance. The commenter also asserted that the EPA has not met the statutory requirements specified in CAA section 112(h)(1)-(2) to authorize the Agency to issue a work practice standard rather than a numeric emission standard. The commenter further stated that the proposed work practice standards are not consistent with the requirements of CAA section 112(d), which sets forth requirements for determining the MACT floor and beyond-the-floor levels based on the emissions reductions achieved by the best performing similar sources. The commenter stated that the EPA has not determined the emissions achieved by the best performing sources or whether those sources have 240 hours of uncontrolled emissions annually. The commenter stated that the EPA failed to apply the CAA standards for beyond-the-floor determinations. On this point, the commenter noted that the EPA claims the use of carbon canisters for emissions control during storage vessel planned routine maintenance is achievable, but not cost effective, however, the EPA did not attempt to examine the benefits of reducing HAP during these periods. The commenter stated that the EPA did not disclose the data or methodology used in its estimate of 26 pounds per year per facility for routine maintenance emissions.

Response: First, there is no basis for the commenter's assertion that the proposed work practice standard is an exemption for storage vessel emissions during control device planned

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routine maintenance. The work practice standard establishes specific requirements that apply during up to 240 hours per year of planned routine maintenance of the control system. Specifically, the standard prohibits sources from increasing the level of material in the storage vessel during periods that the closed-vent system or control device is bypassed to perform planned routine maintenance. This standard minimizes emissions by ensuring that no working losses occur during such time periods. Working losses are the loss of stock vapors as a result of filling a storage vessel and are the majority of uncontrolled emissions for storage vessels having significant throughput. The proposed work practice standard does not allow working losses to occur. With working losses eliminated during this period, the only emissions that would occur are breathing losses (a.k.a. standing losses). Breathing losses occur due to the expansion and contraction of the vapor space in a fixed roof storage vessel from diurnal temperature changes and barometric pressure changes. Breathing losses occur without any change to the liquid level in the storage vessel. The breathing losses from a fixed roof storage vessel are small and highly variable because they are dependent upon the volume of the vapor space in the storage vessel and the meteorological conditions at the time.

Second, the storage vessel requirements in this rule were originally promulgated as CAA section 112(h) standards. The provisions establish two control options. One option is for the installation of a floating roof pursuant to 40 CFR part 63, subpart WW. This option is a combination of design, equipment, work practice, and operational standards. The other option is to install a conveyance system (pursuant to 40 CFR part 63, subpart SS) and route the emissions to a control device that achieves a 95-percent reduction in HAP emissions or that achieves a specific outlet HAP concentration. The second option is a combination of design standards, equipment standards, operational standards, and a percent reduction or outlet concentration. See

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the preamble to the original rulemaking for 40 CFR part 63, subpart OOO at 63 FR 68832 (12/14/1998) and the preamble to the HON at 57 FR 62608 (12/31/1992). In this action, we neither reopened nor accepted comment on the standards that apply during all periods other than the up to 240 hours of planned routine maintenance or any aspect of the original justification for the standards.

Third, the specific work practice requirement added in this action fulfills the purposes of section 112(h)(1) of the CAA, which calls on the Administrator to include requirements in work practice standards sufficient to assure the proper operation and maintenance of the design or equipment. The work practice standard added simply allows for the planned routine maintenance of the control device and minimizes emissions during such periods of planned routine maintenance, consistent with the requirements of CAA section 112(h)(1).

Fourth, the commenter did not provide any evidence to show that there is a methodology that could be applied to breathing losses from a fixed roof storage vessel that would be technologically and economically practicable. We have determined that it is not practicable due to technological and economic limitations, to apply measurement methodology to measure breathing losses from storage vessels during periods of planned routine maintenance. We have concluded that it would not be technically and economically practicable to measure breathing loss emissions with any degree of certainty to establish a numeric limit based upon the best performing sources because of the nature of the breathing losses. The breathing losses during the planned routine maintenance of the control system are highly dependent on the volume of the vapor space and the weather conditions during that time. It would be impractical to plan to test a storage vessel during the 10 days per year that have the both the weather conditions and the vapor space volume that would result in the most breathing losses. Specialized flow meters (such

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as mass flowmeters) would likely be needed in order to accurately measure any flow during these variable, no to low flow conditions. Measurement costs for these no to low flow durations of time would be economically impracticable, particularly in light of the small quantity of emissions. We have used AP-42 emissions estimate equations to estimate 10 days of breathing losses. See “Addendum to National Impacts Associated with Proposed Standards for CPVs and Storage Tanks in the Amino and Phenolic Resins Production Source Category” in the docket for this rule. We estimate that it would cost approximately \$25,000 for three 1-hour testing runs on a single day. We calculated these costs based on industry average costs of deploying qualified individuals for a day and costs of performing the necessary tests on required equipment to determine the concentration and emission rate of HAP. The extremely low flow rate present would require a greater degree of monitoring plan and quality assurance project plan development than is typical. Specialized equipment that is not typically available may be required to measure flow rates under these conditions. We are not aware of any measurement of breathing loss HAP emissions from a fixed roof storage vessel in the field.

In the proposed rule, we also evaluated whether a backup control device capable of achieving the 95-percent reduction standard would be cost effective at controlling the remaining breathing losses. In the proposal, we explained that the use of such back-up control devices is not cost effective. To respond to the commenter’s concern about the disclosure of the data and methodologies used to calculate the breathing losses for assessing the cost effectiveness of controlling such emissions, in the memorandum titled “Addendum to National Impacts Associated with Proposed Standards for CPVs and Storage Tanks in the Amino and Phenolic Resins Production Source Category,” we are providing a summary of the information used to calculate the breathing losses in the docket for this rule.

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Therefore, we are finalizing the amendments to the storage vessel requirements, as proposed, allowing owners or operators of fixed roof vessels at new and existing affected APR sources to perform planned routine maintenance of the emission control system for up to 240 hours per year, provided there are no working losses from the vessel during that time.

*Comment:* One commenter supported the EPA's proposed work practice standards for storage vessels during planned routine maintenance of emission control systems. The commenter requested that the work practice standard also cover periods of malfunctions of the control device when it is temporarily incapable of controlling any emissions from the storage vessel. The commenter stated this would reduce the burden associated with required notifications of unpreventable failure of control equipment, which may not result in an exceedance of the emissions standard.

