ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–HQ–OAR–2012–0360; FRL–9923–26–OAR]

RIN 2060–AR47

National Emission Standards for Hazardous Air Pollutants: Off-Site Waste and Recovery Operations

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: This action finalizes the residual risk and technology review (RTR) conducted for the Off-Site Waste and Recovery Operations (OSWRO) source category regulated under national emission standards for hazardous air pollutants (NESHAP). In addition, the Environmental Protection Agency (EPA) is finalizing amendments to correct and clarify regulatory provisions related to emissions during periods of startup, shutdown and malfunction (SSM); add requirements for reporting of performance testing through the Electronic Reporting Tool (ERT); revise the routine maintenance provisions; clarify provisions pertaining to open-ended valves and lines (OELs); add monitoring requirements for pressure relief devices (PRDs); clarify provisions for some performance test methods and procedures; and make several minor clarifications and corrections. The revisions to the final rule increase the level of emissions control and environmental protection provided by the OSWRO NESHAP.

DATES: This final action is effective on March 18, 2015.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA–HQ–OAR–2012–0360. All documents in the docket are listed on the *http://www.regulations.gov* Web site. Although listed in the index, some information is not publicly available, *e.g.,* confidential business information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet, and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through *http://www.regulations.gov,* or in hard copy at the EPA Docket Center, EPA WJC West Building, Room Number 3334, 1301 Constitution Ave. NW., Washington, DC. The Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m. Eastern Standard Time (EST), Monday through Friday. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Air and Radiation Docket and Information Center is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: For questions about this final action, contact Ms. Paula Hirtz, Sector Policies and Programs Division (E143–01), Office of Air Quality Planning and Standards (OAQPS), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–2618; fax number: (919) 541–0246; and email address: *hirtz.paula@epa.gov.* For specific information regarding the risk modeling methodology, contact Ms. Darcie Smith, Health and Environmental Impacts Division (C504–06), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–2076; fax number: (919) 541–0840; and email address: *smith.darcie@epa.gov.* For information about the applicability of the NESHAP to a particular entity, contact Ms. Marcia Mia, EPA Office of Enforcement and Compliance Assurance; U.S. EPA, WJC West Building, 1200 Pennsylvania Ave. NW., Washington, DC 20460; telephone number: (202) 564–7042; and email address: *mia.marcia@epa.gov.*

SUPPLEMENTARY INFORMATION:

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

ADAF—age-dependent adjustment factors
BDT—best demonstrated technology
CAA—Clean Air Act
CBI—confidential business information
CDX—Central Data Exchange
CEDRI—Compliance and Emissions Data Reporting Interface
CFR—Code of Federal Regulations
CRA—Congressional Review Act
CWA—Clean Water Act
EPA—Environmental Protection Agency
EPCRA—Emergency Planning and Community Right-To-Know Act
ERT—Electronic Reporting Tool
FR—Federal Register
HAP—hazardous air pollutants
HON—Hazardous Organic NESHAP
HQ—hazard quotient
ICR—information collection request
IPT—integrated project team
kPa—kilopascals
LDAR—leak detection and repair
MACT—maximum achievable control technology
MIR—maximum individual risk
MON—Miscellaneous Organic NESHAP
NAICS—North American Industry Classification System
NATA—National Air Toxics Assessment
NEIC—National Enforcement Investigations Center
NESHAP—National Emissions Standards for Hazardous Air Pollutants
NRDC—Natural Resources Defense Council
NTTAA—National Technology Transfer and Advancement Act
OAQPS—Office of Air Quality Planning and Standards
OECA—Office of Enforcement and Compliance Assurance
OEL—open-ended valve or line
OMB—Office of Management and Budget
OSHA—Occupational Safety and Health Administration
OSWRO—off-site waste and recovery operations
PB–HAP—hazardous air pollutants known to be persistent and bio-accumulative in the environment
POM—polycyclic organic matter
ppm—parts per million
ppmv—parts per million by volume
ppmw—parts per million by weight
PRA—Paperwork Reduction Act
PRD—pressure relief device
psi—pounds per square inch
RCRA—Resource Conservation and Recovery Act
RFA—Regulatory Flexibility Act
RQ—reportable quantity
RTR—residual risk and technology review
SBA—Small Business Administration
SCAQMD—South Coast Air Quality Management District
SOCMI—synthetic organic chemical manufacturing industry
SSM—startup, shutdown and malfunction
TOSHI—target organ-specific hazard index
tpy—tons per year
TSDF—hazardous waste treatment, storage and disposal facilities
TTN—Technology Transfer Network
UMRA—Unfunded Mandates Reform Act
VCS—voluntary consensus standards
VOC—volatile organic compound
VOHAP—volatile organic hazardous air pollutant
XML—extensible markup language

Background Information. On July 2, 2014 (79 FR 37850), the EPA proposed revisions to the OSWRO NESHAP based on our RTR, and we also proposed to amend provisions related to emissions during periods of SSM, to add requirements for electronic reporting of performance testing and monitoring requirements for PRDs, to revise routine maintenance provisions, to clarify provisions for OELs and for some performance test methods and procedures and to make several minor clarifications and corrections. In this action, we are finalizing decisions and revisions for the rule. We summarize key comments we timely received regarding the proposed rule and provide our responses in this preamble. A summary of the public comments on the proposal not presented in the preamble

and the EPA's responses to those comments are available in Docket ID No. EPA–HQ–OAR–2012–0360. The background information also includes discussion and technical analyses of other issues addressed in this final rule. A ''track changes'' version of the regulatory language that incorporates the changes in this action is available in the docket.