*Response:* While emissions from most equipment can be eliminated completely during routine maintenance of a control device, simply by not operating the process during those times, the same is not true for a storage vessel. The stored material in the vessel will continue to emit small amounts of volatile compounds due to breathing losses even when the control device is not operating. The only ways to avoid these emissions are to route the vapors from the stored material to another control device or to completely empty and degas the storage vessel prior to the maintenance activity. We proposed the 240 hour work practice standard to avoid having owners or operators empty and degas a storage vessel prior to completing planned routine maintenance, as this activity results in higher emissions than the small amounts of breathing losses that would result during the time the control device was not operating. While this work practice requirement prevents higher emissions than would result from the planned emptying and degassing activity that may take place prior to planned routine maintenance of a control device,

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the same emissions would not be avoided in the event of a malfunction. As malfunctions are not planned events, an owner or operator would not empty and degas a storage vessel prior to the malfunction. Since emissions would not be reduced and would possibly increase by including malfunctions in the work practice standard, we do not agree that it is not appropriate to include malfunctions in the standard. Consequently, the final rule does not adopt the commenter's suggestion.

*Comment:* One commenter requested that the EPA revise the proposed storage vessel control requirements to explicitly allow emissions to be routed to a process for re-use as a raw material rather than just to a control or recovery device, to be more consistent with the similar provisions contained in the HON.

*Response:* The standards in 40 CFR 63.1404(a)(1) refer to 40 CFR part 63, subpart SS, for storage vessel control requirements, stating, "Control shall be achieved by venting emissions through a closed vent system to any combination of control devices meeting the requirements of 40 CFR part 63, subpart SS (National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process)." The requirements of 40 CFR part 63, subpart SS, also include the ability to meet storage vessel emissions standards by routing emissions through a closed vent system to a fuel gas system or a process, which has been an option for control of storage vessel emissions meeting the standards of 40 CFR 63.1404(a)(1). We have revised 40 CFR 63.1404(a)(1) to clarify that compliance with the standards of 40 CFR 63.1404(a)(1) can be achieved by following the requirements of 40 CFR part 63, subpart SS, for routing emissions through a closed vent system to a fuel gas system or a process, which are included in the provisions and the title of the subpart. This clarification achieves the same result as the commenter's suggestion.

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3. What are the final rule amendments and our associated rationale regarding the standards for planned routine maintenance of storage vessel emissions control systems?

The analysis of the alternative work practice standards for storage vessels at new and existing APR facilities during planned routine maintenance of emission control systems has not changed since proposal. Therefore, for the reasons provided above, as well as in the preamble for the proposed rule, the EPA is finalizing, with minor clarifications, the proposed work practice standards for these periods of time. The work practice standards will permit owners or operators of fixed roof storage vessels at new and existing affected APR sources to bypass the emission control system for up to 240 hours per year during planned routine maintenance of the emission control system, provided there are no working losses from the fixed roof storage vessel. To prevent HAP emissions from working losses, owners or operators complying with the alternative work practice standards will not be permitted to add material to the storage vessel during control device planned routine maintenance periods.

We are making two minor clarifications to the requirements for storage vessels during planned routine maintenance of emission control systems. In this final rule, we have revised 40 CFR 63.1404(a)(1) to clarify that compliance with the standards of 40 CFR 63.1404(a)(1) can be achieved by following the requirements of 40 CFR part 63, subpart SS, for routing emissions through a closed vent system to a fuel gas system or a process. This revision will apply during times of normal operation, as well as during planned routine maintenance of the storage vessel emissions control system. We have also added language to the recordkeeping and reporting requirements in 40 CFR 63.1416(g)(6) and 40 CFR 63.1417(f)(16) for storage vessel control device planned routine maintenance. These requirements were inadvertently omitted from the proposed rule text.

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### *C. Technical Corrections*

In this rulemaking, we are making five technical corrections to improve the clarity of the APR NESHAP requirements.

First, the original APR NESHAP, promulgated in January 2000 (65 FR 3276), incorporated three voluntary consensus standards (VCS) by reference, as specified in 40 CFR 63.14. However, while the paragraphs in 40 CFR 63.14 for these three VCS include references to the NESHAP for which they are approved to be used, these references omit citations to 40 CFR 63, subpart OOO. In 40 CFR 63.14, we are adding citations to 40 CFR 63.1402 and 40 CFR 63.1412 for the following consensus standards: American Petroleum Institute Publication 2517, Evaporative Loss From External Floating-Roof Tanks; American Society for Testing and Materials Method D2879-83; and American Society for Testing and Materials Method D1946-90.

Second, we are also correcting a citation reference to 40 CFR 63.1413(d)(6)(iii)(A) in 40 CFR 63.1417(3)(9). The correct citation is to 40 CFR 63.1414(d)(6)(iii)(A).

Third, at 40 CFR 63.1403(a) and 40 CFR 63.1405(a)(2), we are correcting the reference to the title of 40 CFR part 63, subpart SS, *i.e.*, “National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process.”

Fourth, at 40 CFR 63.1412(g)(2)(ii), we are adding the phrase “(Reapproved 1994) (incorporated by reference, see § 63.14)” immediately following “American Society for Testing and Materials D1946-90.”

Fifth, at 40 CFR 63.1404(c) and 40 CFR 63.1416(g)(6)(iii), we are replacing the undefined term “tank” with the defined term “storage vessel.”

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

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*A. What are the affected sources?*

We estimate that 11 to 16 existing sources will be affected by one or more of the revised requirements being finalized in this action. We expect one existing source will be subject to the revised front-end and back-end CPV requirements, one existing source will be subject to the revised front-end CPV requirements, and three existing sources will be subject to the back-end CPV requirements. We expect four of these five existing sources (and an additional six to 11 sources) will be able to take advantage of the storage vessel work practice standards during periods of planned routine maintenance of an emission control system that is used to comply with emissions standards for vents on fixed roof storage vessels.

*B. What are the air quality impacts?*

We are finalizing a revised standard of 8.6 pounds of HAP per ton of resin produced for back-end CPVs at existing sources. We project the final standard will result in an estimated reduction of 207 tons of HAP per year beyond the January 2000 APR MACT standards, based on compliance with the alternative standard of 20 parts per million by volume for combustion control using RTOs. We estimate that the October 2014 rule would have required HAP emission reductions of 271 tons per year from CPVs at existing sources. We are also finalizing a standard of 0.61 pounds of HAP per hour for front-end reactor CPVs at existing sources and a standard of 0.022 pounds of HAP per hour for front-end non-reactor CPVs at existing sources. The front-end CPVs are anticipated to be able to meet the emission standards without additional controls, and we project that these final standards will not result in HAP emission reductions beyond the January 2000 APR MACT standards.

We are finalizing work practice standards to address emissions during periods of storage vessel emissions control system planned routine maintenance. The standards require that storage

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vessels not be filled during these times, which eliminates working losses, and limit the amount of time allowed annually for use of this work practice. We anticipate the revised work practice standards will reduce HAP emissions from those allowed under the January 2000 APR MACT standards by preventing working losses and limiting the annual duration of the maintenance period for which the work practice can be used, resulting in an estimated decrease of 0.9 tons of HAP per year per facility beyond the January 2000 APR MACT standards. When compared to the October 2014 rule, which required compliance with the storage vessel emissions standards at all times, including during times of planned routine maintenance of the emissions control system, the HAP emissions reduction may be slightly less than the 0.08 tons of HAP per year projected under the 2014 final rule.