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

I. General Information

A. Does this action apply to me?

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

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

NESHAP and source category	Examples of regulated entities
Off-Site Waste and Recovery Operations.	Businesses or government agencies that operate any of the following: Hazardous waste treatment, storage and disposal facilities (TSDF); Resource Conservation and Recovery Act (RCRA) exempt hazardous wastewater treatment facilities; nonhazardous wastewater treatment facilities other than publicly-owned treatment works; used solvent recovery plants; RCRA exempt hazardous waste recycling operations; used oil re-refineries.

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

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

In addition to being available in the docket, an electronic copy of this final action will be available on the Internet through the Technology Transfer Network (TTN) Web site, a forum for information and technology exchange in various areas or air pollution control. Following signature by the EPA Administrator, the EPA will post a copy of this final action at *http://www.epa.gov/ttn/atw/offwaste/oswropg.html.* Following publication in the **Federal Register**, the EPA will post the **Federal Register** version and key technical documents at this same Web site.

Additional information is available on the RTR Web site at *http://www.epa.gov/ttn/atw/rrisk/rtrpg.html.* This information includes an overview of the RTR program, links to project Web sites for the RTR source categories and detailed emissions and other data we used as inputs to the risk assessments.

C. Judicial Review and Administrative Reconsideration

Under Clean Air Act (CAA) section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit by May 18, 2015. 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 the requirements.

Section 307(d)(7)(B) of the CAA further provides that ''[o]nly an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review.'' This section also provides a mechanism for the EPA to reconsider the rule, ''[i]f the

person raising an objection can demonstrate to the EPA 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 West Building, 1200 Pennsylvania Ave. NW., Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave. NW., Washington, DC 20460.

II. Background

A. What is the statutory authority for this action?

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

For these MACT standards, the statute specifies certain minimum stringency requirements, which are referred to as MACT floor requirements and may not be based on cost considerations. See CAA section 112(d)(3). For new sources, the MACT floor cannot be less stringent than the emission control achieved in practice by the best-controlled similar source. The MACT standards for existing sources can be less stringent than floors for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources in the category or subcategory (or the best-performing five sources for categories or subcategories with fewer than 30 sources). In developing MACT standards, we must also consider control options that are more stringent than the floor, under CAA section 112(d)(2). We may establish standards more stringent than the floor, based on the consideration of the cost of achieving the emissions reductions, any non-air quality health and environmental impacts and energy requirements.

In the second stage of the regulatory process, the CAA requires the EPA to undertake two different analyses, which we refer to as the technology review and the residual risk review. Under the technology review, we must review the technology-based standards and revise them ''as necessary (taking into account developments in practices, processes, and control technologies)'' no less frequently than every 8 years, pursuant to CAA section 112(d)(6). Under the residual risk review, we must evaluate the risk to public health remaining after application of the technology-based standards and revise the standards, if necessary, to provide an ample margin of safety to protect public health or to prevent, taking into consideration costs, energy, safety and other relevant factors, an adverse environmental effect. The residual risk review is required within 8 years after promulgation of the technology-based standards, pursuant to CAA section 112(f). In conducting the residual risk review, if the EPA determines that the current standards provide an ample margin of safety to protect public health, it is not necessary to revise the MACT standards pursuant to CAA section 112(f).[1] For more information on the statutory authority for this rule, see 79 FR 37850.

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

B. What is the OSWRO source category and how does the NESHAP promulgated on July 1, 1996, regulate HAP emissions from the source category?

The EPA promulgated the OSWRO NESHAP on July 1, 1996 (61 FR 34139). The standards are codified at 40 CFR part 63, subpart DD. The OSWRO industry consists of facilities that conduct operations to manage, convey or handle wastes or recoverable materials that are received from other facilities. The source category covered by the OSWRO NESHAP currently includes approximately 56 facilities. However, based on available permit information, seven facilities are known to be exempt from most of the rule requirements due to the low HAP content of the off-site waste they receive or because they comply instead with 40 CFR part 61, subpart FF, as allowed by the OSWRO NESHAP, and they are not expected to be affected by the final rule amendments.

In general, the rule applies to waste management units and recovery operations that are located at major sources of HAP emissions, are used to manage, convey or handle used oil, used solvent or waste received from other facilities, and contain at least one of 97 organic HAP specified in the rule.[2] The HAP emission sources at facilities subject to the OSWRO NESHAP are tanks, containers, surface impoundments, oil-water separators, organic-water separators, process vents and transfer systems used to manage offsite material and equipment leaks. The MACT standards regulate these emissions sources through emission limits, equipment standards and work practices.

C. What changes have been made to the standards since promulgation of the NESHAP for the OSWRO source category?

Rule changes have been made to the OSWRO NESHAP since the promulgation of the NESHAP on July 1, 1996, in several separate actions. On July 20, 1999 (64 FR 38950), the EPA issued a direct final rule that amended specific provisions in the rule to resolve issues and questions raised after promulgation of the final rule. In this action, the EPA also amended other rule language to correct technical omissions, to make requirements consistent with other related air rules, and to correct typographical, printing and grammatical errors. On January 8, 2001 (66 FR 1263), the EPA published technical corrections

[2] The OSWRO MACT rule defines ''waste,'' ''used oil'' and ''used solvent'' in 40 CFR 63.681 Definitions.

and minor technical amendments for the OSWRO NESHAP. In addition, the EPA published proposed and final rules on January 16, 2002 (67 FR 2286), and June 23, 2003 (68 FR 37334), respectively, to clarify which parts of several existing NESHAP, including the OSWRO NESHAP, can be delegated to state, local and tribal agencies. The EPA also published proposed and final rules on July 29, 2005 (70 FR 43992), and April 20, 2006 (71 FR 20446), respectively, to revise certain aspects of SSM requirements in several existing NESHAP, including the OSWRO NESHAP.

D. What changes did we propose for the OSWRO source category in our July 2, 2014, proposal?

On July 2, 2014 (79 FR 37850), the EPA published proposed amendments to the OSWRO NESHAP based on the RTR analyses and also proposed other revisions. The proposed revisions include the following:

- Revisions to the tank requirements to require increased control of emissions for tanks in a specific size range that also contain material above a specified vapor pressure;
- Revisions to the equipment leak requirements to remove the option to comply with either 40 CFR part 63, subpart H or 40 CFR part 61, subpart V, and require compliance with only 40 CFR part 63, subpart H;
- Revisions to requirements related to emissions during periods of SSM;
- The addition of requirements for reporting of performance testing through the ERT;
- Revisions to the routine maintenance provisions to limit the applicability of the provisions to tanks;
- Clarifications to the ''sealed'' requirement of the provisions for OELs;
- Addition of monitoring requirements for PRDs;
- Clarification of provisions for some performance test methods and procedures; and
- Several minor clarifications and corrections.

III. What is included in this final rule?

This action finalizes the EPA's determinations pursuant to the RTR provisions of CAA section 112 for the OSWRO source category, and amends the OSWRO NESHAP, as proposed, based on those determinations. This action also finalizes the proposed changes to the NESHAP described in section II.D. of this preamble. We are also finalizing minor changes to the NESHAP in consideration of comments received during the public comment period for the proposed rulemaking, as described in section IV.D.2 of this preamble. In the following subsections, we introduce and summarize the final amendments to the OSWRO NESHAP.

A. What are the final rule amendments based on the risk review for the OSWRO source category?

Pursuant to CAA section 112(f), we are revising the tank and equipment leak requirements of the OSWRO NESHAP. Specifically, as we proposed, we are finalizing our determination that risks from the OSWRO source category are acceptable, considering all of the health information and factors evaluated and also considering risk estimation uncertainty; we are finalizing revisions to the tank requirements to require increased control of emissions for tanks in a specific size range that also contain material above a specified vapor pressure; and we are finalizing revisions to the equipment leak requirements to remove the option to comply with either 40 CFR part 63, subpart H or 40 CFR part 61, subpart V, and require compliance with only 40 CFR part 63, subpart H. We evaluated the costs, emissions reductions, energy implications and cost effectiveness of these revised standards and determined that these measures are cost effective and technically feasible and will provide an ample margin of safety to protect public health and prevent adverse environmental effects from exposure to emissions from the OSWRO source category.

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

We determined that there are developments in practices, processes and control technologies that warrant revisions to the NESHAP for this source category. Therefore, to satisfy the requirements of CAA section 112(d)(6), we are revising the MACT standards to include those developments. Specifically, as we proposed, we are finalizing revisions to the tank requirements to require increased control of emissions for tanks in a specific size range that also contain material above a specified vapor pressure, and we are finalizing revisions, as proposed, to the equipment leak requirements to remove the option to comply with either 40 CFR part 63, subpart H or 40 CFR part 61, subpart V, and require compliance with only 40 CFR part 63, subpart H. As noted in section III.A of the preamble, we are concurrently promulgating these tank and equipment leak revisions under section 112(f)(2) of the CAA to provide an ample margin of safety to protect public health.

C. What are the final rule amendments addressing emissions during periods of startup, shutdown and malfunction?

We are finalizing, as proposed, changes to the OSWRO NESHAP to eliminate the SSM exemption. Consistent with *Sierra Club* v. *EPA* 551 F. 3d 1019 (D.C. Cir. 2008), the EPA has established standards in this rule that apply at all times. Table 2 to Subpart DD of Part 63 (General Provisions applicability table) is being revised to change several references related to requirements that apply during periods of SSM. We also eliminated or revised certain recordkeeping and reporting requirements related to the eliminated SSM exemption. The EPA also made changes to the rule to remove or modify inappropriate, unnecessary or redundant language in the absence of the SSM exemption. We determined that facilities in this source category can meet the applicable emission standards in the OSWRO NESHAP at all times, including periods of startup and shutdown; therefore, the EPA determined that no additional standards are needed to address emissions during these periods.

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

This rule also finalizes, as proposed, revisions to several other OSWRO NESHAP requirements. We describe the revisions in the following paragraphs.

To increase the ease and efficiency of data submittal and data accessibility, we are finalizing, as proposed, a requirement that owners and operators of OSWRO facilities submit electronic copies of certain required performance test reports through an electronic performance test report tool called the ERT. This requirement to submit performance test data electronically to the EPA does not require any additional performance testing and applies only to those performance tests conducted using test methods that are supported by the ERT.