*C. What are the cost impacts?*

For back-end CPVs at existing affected sources, we are finalizing a revised standard of 8.6 pounds of HAP per ton of resin produced. We project that back-end CPVs at two existing affected sources will require emissions controls to meet the revised standard. For cost purposes, we assumed that each facility would install an RTO. Based on discussions with Georgia-Pacific and Tembec, we understand that the facilities are exploring other options, such as process changes, that may be more cost effective. However, the technical feasibility and potential costs of these options are currently unknown, and our estimate of compliance costs, assuming the use of RTOs, is based on the best information available. We estimate the nationwide capital costs to be \$4.8 million and annualized costs to be \$2.1 million per year. These costs are incremental to those of the 2000 rule, which did not regulate CPVs at existing sources. Compared to our revised estimate of the October 2014 rule costs of \$9.6 million in capital costs and annualized costs of

\$4.2 million,<sup>1</sup> the revised standard represents an approximate 50-percent reduction in industry-wide costs. For front-end CPVs, we anticipate compliance with the emissions standards to be met without additional control, and we estimate there will be no capital or annualized costs associated with achieving these standards.

We estimated the nationwide annualized cost reductions associated with the final work practice standards for periods of planned routine maintenance of an emission control system that is used to comply with emissions standards for vents on fixed roof storage vessels. Compared to our revised cost estimate of the October 2014 rule,<sup>2</sup> the final storage vessel work practice standards result in an annualized cost reduction for each facility of \$830 per year, which includes a capital cost reduction of \$1,600. We estimate the nationwide annualized cost reduction to be up to \$12,450 per year based on an estimated 15 facilities.

*D. What are the economic impacts?*

We performed a national economic impact analysis for APR production facilities affected by this final rule. We anticipate that two existing affected sources would install RTOs to comply with this rule at a total annualized cost of \$2.1 million (in 2014\$) per year compared to the January 2000 rule. These total annualized costs of compliance are estimated to be approximately 0.002 percent of sales. Accordingly, we do not project this final rule to have a significant economic impact on the affected entities.

The estimated total annualized cost of this final rule can also be compared to the estimated cost for the industry to comply with all provisions of the October 2014 rule. Based on information received since the October 2014 rule was finalized and the issues reconsidered in

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<sup>1</sup> See memorandum, “National Impacts Associated with Proposed Standards for CPVs and Storage Tanks in the Amino and Phenolic Resins Production Source Category,” which is available in the rulemaking docket.

<sup>2</sup> Same as previous footnote.



this action, we developed a revised estimate of the cost to comply with the 2014 final rule. We estimate the revised annualized cost of complying with the October 2014 rule to be \$4.2 million per year.<sup>3</sup> Compared to this revised estimate of the cost of compliance with the October 2014 rule, this final rule will provide regulatory relief by reducing annualized compliance costs by \$2.1 million in year 2014 dollars.

More information and details of this analysis, including the conclusions stated above, are provided in the technical document, “Economic Impact Analysis for the Final Amendments to the NESHAP for Amino/Phenolic Resins,” which is available in the rulemaking docket.

*E. What are the benefits?*

We estimate that this final rule will result in an annual reduction of 207 tons of HAP, compared to the January 2000 rule baseline. The EPA estimates this rule will result in 64 tons per year fewer HAP emission reductions than what the EPA projects the 2014 rule would achieve based on the additional information and test data that the EPA obtained following issuance of the 2014 final rule, as described in section III.A.1 of this preamble. We have not quantified or monetized the effects of these emissions changes for this rulemaking. See section IV.B of this preamble for discussion of HAP emissions from CPVs at existing sources under this final rule compared to the October 2014 rule.

**V. 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>.

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<sup>3</sup> See Table 3 and Table 4 of the memorandum, “National Impacts Associated with Final Standards for CPVs and Storage Tanks in the Amino and Phenolic Resins Production Source Category,” which is available in the rulemaking docket.

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

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review. Details on the estimated cost savings of this final rule can be found in the EPA's analysis of the potential costs and benefits associated with this action, titled "Economic Impact Analysis for the Final Amendments to the NESHAP for Amino/Phenolic Resins," and included in the docket of this rule.

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

This action is considered an Executive Order 13771 deregulatory action. Details on the 13771 deregulatory figures of this final rule can be found in the EPA's analysis of the potential costs and benefits associated with this action, titled "Economic Impact Analysis for the Final Amendments to the NESHAP for Amino/Phenolic Resins," and included in the docket of this rule.

*C. Paperwork Reduction Act (PRA)*

The information collection activities in this rule have been submitted for approval to OMB under the PRA. The Information Collection Request (ICR) document that the EPA prepared has been assigned EPA ICR number 1869.08. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here. The information collection requirements are not enforceable until OMB approves them.

This final rule requires recordkeeping and reporting of occurrences when control devices used to comply with the storage vessel provisions undergo planned routine maintenance. Reporting of such occurrences are required to be disclosed in the Periodic Reports as specified at 40 CFR 63.1417.

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*Respondents/affected entities:* The respondents affected by the amendments to 40 CFR part 63, subpart OOO, include, but are not limited to, facilities having a NAICS code 325211 (United States Standard Industrial Classification 2821). Facilities with a NAICS code of 325211 are described as Plastics Material and Resin Manufacturing establishments, which includes facilities engaged in manufacturing amino resins and phenolic resins, as well as other plastic and resin types.

*Respondent's obligation to respond:* Mandatory under sections 112 and 114 of the CAA.

*Estimated number of respondents:* 15.

*Frequency of response:* Once or twice per year.

*Total estimated burden:* 45 hours (per year). Burden is defined at 5 CFR 1320.3(b).

*Total estimated cost:* \$2,750 per year, including no annualized capital or operation and maintenance costs.

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. When OMB approves this ICR, the Agency will announce that approval in the **Federal Register** and publish a technical amendment to 40 CFR part 9 to display the OMB control number for the approved information collection activities contained in this final rule.

#### *D. Regulatory Flexibility Act (RFA)*

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. The EPA has identified no small entities that are subject to the requirements of 40 CFR 63, subpart OOO.

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*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. It will not have substantial direct effects on tribal governments, on the relationship between the federal government and Indian tribes, or on the distribution of power and responsibilities between the federal government and Indian tribes, as specified in Executive Order 13175. 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. The EPA's risk assessments for the October 2014 rule (Docket ID No. EPA-HQ-OAR-2012-0133) demonstrate that the current regulations are associated with an acceptable level of

risk and provide an ample margin of safety to protect public health and prevent adverse environmental effects. This final action does not alter those conclusions.