We are finalizing the proposed revisions to the routine maintenance provisions to limit their applicability to tanks routing emissions to a control device rather than any equipment or process routing emissions to a control device. This revision restores the OSWRO NESHAP provisions to the original intent for them to be consistent with the routine maintenance provisions of the Hazardous Organic NESHAP (HON).

To reduce compliance uncertainty associated with ''sealed'' OELs, we are

finalizing the proposed revisions to clarify that OELs are ''sealed'' by a cap, blind flange, plug or second valve when instrument monitoring of the OEL conducted according to Method 21 of 40 CFR part 60, appendix A indicates no readings of 500 parts per million (ppm) or greater. For OELs that are exempt from the requirements to be equipped with a cap, blind flange, plug or second valve, we are requiring them to be equipped with a flow indicator, seal or locking device.

To conform with the reasoning of the Court's ruling in *Sierra Club* v. *EPA,* we are finalizing the proposed requirements regarding releases directly to the atmosphere from safety devices, pressure tanks, bypasses and PRDs. These requirements prohibit bypasses of control devices and prohibit emissions released directly to the atmosphere from PRDs and closure devices on pressure tanks. In addition, we are finalizing the proposed recordkeeping and reporting requirements associated with releases to the atmosphere from bypasses and PRDs. We are also finalizing the proposed requirements that PRDs be monitored with a device or monitoring system that is capable of: (1) Identifying the pressure release; (2) recording the time and duration of each pressure release; and (3) notifying operators immediately that a pressure release is occurring.

We are finalizing, as proposed, several minor changes to the test methods and procedures required by the NESHAP to correct errors and to provide consistency, clarification and flexibility.

In addition, we are finalizing, as proposed, several miscellaneous minor changes to improve the clarity of the rule requirements.

We are also finalizing minor changes to the NESHAP in consideration of comments received during the public comment period for the proposed rulemaking, as described in section IV. D.2 of this preamble.

E. What are the effective and compliance dates of the revisions to the OSWRO NESHAP?

The effective date and compliance dates for the revisions to the OSWRO NESHAP being promulgated in this action have not changed since proposal.

The revisions to the OSWRO NESHAP being promulgated in this action are effective on March 18, 2015.

The compliance date for the revised SSM requirements, electronic reporting requirements, the revised routine maintenance provisions, the operating and pressure release management requirements for PRDs, and the revised requirements regarding bypasses and closure devices on pressure tanks for existing OSWRO facilities is the effective date of the standards March 18, 2015. The compliance date for existing OSWRO facilities to comply with the PRD monitoring requirements is 3 years from the effective date of the standards, March 20, 2018. The compliance date for existing OSWRO facilities to comply with the revised tank requirements is 2 years from the effective date of the standards, March 20, 2017. For equipment leaks, the compliance date for existing sources is 1 year from the effective date of the standards, March 18, 2016.

New sources must comply with all of the standards immediately upon the effective date of the standard, March 18, 2015, or upon startup, whichever is later.

IV. What is the rationale for our final decisions and amendments for the OSWRO source category?

For each issue, this section provides a description of what we proposed and what we are finalizing for the issue, the EPA's rationale for the final decisions and amendments and a summary of key comments and responses. For all comments not discussed in this preamble, comment summaries and the EPA's responses can be found in the comment summary and response document available in the docket.

A. Residual Risk Review for the OSWRO Source Category

1. What did we propose pursuant to CAA section 112(f) for the OSWRO source category?

Pursuant to CAA section 112(f), we conducted a residual risk review and presented the results of this review, along with our proposed decisions regarding risk acceptability and ample margin of safety, in the July 2, 2014, proposed rule for the OSWRO NESHAP (79 FR 37850). The results of the risk assessment are presented briefly below in Table 2, and in more detail in the residual risk document, *Residual Risk Assessment for the Off-Site Waste and Recovery Operations Source Category in Support of the February 2015 Risk and Technology Review Final Rule,* which is available in the docket for this rulemaking. Based on actual emissions for the OSWRO source category, the maximum individual risk (MIR) was estimated to be up to 9-in-1 million, the maximum chronic non-cancer target organ-specific hazard index (TOSHI) value was estimated to be up to 0.6, and the maximum off-site acute hazard quotient (HQ) value was estimated to be up to 1. The total estimated national cancer incidence from this source category, based on actual emission levels, was 0.02 excess cancer cases per year, or one case in every 50 years. Based on MACT-allowable emissions for the OSWRO source category, the MIR was estimated to be up to 20-in-1 million, and the maximum chronic non-cancer TOSHI value was estimated to be up to 1. We also found there were emissions of one persistent and bio-accumulative HAP (PB–HAP) with an available RTR multipathway screening value, and the reported emissions of this HAP, 2-acetylaminofluorene (which is a polycyclic organic matter (POM) compound), were below the multipathway screening value for this compound. Emissions of three environmental HAP, POM, hydrogen chloride and hydrogen fluoride, were reported by OSWRO facilities. For each of these three HAP, the modeled concentrations were below the respective ecological benchmark values. The maximum facility-wide MIR was 200-in-1 million and the maximum facility-wide TOSHI was 4. These risks were found to be due to emissions from non-OSWRO processes at the facility site and were based on actual emissions. We weighed all health risk factors in our risk acceptability determination, and we proposed that the residual risks from the OSWRO source category are acceptable.