*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 is formalizing the incorporation of three technical standards that were included in the January 2000 rule for which the EPA had previously not formally requested the Office of the Federal Register to include in 40 CFR 63.14 with a reference back to the sections in 40 CFR 63, subpart OOO. These three standards were included in the original January 2000 rule. These three standards were already incorporated in 40 CFR 63.14, and were formally requested for other rules. These standards are API Publication 2517, Evaporative Loss from External Floating-Roof Tanks, Third Edition, February 1989; ASTM D1946-90 (Reapproved 1994), Standard Method for Analysis of Reformed Gas by Gas Chromatography; and ASTM D2879-83, Standard Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope. API Publication 2517 is used to determine the maximum true vapor pressure of HAP in liquids stored at ambient temperature. API Publication 2517 is available to the public for free viewing online in the Read Online Documents section on API's website at <https://publications.api.org>. In addition to this free online viewing availability on API's website, hardcopies and printable versions are available for purchase from API. ASTM D2879 is also used to determine the maximum true vapor pressure of HAP in liquids stored at ambient temperature. ASTM D1946 is used to measure the

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concentration of carbon monoxide and hydrogen in a process vent gas stream. ASTM D2879 and ASTM D1946 are available to the public for free viewing online in the Reading Room section on ASTM's website at <https://www.astm.org/READINGLIBRARY/>. In addition to this free online viewing availability on ASTM's website, hardcopies and printable versions are available for purchase from ASTM. Additional information can be found at <http://www.api.org/> and <https://www.astm.org/Standard/standards-and-publications.html>.

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

The EPA believes that this action does *not* have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). In the October 2014 rule, the EPA determined that the current health risks posed by emissions from these source categories are acceptable and provide an ample margin of safety to protect public health and prevent adverse environmental effects. This final action does not alter the conclusions made in the October 2014 rule regarding these analyses.

**National Emission Standards for Hazardous Air Pollutants: Manufacture of  
Amino/Phenolic Resins Risk and Technology Review Reconsideration**

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*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, Administrative practice and procedure, Air pollution control, Hazardous substances, Incorporation by reference, Reporting and recordkeeping requirements.

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

\_\_\_\_\_  
Andrew R. Wheeler  
Acting Administrator.

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**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.*

2. Section 63.14 is amended by revising paragraphs (e)(1), (h)(17), and (h)(27) to read as follows:

**§63.14 Incorporations by reference.**

\* \* \* \* \*

(e) \* \* \*

(1) API Publication 2517, Evaporative Loss from External Floating-Roof Tanks, Third Edition, February 1989, IBR approved for §§63.111, 63.1402, and 63.2406.

\* \* \* \* \*

(h) \* \* \*

(17) ASTM D1946-90 (Reapproved 1994), Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for §§63.11(b) and 63.1412.

\* \* \* \* \*

(27) ASTM D2879-83, Standard Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved for §§63.111, 63.1402, 63.2406, and 63.12005.

\* \* \* \* \*

**Subpart OOO—National Emission Standards for Hazardous Air Pollutant Emissions:  
Manufacture of Amino/Phenolic Resins**

3. Section 63.1400 is amended by revising paragraph (b)(4) to read as follows:

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**§ 63.1400 Applicability and designation of affected sources.**

\* \* \* \* \*

(b) \* \* \*

(4) Equipment that does not contain organic hazardous air pollutants (HAP) and is located within an APPU that is part of an affected source;

\* \* \* \* \*

4. Section 63.1401 is amended by revising paragraph (b) to read as follows:

**§ 63.1401 Compliance schedule.**

\* \* \* \* \*

(b) Existing affected sources shall be in compliance with this subpart (except §§63.1404, 63.1405, and 63.1411(c)) no later than 3 years after January 20, 2000. Existing affected sources shall be in compliance with the storage vessel requirements of §63.1404 and the pressure relief device monitoring requirements of §63.1411(c) by October 9, 2017. Existing affected sources shall be in compliance with the continuous process vent requirements of §63.1405(b) by [INSERT DATE ONE YEAR AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

\* \* \* \* \*

5. Section 63.1402 paragraph (b) is amended by:

a. Adding, in alphabetical order, definitions for “Back-end continuous process vent”, “Front-end continuous process vent”, “Non-reactor process vent”, and “Reactor process vent”; and

b. Removing the definitions for “Non-reactor batch process vent” and “Reactor batch process vent”

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The additions read as follows:

**§ 63.1402 Definitions.**

\* \* \* \* \*

(b) \* \* \*

*Back-end continuous process vent* means a continuous process vent for operations related to processing liquid resins into a dry form. Back-end process operations include, but are not limited to, flaking, grinding, blending, mixing, drying, pelletizing, and other finishing operations, as well as latex and crumb storage. Back-end does not include storage and loading of finished product or emission points that are regulated under §§63.1404 or 63.1409 through 63.1411 of this subpart.

\* \* \* \* \*

*Front-end continuous process vent* means a continuous process vent for operations in an APPU related to producing liquid resins, including any product recovery, stripping and filtering operations, and prior to any flaking or drying operations.

\* \* \* \* \*

*Non-reactor process vent* means a batch or continuous process vent originating from a unit operation other than a reactor. Non-reactor process vents include, but are not limited to, process vents from filter presses, surge control vessels, bottoms receivers, weigh tanks, and distillation systems.

\* \* \* \* \*

*Reactor process vent* means a batch or continuous process vent originating from a reactor.

\* \* \* \* \*

6. Section 63.1403 is amended by revising paragraph (a) to read as follows:

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(a) *Provisions of this subpart.* Except as allowed under paragraph (b) of this section, the owner or operator of an affected source shall comply with the provisions of §§63.1404 through 63.1410, as appropriate. When emissions are vented to a control device or control technology as part of complying with this subpart, emissions shall be vented through a closed vent system meeting the requirements of 40 CFR part 63, subpart SS (national emission standards for closed vent systems, control devices, recovery devices and routing to a fuel gas system or a process).

\* \* \* \* \*

7. Section 63.1404 is amended by revising paragraph (a)(1) and adding paragraph (c) to read as follows:

**§ 63.1404 Storage vessel provisions.**

(a) \* \* \*

(1) Reduce emissions of total organic HAP by 95 weight-percent. Control shall be achieved by venting emissions through a closed vent system to any combination of control devices meeting the requirements of 40 CFR part 63, subpart SS (national emission standards for closed vent systems, control devices, recovery devices and routing to a fuel gas system or a process). When complying with the requirements of 40 CFR part 63, subpart SS, the following apply for purposes of this subpart:

\* \* \* \* \*

(c) Whenever gases or vapors containing HAP are routed from a storage vessel through a closed-vent system connected to a control device used to comply with the requirements of paragraphs (a) or (b) of this section, the control device must be operating except as provided for in paragraphs (c)(1) or (2) of this section.

(1) The control device may only be bypassed for the purpose of performing planned routine maintenance of the control device. When the control device is bypassed, the owner or operator must comply with paragraphs (c)(1)(i) through (iii) of this section.

(i) The control device may only be bypassed when the planned routine maintenance cannot be performed during periods that storage vessel emissions are vented to the control device.

(ii) On an annual basis, the total time that the closed-vent system or control device is bypassed to perform routine maintenance shall not exceed 240 hours per each calendar year.

(iii) The level of material in the storage vessel shall not be increased during periods that the closed-vent system or control device is bypassed to perform planned routine maintenance.

(2) The gases or vapors containing HAP are routed from the storage vessel through a closed-vent system connected to an alternate control device meeting the requirements of paragraph (a)(1) or the alternative standard in paragraph (b) of this section.

8. Section 63.1405 is amended by:

- a. Revising paragraphs (a) introductory text and paragraph (a)(2) introductory text;
- b. Removing paragraph (a)(3);
- c. Revising paragraph (b); and
- d. Adding paragraph (c).

The revisions and additions read as follows:

**§ 63.1405 Continuous process vent provisions.**

(a) *Emission standards for new affected sources.* For each continuous process vent located at a new affected source with a Total Resource Effectiveness (TRE) index value, as determined following the procedures specified in §63.1412(j), less than or equal to 1.2, the

owner or operator shall comply with either paragraph (a)(1) or (2) of this section. As an alternative to complying with paragraph (a) of this section, an owner or operator may comply with paragraph (c)(1) of this section.

\* \* \* \* \*

(2) Reduce emissions of total organic HAP by 85 weight-percent. Control shall be achieved by venting emissions through a closed vent system to any combination of control devices meeting the requirements of 40 CFR part 63, subpart SS (national emission standards for closed vent systems, control devices, recovery devices and routing to a fuel gas system or process). When complying with the requirements of 40 CFR part 63, subpart SS, the following apply for purposes of this subpart:

\* \* \* \* \*

(b) *Emission standards for existing affected sources.* For each continuous process vent located at an existing affected source, the owner or operator shall comply with either paragraph (b)(1) or (2) of this section. As an alternative to complying with paragraph (b) of this section, an owner or operator may comply with paragraph (c)(2) of this section.

(1) Vent all emissions of organic HAP to a flare.

(2) Reduce emissions as specified in paragraphs (b)(2)(i) through (iii) of this section, as applicable.

(i) The owner or operator of a back-end continuous process vent shall reduce total organic HAP emissions to less than or equal to 4.3 kilograms of total organic HAP per megagram of resin produced (8.6 pounds of total organic HAP per ton of resin produced).

(ii) The owner or operator of a front-end reactor continuous process vent shall reduce total organic HAP emissions to less than or equal to 0.28 kilograms of total organic HAP per hour (0.61 pounds of total organic HAP per hour).

(iii) The owner or operator of a front-end non-reactor continuous process vent shall reduce total organic HAP emissions to less than or equal to 0.010 kilograms of total organic HAP per hour (0.022 pounds of total organic HAP per hour).

(c) *Alternative emission standards.* As an alternative to complying with paragraphs (a) or (b) of this section, an owner or operator may comply with paragraph (c)(1) or (2) of this section, as appropriate.

(1) For each continuous process vent located at a new affected source, the owner or operator shall vent all organic HAP emissions from a continuous process vent meeting the TRE value specified in paragraph (a) of this section to a non-flare combustion control device achieving an outlet organic HAP concentration of 20 ppmv or less or to a non-combustion control device achieving an outlet organic HAP concentration of 50 ppmv or less. Any continuous process vents that are not vented to a control device meeting these conditions shall be controlled in accordance with the provisions of paragraphs (a)(1) or (2) of this section.

(2) For each continuous process vent located at an existing affected source, the owner or operator shall vent all organic HAP emissions from a continuous process vent to a non-flare combustion control device achieving an outlet organic HAP concentration of 20 ppmv or less or to a non-combustion control device achieving an outlet organic HAP concentration of 50 ppmv or less. Any continuous process vents that are not vented to a control device meeting these conditions shall be controlled in accordance with the provisions of paragraphs (b)(1) or (2) of this section.

9. Section 63.1412 is amended by revising paragraphs (a), (g)(2)(ii), and (k)(2) to read as follows:

**§ 63.1412 Continuous process vent applicability assessment procedures and methods.**

(a) *General.* The provisions of this section provide procedures and methods for determining the applicability of the control requirements specified in §63.1405(a) to continuous process vents.

\* \* \* \* \*

(g) \* \* \*

(2) \* \* \*

(ii) American Society for Testing and Materials D1946-90 (Reapproved 1994) (incorporated by reference, see § 63.14) to measure the concentration of carbon monoxide and hydrogen.

\* \* \* \* \*

(k) \* \* \*

(2) If the TRE index value calculated using engineering assessment is less than or equal to 4.0, the owner or operator is required either to perform the measurements specified in paragraphs (e) through (h) of this section for control applicability assessment or comply with the control requirements specified in §63.1405(a).

\* \* \* \* \*

10. Section 63.1413 is amended by:

- a. Revising paragraph (a) introductory text;
- b. Adding paragraph (a)(1)(iii);

- c. Revising paragraphs (a)(3) introductory text, (a)(4) introductory text, and paragraphs (c)(2) and (c)(4) through (6);
- d. Adding paragraph (c)(7);
- e. Revising paragraphs (f) and (h)(1);
- f. Redesignating paragraph (h)(2) as (h)(3);
- g. Adding new paragraph (h)(2);
- h. Revising newly redesignated paragraph (h)(3) introductory text and paragraphs (h)(3)(i), (h)(3)(ii) introductory text, (h)(3)(ii)(B)(I) and (3), and (h)(3)(iii);
- i. Adding paragraph (h)(4);
- j. Revising paragraphs (i)(1)(iii) and (iv); and
- k. Adding paragraph (i)(1)(v).

The revisions and additions read as follows:

**§ 63.1413 Compliance demonstration procedures.**

(a) *General.* For each emission point, the owner or operator shall meet three stages of compliance, with exceptions specified in this subpart. First, the owner or operator shall conduct a performance test or design evaluation to demonstrate either the performance of the control device or control technology being used or the uncontrolled total organic HAP emissions rate from a continuous process vent. Second, the owner or operator shall meet the requirements for demonstrating initial compliance (*e.g.*, a demonstration that the required percent reduction or emissions limit is achieved). Third, the owner or operator shall meet the requirements for demonstrating continuous compliance through some form of monitoring (*e.g.*, continuous monitoring of operating parameters).

\* \* \* \* \*



(1) \* \* \*

(iii) *Uncontrolled continuous process vents.* Owners or operators are required to conduct either a performance test or a design evaluation for continuous process vents that are not controlled through either a large or small control device.