TABLE 2—OFF-SITE WASTE AND RECOVERY OPERATIONS INHALATION RISK ASSESSMENT RESULTS

Maximum individual cancer risk (in 1 million) [a]		Estimated population at increased risk levels of cancer	Estimated annual cancer incidence (cases per year)	Maximum chronic non-cancer TOSHI [b]		Maximum screening acute non-cancer HQ [d]
Actual emissions level	MACT-allowable emissions level [c]			Actual emissions level	MACT-allowable emissions level	
9	20	≥ 1-in-1 million: 210,000 .. ≥ 10-in-1 million: 0	0.02	0.6	1	HQ_{REL} = 1 (glycol ethers).

[a] Estimated maximum individual excess lifetime cancer risk due to HAP emissions from the source category.
[b] Maximum TOSHI. The target organ with the highest TOSHI for the OSWRO source category for both actual and MACT-allowable emissions is the respiratory system.
[c] The development of allowable emission estimates can be found in the memo *MACT-Allowable Emissions for the Off-Site Waste and Recovery Operations Source Category,* which is available in the docket for this action.
[d] The maximum off-site acute value of 1 for actual emissions is driven by emissions of glycol ethers. Acute assessments are not performed with MACT-allowable emissions.

We then considered whether the OSWRO NESHAP provides an ample margin of safety to protect public health and whether more stringent standards are necessary to prevent, taking into consideration costs, energy, safety and other relevant factors, an adverse environmental effect. In considering whether the standards should be tightened to provide an ample margin of safety to protect public health, we considered the same risk factors that we considered for our acceptability determination and also considered the costs, technological feasibility and other relevant factors related to emissions control options that might reduce risk associated with emissions from the source category. The control options identified to reduce risk were the same as those identified under the technology review for the OSWRO source category. Based on that analysis, we proposed to require more stringent controls for tanks of certain sizes and containing materials above a certain vapor pressure. We also proposed to require facilities to comply with the more stringent leak detection and repair (LDAR) program of 40 CFR part 63, subpart H rather than to allow facilities to comply with either 40 CFR part 63, subpart H or 40 CFR part 61, subpart V. Furthermore, we proposed that additional HAP emissions controls for OSWRO process vents are not necessary to provide an ample margin of safety. Based on the results of our screening analysis for risks to the environment, we also proposed that more stringent standards are not necessary to prevent an adverse environmental effect.

2. How did the risk review change for the OSWRO source category since the proposed rule?

Information received by the EPA during the proposal comment period indicates that four additional facilities, not included in the risk review for the OSWRO source category, are subject to the OSWRO NESHAP. These facilities include Eastman Chemical Company in Kingsport, Tennessee; Eastman Chemical Company in Longview, Texas; E.I. DuPont de Nemours and Company in Orange, Texas; and E. I. DuPont de Nemours and Company in Axis, Alabama.

To determine whether to conduct additional risk modeling for these facilities, we reviewed the title V permits and the results of previously performed risk modeling for these facilities. The review of the facility title V permits, as well as conversations with facility representatives, indicated that these facilities are primarily chemical manufacturing plants with processes subject to other NESHAPs that also process some amount of waste received from other facilities within their companies. A review of previously modeled facility-wide risks for these four facilities as part of the risk reviews for the other NESHAP indicate that the maximum facility-wide cancer risks due to emissions of HAP range from 6-in-1 million to 40-in-1 million. These risks are relatively low when compared to the upper end of the range of acceptability of 100-in-1 million. The maximum facility-wide non-cancer risks due to HAP emissions range from 0.08 to 1. In addition, the results show that the facility-wide cancer and non-cancer risks are attributed to HAP emissions from non-OSWRO processes. As the OSWRO processes are minor operations at these facilities, the risk due to OSWRO operations is expected to be a small fraction of the facility-wide risk.

Adding these facilities to the dataset and performing additional modeling would not be expected to result in increased maximum risks from the source category, for the reasons discussed above. Thus, we determined that additional modeling to include these facilities is not necessary, and, based on available information, the risks from these four facilities do not change our decisions regarding risk acceptability or ample margin of safety for the OSWRO source category. We have not otherwise changed any aspects of our risk review since the proposal.

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

The comments received on the proposed risk review were generally supportive of our determination of risk acceptability and ample margin of safety analysis and requirement for additional control. A summary of these comments and our responses can be found in the comment summary and response document available in the docket for this action (EPA–HQ–OAR–2012–0360).

4. What is the rationale for our final decisions for the risk review?

For the reasons explained in the proposed rule, we determined that the risks from the OSWRO source category are acceptable, and the revised requirements for tanks and equipment leaks described above will provide an ample margin of safety to protect public. In addition, for the reasons explained in the proposal, we determined that more stringent standards are not necessary to prevent an adverse environmental effect. Since proposal, neither the risk assessment nor our determinations regarding risk acceptability, ample margin of safety or adverse environmental effects have changed. Therefore, pursuant to CAA section 112(f)(2), we are revising the OSWRO NESHAP to require the 40 CFR part 63, subpart H LDAR program and more stringent emissions controls for certain tanks to provide an ample margin of safety to protect public.