\* \* \* \* \*

(3) *Design evaluations.* As provided in paragraph (a) of this section, a design evaluation may be conducted to demonstrate the organic HAP removal efficiency for a control device or control technology, or the uncontrolled total organic HAP emissions rate from a continuous process vent. As applicable, a design evaluation shall address the organic HAP emissions rate from uncontrolled continuous process vents, the composition and organic HAP concentration of the vent stream(s) entering a control device or control technology, the operating parameters of the emission point and any control device or control technology, and other conditions or parameters that reflect the performance of the control device or control technology or the organic HAP emission rate from a continuous process vent. A design evaluation also shall address other vent stream characteristics and control device operating parameters as specified in any one of paragraphs (a)(3)(i) through (vi) of this section, for controlled vent streams, depending on the type of control device that is used. If the vent stream(s) is not the only inlet to the control device, the efficiency demonstration also shall consider all other vapors, gases, and liquids, other than fuels, received by the control device.

\* \* \* \* \*

(4) *Establishment of parameter monitoring levels.* The owner or operator of a control device that has one or more parameter monitoring level requirements specified under this subpart, or specified under subparts referenced by this subpart, shall establish a maximum or

minimum level, as denoted on Table 4 of this subpart, for each measured parameter using the procedures specified in paragraph (a)(4)(i) or (ii) of this section. Except as otherwise provided in this subpart, the owner or operator shall operate control devices such that the hourly average, daily average, batch cycle daily average, or block average of monitored parameters, established as specified in this paragraph, remains above the minimum level or below the maximum level, as appropriate.

\* \* \* \* \*

(c) \* \* \*

(2) Initial compliance with §63.1405(a)(1) or (b)(1) (venting of emissions to a flare) shall be demonstrated following the procedures specified in paragraph (g) of this section.

\* \* \* \* \*

(4) Continuous compliance with §63.1405(a)(1) or (b)(1) (venting of emissions to a flare) shall be demonstrated following the continuous monitoring procedures specified in §63.1415.

(5) Initial and continuous compliance with the production-based emission limit specified in §63.1405(b)(2)(i) shall be demonstrated following the procedures in paragraph (h)(1) of this section.

(6) Initial and continuous compliance with the emission rate limits specified in §63.1405(b)(2)(ii) and (iii) shall be demonstrated following the procedures of either paragraphs (c)(6)(i) or (ii) of this section.

(i) Continuous process vents meeting the emission rate limit using a closed vent system and a control device or recovery device or by routing emissions to a fuel gas system or process shall follow the procedures in 40 CFR part 63, subpart SS. When complying with the requirements of 40 CFR part 63, subpart SS, the following apply for purposes of this subpart:

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(A) The requirements specified in of §63.1405 (a)(2)(i) through (viii).

(B) When 40 CFR part 63, subpart SS refers to meeting a weight-percent emission reduction or ppmv outlet concentration requirement, meeting an emission rate limit in terms of kilograms of total organic HAP per hour shall also apply.

(ii) Continuous process vents meeting the emission rate limit by means other than those specified in paragraph (c)(6)(i) of this section shall follow the procedures specified in paragraph (h)(2) of this section.

(7) Initial and continuous compliance with the alternative standards specified in §63.1405(c) shall be demonstrated following the procedures in paragraph (f) of this section.

\* \* \* \* \*

(f) *Compliance with alternative standard.* Initial and continuous compliance with the alternative standards in §§63.1404(b), 63.1405(c), 63.1406(b), 63.1407(b)(1), and 63.1408(b)(1) are demonstrated when the daily average outlet organic HAP concentration is 20 ppmv or less when using a combustion control device or 50 ppmv or less when using a non-combustion control device. To demonstrate initial and continuous compliance, the owner or operator shall follow the test method specified in §63.1414(a)(6) and shall be in compliance with the monitoring provisions in §63.1415(e) no later than the initial compliance date and on each day thereafter.

\* \* \* \* \*

(h) \* \* \*

(1) Each owner or operator complying with the mass emission limit specified in §63.1405(b)(2)(i) shall determine initial compliance as specified in paragraph (h)(1)(i) of this section and continuous compliance as specified in paragraph (h)(1)(ii) of this section.

(i) *Initial compliance.* Initial compliance shall be determined by comparing the results of the performance test or design evaluation, as specified in paragraph (a)(1) of this section, to the mass emission limit specified in §63.1405(b)(2)(i).

(ii) *Continuous compliance.* Continuous compliance shall be based on the daily average emission rate calculated for each operating day. The first continuous compliance average daily emission rate shall be calculated using the first 24-hour period or otherwise-specified operating day after the compliance date. Continuous compliance shall be determined by comparing the daily average emission rate to the mass emission limit specified in §63.1405(b)(2)(i).

(2) As required by paragraph (c)(6)(ii) of this section, each owner or operator complying with the emission rate limits specified in §63.1405(b)(2)(ii) and (iii), as applicable, by means other than those specified in paragraph (c)(6)(i) of this section, shall determine initial compliance as specified in paragraph (h)(2)(i) of this section and continuous compliance as specified in paragraph (h)(2)(ii) of this section.

(i) *Initial compliance.* Initial compliance shall be determined by comparing the results of the performance test or design evaluation, as specified in paragraph (a)(1) of this section, to the emission rate limits specified in §63.1405(b)(2)(ii) and (iii), as applicable.

(ii) *Continuous compliance.* Continuous compliance shall be based on the hourly average emission rate calculated for each operating day. The first continuous compliance average hourly emission rate shall be calculated using the first 24-hour period or otherwise-specified operating day after the compliance date. Continuous compliance shall be determined by comparing the average hourly emission rate to the emission rate limit specified in §63.1405(b)(2)(ii) or (iii), as applicable.

(3) *Procedures to determine continuous compliance with the mass emission limit specified in §63.1405(b)(2)(i).*

(i) The daily emission rate, kilograms of organic HAP per megagram of product, shall be determined for each operating day using Equation 5 of this section:

$$ER = \frac{E_i}{RP_m} \quad [\text{Eq.5}]$$

Where:

ER = Emission rate of organic HAP from continuous process vent, kg of HAP/Mg product.

$E_i$  = Emission rate of organic HAP from continuous process vent i as determined using the procedures specified in paragraph (h)(3)(ii) of this section, kg/day.

$RP_m$  = Amount of resin produced in one month as determined using the procedures specified in paragraph (h)(3)(iii) of this section, Mg/day.

(ii) The daily emission rate of organic HAP, in kilograms per day, from an individual continuous process vent ( $E_i$ ) shall be determined. Once organic HAP emissions have been estimated, as specified in paragraph (h)(3)(ii)(A) of this section for uncontrolled continuous process vents or paragraphs (h)(3)(ii)(A) and (B) of this section for continuous process vents vented to a control device or control technology, the owner or operator may use the estimated organic HAP emissions ( $E_i$ ) until the estimated organic HAP emissions are no longer representative due to a process change or other reason known to the owner or operator. If organic HAP emissions ( $E_i$ ) are determined to no longer be representative, the owner or operator shall redetermine organic HAP emissions for the continuous process vent following the procedures in paragraph (h)(3)(ii)(A) of this section for uncontrolled continuous process vents or paragraphs

(h)(3)(ii)(A) and (B) of this section for continuous process vents vented to a control device or control technology.