B. Technology Review for the OSWRO Source Category

1. What did we propose pursuant to CAA section 112(d)(6) for the OSWRO source category?

Pursuant to CAA section 112(d)(6), we conducted a technology review, which focused on identifying and evaluating developments in practices, processes and control technologies for the emission sources in the OSWRO source category. At proposal, we identified developments in practices, processes or control technologies for process vents, tanks and equipment leaks.

For process vents, one potential control technology was identified at proposal, use of a regenerative thermal oxidizer, which could increase the emissions capture and control efficiency from 95 percent to 98 percent for those process vents that are currently controlled with a carbon adsorption system or other device achieving 95-percent control. We estimated an additional emission reduction of 10 tpy of HAP would be associated with this increase in emissions control efficiency, and the estimated costs would be $350,000 per ton of HAP emission reduction.

For tanks, we identified two potential developments in practices and control techniques at proposal. Option 1 would lower the vapor pressure threshold above which ''Level 2'' control would be required for some tanks. ''Level 2'' control essentially requires one of five options: (1) A fixed roof tank equipped with an internal floating roof; (2) a fixed roof tank equipped with an external floating roof; (3) a tank with a vapor-tight cover and vented through a closed-vent system to a control device that has an efficiency of 95 percent or more; (4) a pressure tank; or (5) a tank inside a permanent total enclosure that is vented through a closed-vent system to an enclosed combustion control device. Option 1 would require Level 2 emissions control for tanks with capacities greater than or equal to 75 cubic meters (m^3), but less than 151 m^3, if the vapor pressure of the stored material is 13 kilopascals (kPa) or greater, instead of 27.6 kPa or greater as required by the current MACT standard. Option 2 would revise the vapor pressure threshold as in Option 1 and increase the required control efficiency from the current 95-percent to a 98-percent emissions reduction for all tanks required to use Level 2 controls. For tank Option 1, we estimated an additional emission reduction of up to 73 tpy and estimated the costs would be $300 per ton of HAP emission reduction. For tank Option 2, we estimated the HAP emissions reduction incremental to Option 1 would be approximately 22 tpy and the incremental cost effectiveness between Option 1 and Option 2 would be $56,000 per ton of HAP emission reduction.

For equipment leaks, we identified the more stringent leak definitions of 40 CFR part 63, subpart H over those of 40 CFR part 61, subpart V as a development in practices, processes or control technologies at proposal. To implement the subpart H LDAR program, two options were identified: Option 1—switching from the subpart V LDAR program to the subpart H LDAR program, without the connector monitoring requirements; Option 2—switching from the subpart V LDAR program to the subpart H LDAR program, with the connector monitoring requirements. For Option 1, we estimated an additional emission reduction of up to 69 tpy and estimated the costs would be $1,000 per ton of HAP emission reduction. For Option 2, we estimated the HAP emissions reduction incremental to Option 1 would be approximately 70 tpy and the incremental cost effectiveness between Option 1 and Option 2 would be $7,000 per ton of HAP emission reduction.

Based on the costs and the emission reductions that would be achieved with the identified developments, we proposed to revise the MACT standard pursuant to CAA section 112(d)(6) to require Level 2 controls for tanks with capacities greater than or equal to 75 m^3, but less than 151 m^3, if the vapor pressure of the stored material is 13 kPa or greater and to require facilities to comply with the subpart H LDAR program, including the subpart H requirements for connectors in gas/vapor service and in light liquid service. We proposed that it was not necessary to revise the MACT standards pursuant to CAA section 112(d)(6) to require 98-percent control, based on the use of a regenerative thermal oxidizer, for process vents. More information concerning our technology review can be found in the memorandum titled, *Technology Review and Cost Impacts for the Proposed Amendments to the Off-Site Waste and Recovery Operations Source Category,* which is available in the docket, and in the preamble to the proposed rule, 79 FR at 37870 to 37873.

2. How did the technology review change for the OSWRO source category?

a. Tanks

The analysis of the proposed control requirements for tanks at existing OSWRO facilities has been revised to reflect new data submitted by industry during the comment period. As part of its comments, the Cement Kiln Recycling Coalition provided information to demonstrate that alternative values or assumptions should be used in the analysis of tank emission reductions and costs of control. These comments were associated with the proposed requirement that Level 2 controls be used for tanks with capacities greater than or equal to 75 m^3, but less than 151 m^3, if the vapor pressure of the stored material is 13 kPa or greater (*i.e.,* Option 1). We reviewed this information, determined that several suggested changes were appropriate because they more accurately reflect the conditions of tanks in the OSWRO source category, and revised our analysis of tank emissions reductions and control costs to incorporate the data submitted by the commenter, where such incorporation was deemed appropriate. The major revisions to the analysis included the use of different parameters in estimating HAP emissions per tank and the inclusion of additional emissions control equipment and ancillary equipment. In addition, through further review of our previous analysis, we determined that the number of tanks nationwide that would require control under Option 1 was overestimated, and we revised the estimated number of tanks that would be affected by Option 1 in this analysis.

As shown in Table 3, our revised estimate of the capital costs for the tanks Option 1 requirement is approximately $139,000, and the total annualized costs are estimated to be approximately $192,000. The estimated HAP emissions reduction is approximately 26 tpy, and the cost effectiveness is approximately $7,000/ton.