\* \* \* \* \*

(B) \* \* \*

(1) Uncontrolled organic HAP emissions shall be determined following the procedures in paragraph (h)(3)(ii)(A) of this section.

\* \* \* \* \*

(3) Controlled organic HAP emissions shall be determined by applying the control device or control technology efficiency, determined in paragraph (h)(3)(ii)(B)(2) of this section, to the uncontrolled organic HAP emissions, determined in paragraph (h)(3)(ii)(B)(1) of this section.

(iii) The rate of resin produced,  $RP_M$  (Mg/day), shall be determined based on production records certified by the owner or operator to represent actual production for the day. A sample of the records selected by the owner or operator for this purpose shall be provided to the Administrator in the Precompliance Report as required by §63.1417(d).

(4) *Procedures to determine continuous compliance with the emission rate limit specified in §63.1405(b)(2)(ii) or (iii).*

(i) The hourly emission rate, kilograms of organic HAP per hour, shall be determined for each hour during the operating day using Equation 6 of this section:

$$E_H = K_2 \left( \sum_{j=1}^n C_j M_j \right) Q_S \quad [\text{Eq.6}]$$

Where:

$E_H$  = Hourly emission rate of organic HAP in the sample, kilograms per hour.

$K_2$  = Constant,  $2.494 \times 10^{-6}$  (parts per million)<sup>-1</sup> (gram-mole per standard cubic meter) (kilogram/gram) (minutes/hour), where standard temperature for (gram-mole per standard cubic meter) is 20 °C.

$n$  = Number of components in the sample.

$C_j$  = Organic HAP concentration on a dry basis of organic compound  $j$  in parts per million as determined by the methods specified in paragraph (h)(4)(ii) of this section.

$M_j$  = Molecular weight of organic compound  $j$ , gram/gram-mole.

$Q_s$  = Continuous process vent flow rate, dry standard cubic meters per minute, at a temperature of 20 °C, as determined by the methods specified in paragraph (h)(4)(ii) of this section.

(ii) The average hourly emission rate, kilograms of organic HAP per hour, shall be determined for each operating day using Equation 7 of this section:

$$AE = \frac{\sum_{i=1}^n E_H}{n} \quad [\text{Eq.7}]$$

Where:

$AE$  = Average hourly emission rate per operating day, kilograms per hour.

$n$  = Number of hours in the operating day.

(ii) Continuous process vent flow rate and organic HAP concentration shall be determined using the procedures specified in §63.1414(a), or by using the engineering assessment procedures in paragraph (h)(4)(iii) of this section.

(iii) *Engineering assessment.* For the purposes of determining continuous compliance with the emission rate limit specified in §63.1405(b)(2)(ii) or (iii) using Equations 6 and 7, engineering assessments may be used to determine continuous process vent flow rate and organic

HAP concentration. An engineering assessment includes, but is not limited to, the following examples:

(A) Previous test results, provided the tests are representative of current operating practices.

(B) Bench-scale or pilot-scale test data representative of the process under representative operating conditions.

(C) Maximum volumetric flow rate or organic HAP concentration specified or implied within a permit limit applicable to the continuous process vent.

(D) Design analysis based on accepted chemical engineering principles, measurable process parameters, or physical or chemical laws or properties. Examples of analytical methods include, but are not limited to, the following:

(1) Estimation of maximum organic HAP concentrations based on process stoichiometry material balances or saturation conditions; and

(2) Estimation of maximum volumetric flow rate based on physical equipment design, such as pump or blower capacities.

\* \* \* \* \*

(i) \* \* \*

(1) \* \* \*

(iii) Exceedance of the mass emission limit (*i.e.*, having an average value higher than the specified limit) monitored according to the provisions of paragraph (e)(2) of this section for batch process vents and according to the provisions of paragraph (h)(1) of this section for continuous process vents;



(iv) Exceedance of the organic HAP outlet concentration limit (*i.e.*, having an average value higher than the specified limit) monitored according to the provisions of §63.1415(e); and

(v) Exceedance of the emission rate limit (*i.e.*, having an average value higher than the specified limit) determined according to the provisions of paragraph (h)(2) of this section.

\* \* \* \* \*

11. Section 63.1415 is amended by revising paragraph (e) to read as follows:

**§ 63.1415 Monitoring requirements.**

\* \* \* \* \*

(e) *Monitoring for the alternative standards.* For control devices that are used to comply with the provisions of §§63.1404(b), 63.1405(c), 63.1406(b), 63.1407(b), or 63.1408(b) the owner or operator shall conduct continuous monitoring of the outlet organic HAP concentration whenever emissions are vented to the control device. Continuous monitoring of outlet organic HAP concentration shall be accomplished using an FTIR instrument following Method PS-15 of 40 CFR part 60, appendix B. The owner or operator shall calculate a daily average outlet organic HAP concentration.

12. Section 63.1416 is amended by:

- a. Revising paragraphs (f)(1), (3), (5) introductory text, and 5(ii);
- b. Adding paragraph (f)(5)(iii);
- c. Redesignating paragraph (f)(6) as (f)(7);
- d. Adding new paragraph (f)(6);
- e. Revising newly redesignated paragraph (f)(7) introductory text and paragraph (g)(5)(v)(E); and
- f. Adding paragraph (g)(6).

The revisions and additions read as follows:

**§ 63.1416 Recordkeeping requirements.**

\* \* \* \* \*

(f) \* \* \*

(1) *TRE index value records.* Each owner or operator of a continuous process vent at a new affected source shall maintain records of measurements, engineering assessments, and calculations performed according to the procedures of §63.1412(j) to determine the TRE index value. Documentation of engineering assessments, described in §63.1412(k), shall include all data, assumptions, and procedures used for the engineering assessments.

\* \* \* \* \*

(3) *Organic HAP concentration records.* Each owner or operator shall record the organic HAP concentration as measured using the sampling site and organic HAP concentration determination procedures (if applicable) specified in §63.1412(b) and (e), or determined through engineering assessment as specified in §63.1412(k).

\* \* \* \* \*

(5) If a continuous process vent is seeking to demonstrate compliance with the mass emission limit specified in §63.1405(b)(2)(i), keep records specified in paragraphs (f)(5)(i) through (iii) of this section.

\* \* \* \* \*

(ii) Identification of the period of time that represents an operating day.

(iii) The daily organic HAP emissions from the continuous process vent determined as specified in §63.1413(h)(3).