TABLE 3—REVISED ESTIMATED NATIONWIDE EMISSIONS REDUCTION AND COSTS OF CONTROL OPTION 1 FOR TANKS AT OSWRO FACILITIES

Regulatory alternative	HAP emissions reduction (tpy)	Capital cost ($)	Annual costs ($/yr)	Cost effectiveness ($/ton HAP)
Option 1	26.4	139,000	192,000	7,000

At proposal, we also evaluated the impacts of requiring an increased HAP emissions control efficiency of 98 percent based on the use of a regenerative thermal oxidizer (*i.e.,* Option 2) and found that the costs of Option 2 were not reasonable given the level of HAP emissions reductions that it would achieve. No comments were received regarding Option 2, and we have not revised the analysis for Option 2.

For further details on the revised tanks analysis, see the technical memorandum titled, *Revised Technology Review for the Off-Site Waste and Recovery Operations Tanks,* available in the docket for this action.

b. Equipment Leaks

As part of its comments on the proposed rule, one commenter noted that the EPA did not account for monitoring of agitator seals on tanks in its analysis of the costs of implementing the more stringent leak definitions for equipment in 40 CFR part 63 subpart H. We have revised our analysis of the costs and emissions reductions associated with switching from the 40 CFR part 61, subpart V LDAR program to the 40 CFR part 63, subpart H LDAR program to include the expected emissions reductions and costs associated with monitoring agitator seals for leaks. Also, based on information received after proposal that there are four additional facilities in the source category that would be subject to the LDAR requirements of the rule, we have revised the analysis to include those facilities. We included this information in the evaluation of both regulatory options: Option 1—switching from a subpart V LDAR program to a subpart H LDAR program, without the subpart H connector monitoring requirements and Option 2—switching from a subpart V LDAR program, with the subpart H connector monitoring requirements.

The revised estimated costs and emissions reductions associated with these two options are shown in Table 4. For Option 1 (subpart H without connector monitoring), we estimate the capital costs to be approximately $414,000, and the total annualized costs are estimated to be approximately $155,000. The estimated HAP emissions reduction is approximately 109 tpy, and the cost effectiveness is approximately $1,000/ton. For Option 2 (subpart H with connector monitoring), we estimate the capital costs to be approximately $2,089,000, and the total annualized costs are estimated to be approximately $664,000. The estimated HAP emissions reduction is approximately 185 tpy, and the cost effectiveness is approximately $4,000/ton. The incremental cost effectiveness between Option 1 and Option 2 is approximately $7,000.

TABLE 4—REVISED ESTIMATED NATIONWIDE EMISSIONS REDUCTION AND COSTS OF EQUIPMENT LEAK CONTROL OPTIONS AT OSWRO FACILITIES

Regulatory alternative	HAP emissions reduction (tpy)	Capital cost ($)	Annual costs ($/yr)	Cost effectiveness ($/ton HAP)	Incremental cost effectiveness ($/ton HAP removed)
Option 1: Subpart H, no connector monitoring	108.7	414,000	155,000	1,000	.....
Option 2: Subpart H with connector monitoring	184.5	2,089,000	664,000	4,000	7,000

In addition to these revisions to the equipment leak analysis, we also considered comments regarding the costs of connector monitoring. In its comments on the proposed rule, one commenter claimed that the costs the EPA included in its analysis for ongoing connector monitoring and administrative activities were too low. Although we do not agree with the commenter and we continue to believe the costs we used in the analysis for these activities are reasonable, we conducted an additional analysis to assess the potential effect of using the values provided by the commenter on the cost effectiveness of Option 2. This additional analysis showed there would be a slight increase in the Option 2 total annualized cost to $672,000. The cost effectiveness would remain approximately $4,000, and the incremental cost effectiveness between Option 1 and Option 2 would still be approximately $7,000.

For further details on the revised equipment leaks analysis, see the technical memorandum titled, *Revised Technology Review for the Off-Site Waste and Recovery Operations Equipment Leaks,* available in the docket for this action.

c. Process Vents and Other OSWRO Equipment and Processes

For process vents and other equipment and processes at OSWRO facilities, the technology review has not changed since proposal.

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

The following is a summary of the key comments received regarding the OSWRO source category technology review and our responses to these comments. Additional comments on the technology review and our responses can be found in the comment summary and response document available in the docket for this action (EPA–HQ–OAR–2012–0360).

Comment: One commenter states that the EPA did not account for monitoring of agitator seals on tanks in its analysis of the costs of implementing the more stringent leak definitions for equipment in 40 CFR part 63, subpart H, and

asserts that many tanks at OSWRO facilities are equipped with agitators.