(6) If a continuous process vent is seeking to demonstrate compliance with the emission

rate limits specified in §63.1405(b)(2)(ii) or (iii), keep records specified in paragraphs (f)(6)(i) through (iii) of this section.

(i) The results of the initial compliance demonstration specified in §63.1413(h)(2)(i).

(ii) Identification of the period of time that represents an operating day.

(iii) The average hourly organic HAP emissions from the continuous process vent determined as specified in §63.1413(h)(4).

(7) When using a flare to comply with §63.1405(a)(1) or (b)(1), keep the records specified in paragraphs (f)(7)(i) through (f)(7)(iii) of this section.

\* \* \* \* \*

(g) \* \* \*

(5) \* \* \*

(v) \* \* \*

(E) The measures adopted to prevent future such pressure releases.

(6) An owner or operator shall record, on a semiannual basis, the information specified in paragraphs (g)(6)(i) through (iii) of this section, as applicable, for those planned routine maintenance operations that would require the control device not to meet the requirements of §63.1404(a) or (b) of this subpart.

(i) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

(ii) A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during these 6 months that the control device did not

meet the requirement of §63.1404 (a) or (b) of this subpart, as applicable, due to planned routine maintenance.

(iii) For each storage vessel for which planned routine maintenance was performed during the previous 6 months, record the height of the liquid in the storage vessel at the time the control device is bypassed to conduct the planned routine maintenance and at the time the control device is placed back in service after completing the routine maintenance. These records shall include the date and time the liquid height was measured.

13. Section 63.1417 is amended by:

- a. Revising paragraphs (d) introductory text, (d)(8), (e)(1) introductory text, (e)(9), (f) introductory text, (f)(1), (2), and (5) introductory text and (12)(ii);
- b. Adding paragraphs (f)(14) through (16); and
- c. Revising paragraph (h)(7) introductory text.

The revisions and additions read as follows:

**§ 63.1417 Reporting requirements.**

\* \* \* \* \*

(d) *Precompliance Report.* Owners or operators of affected sources requesting an extension for compliance; requesting approval to use alternative monitoring parameters, alternative continuous monitoring and recordkeeping, or alternative controls; requesting approval to use engineering assessment to estimate organic HAP emissions from a batch emissions episode as described in §63.1414(d)(6)(i)(C); wishing to establish parameter monitoring levels according to the procedures contained in §63.1413(a)(4)(ii); establishing parameter monitoring levels based on a design evaluation as specified in §63.1413(a)(3); or following the procedures in §63.1413(e)(2); or following the procedures in §63.1413(h)(3), shall submit a Precompliance

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Report according to the schedule described in paragraph (d)(1) of this section. The Precompliance Report shall contain the information specified in paragraphs (d)(2) through (11) of this section, as appropriate.

\* \* \* \* \*

(8) If an owner or operator is complying with the mass emission limit specified in §63.1405(b)(2)(i), the sample of production records specified in §63.1413(h)(3) shall be submitted in the Precompliance Report.

\* \* \* \* \*

(e) \* \* \*

(1) The results of any emission point applicability determinations, performance tests, design evaluations, inspections, continuous monitoring system performance evaluations, any other information used to demonstrate compliance, and any other information, as appropriate, required to be included in the Notification of Compliance Status under 40 CFR part 63, subpart WW and subpart SS, as referred to in §63.1404 for storage vessels; under 40 CFR part 63, subpart SS, as referred to in §63.1405 for continuous process vents; under §63.1416(f)(1) through (3), (5)(i) and (ii), and (6)(i) and (ii) for continuous process vents; under §63.1416(d)(1) for batch process vents; and under §63.1416(e)(1) for aggregate batch vent streams. In addition, each owner or operator shall comply with paragraphs (e)(1)(i) and (ii) of this section.

\* \* \* \* \*

(9) Data or other information used to demonstrate that an owner or operator may use engineering assessment to estimate emissions for a batch emission episode, as specified in §63.1414(d)(6)(iii)(A).

\* \* \* \* \*

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(f) *Periodic Reports.* Except as specified in paragraph (f)(12) of this section, a report containing the information in paragraph (f)(2) of this section or containing the information in paragraphs (f)(3) through (11) and (13) through (16) of this section, as appropriate, shall be submitted semiannually no later than 60 days after the end of each 180 day period. In addition, for equipment leaks subject to §63.1410, the owner or operator shall submit the information specified in 40 CFR part 63, subpart UU, and for heat exchange systems subject to §63.1409, the owner or operator shall submit the information specified in §63.1409. Section 63.1415 shall govern the use of monitoring data to determine compliance for emissions points required to apply controls by the provisions of this subpart.

(1) Except as specified in paragraph (f)(12) of this section, a report containing the information in paragraph (f)(2) of this section or containing the information in paragraphs (f)(3) through (11) and (13) through (16) of this section, as appropriate, shall be submitted semiannually no later than 60 days after the end of each 180 day period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status is due. Subsequent reports shall cover each preceding 6-month period.

(2) If none of the compliance exceptions specified in paragraphs (f)(3) through (11) and (13) through (16) of this section occurred during the 6-month period, the Periodic Report required by paragraph (f)(1) of this section shall be a statement that the affected source was in compliance for the preceding 6-month period and no activities specified in paragraphs (f)(3) through (11) and (13) through (16) of this section occurred during the preceding 6-month period.

\* \* \* \* \*

(5) If there is a deviation from the mass emission limit specified in §63.1406(a)(1)(iii) or

(a)(2)(iii), §63.1407(b)(2), or §63.1408(b)(2), the following information, as appropriate, shall be included:

\* \* \* \* \*

(12) \* \* \*

(ii) The quarterly reports shall include all information specified in paragraphs (f)(3) through (11) and (13) through (16) of this section applicable to the emission point for which quarterly reporting is required under paragraph (f)(12)(i) of this section. Information applicable to other emission points within the affected source shall be submitted in the semiannual reports required under paragraph (f)(1) of this section.

\* \* \* \* \*

(14) If there is a deviation from the mass emission limit specified in §63.1405(b)(2)(i), the report shall include the daily average emission rate calculated for each operating day for which a deviation occurred.

(15) If there is a deviation from the emission rate limit specified in §63.1405(b)(2)(ii) or (iii), the report shall include the following information for each operating day for which a deviation occurred:

(i) The calculated average hourly emission rate.

(ii) The individual hourly emission rate data points making up the average hourly emission rate.

(16) For periods of storage vessel routine maintenance in which a control device is bypassed, the owner or operator shall submit the information specified in § 63.1416(g)(6)(i) through (iii) of this subpart.

(h) \* \* \*

(7) Whenever a continuous process vent becomes subject to control requirements under §63.1405, as a result of a process change, the owner or operator shall submit a report within 60 days after the performance test or applicability assessment, whichever is sooner. The report may be submitted as part of the next Periodic Report required by paragraph (f) of this section.

\* \* \* \* \*