Response: We acknowledge that we did not, prior to proposal, analyze the impacts of including monthly monitoring of agitators with Method 21 for the proposed rule. We performed this analysis in response to comments and have determined that the capital costs per facility for agitator monitoring are approximately $1,000, and the total annualized costs are estimated to be approximately $2,000. The estimated HAP emissions reduction is approximately 0.7 tpy, and the cost effectiveness is approximately $2,000/ton. Agitator monitoring would be included in both LDAR Options 1 and 2. To determine the effect of including agitator monitoring in the LDAR program options, we compared the costs and emissions reductions on a per facility basis rather than for the whole source category to avoid issues with differences in the number of facilities included in the source category. The effect of including agitator monitoring in Option 1 is an increase in the per facility capital costs from approximately $7,000 to approximately $8,000, an increase in the total annualized costs from approximately $1,500 to approximately $3,000, an increase in the estimated HAP emissions reduction from approximately 1.5 to approximately 2.2 tpy, and the cost effectiveness value remaining at approximately $1,000/ton. The effect of including agitator monitoring in Option 2 is an increase in the per facility capital costs from approximately $41,000 to approximately $43,000, an increase in the total annualized costs from approximately $12,000 to approximately $14,000, and an increase in the estimated HAP emissions reduction from approximately 3.1 to approximately 3.8 tpy. The cost effectiveness remains at approximately $4,000/ton, and the incremental cost effectiveness compared with Option 1 remains the same at $7,000/ton. Further details on the revised equipment leaks analysis are documented in the technical memorandum titled, *Revised Technology Review for the Off-Site Waste and Recovery Operations Equipment Leaks,* available in the docket for this action.

Based on our analysis of the costs of a 40 CFR part 63, subpart H LDAR program with monthly agitator monitoring using Method 21, we are finalizing, as proposed, the requirement that OSWRO facilities comply with subpart H, including the subpart H requirements for connectors in gas/vapor service and in light liquid service.

Comment: Several commenters dispute the EPA's emission reduction estimates related to connector monitoring. One of these commenters notes that the EPA based its cost-effectiveness calculations on the approach from the December 21, 2011, memorandum, *Analysis of Emissions Reduction Techniques for Equipment Leaks,* developed for the Uniform Standards, and provides comments on the approach used in this memorandum. This commenter and another commenter state that the leak rate factor of 1.7 for connectors was determined for the refining industry, and the EPA provides no basis that it applies to the synthetic organic chemical manufacturing industry (SOCMI) or the OSWRO source category. One commenter states that if the EPA believes the 1.7 factor is warranted, it should use petroleum refinery leak rates as a starting point instead of SOCMI rates. The commenter asserts that based on the experience of member companies with process units subject to HON connector monitoring, commencement of Method 21 monitoring with a leak definition of 500 ppm will not reduce emissions by 50 percent, as the EPA estimates. This commenter submitted a report that concluded there is no statistical difference in average leak rates between the initial Method 21 inspections and subsequent inspections and that volatile organic compound (VOC) emissions from connectors at plants subject to the HON or Miscellaneous Organic NESHAP (MON) are far below SOCMI average factor estimates. The commenter suggests that sensory methods of detecting leaks are adequate and the imposition of Method 21 in addition to current practices will not further reduce the number of leaks. The commenter asserts that operators are trained to recognize hazards associated with leaks using sensory methods and are expected to take prompt action when leaks occur.

Another commenter asserts that the revised monitoring requirements for connectors will not result in substantial, or any, HAP emission reductions. The commenter's assertion is based on data obtained from LDAR records of its member facilities, where only five connectors were found to have a leak above 500 ppm out of 10,542 connectors analyzed over the past year. The commenter also asserts that the EPA's assumption of 82-percent HAP composition is incorrect, and was taken from an OSWRO NESHAP background information document from 1994 which is based on an outdated HAP list (*i.e.,* methyl ethyl ketone has since been removed).

Response: The EPA stands by our analysis of emission reduction estimates related to connector monitoring for the OSWRO source category.

Regarding the factor used in estimating the leak frequency, we increased the connector leak frequency by a factor of 1.7. As explained below, we believe it is appropriate to apply this factor to the OSWRO source category to account for differences in industry-reported and National Enforcement Investigations Center (NEIC) measured leak frequencies. In 1999, the NEIC published the results of a comparative monitoring study at 17 petroleum refineries, which showed the percentage of valves identified as leaking by NEIC was always higher than the results of monitoring conducted by the petroleum refiners.[3] This NEIC report states that the disparity between the NEIC and company results may be attributable to refineries not monitoring in the manner prescribed in Method 21 of 40 CFR part 60, appendix A–7. In a subsequent analysis of these results, the NEIC results were shown to be higher than the industry results by a factor of at least 2.6 at the 99-percent confidence level.[4] As the initial connector leak frequency used in the analysis of OSWRO connector leak emissions was the same as that used in the Uniform Standards analysis,[5] which was based on industry–supplied data for facilities regulated by the MON, we applied a factor to account for the differences noted between industry-supplied data and NEIC-measured leak frequency data. For the OSWRO analysis, the factor of 1.7 was used rather than 2.6. This 1.7 factor represents the 10th percentile of the data set (*i.e.,* 90 percent of the NEIC leak frequencies were at least 1.7 times higher than the leak frequencies reported by the refineries). This conservative factor was chosen, in part, to account for the possibility that refineries and OSWRO facilities could leak at different rates.

We disagree with the commenter that applying the connector leak frequency

[3] U.S. EPA, Office of Enforcement and Compliance Assurance. October 1999. *Enforcement Alert: Proper Monitoring Essential to Reducing 'Fugitive Emissions' Under Leak Detection and Repair Programs.*

[4] Memorandum from D. Randall, RTI International, to K. Rackley, USEPA. October 30, 2007. *Statistical Analysis of Valve Leak Frequencies Obtained by Industry and EPA for Petroleum Refining Process Units.*

[5] Memorandum from C. Hancy, RTI International, to J. Howard, USEPA. December 21, 2011. *Analysis of Emissions Reduction Techniques for Equipment Leaks. This memorandum is available in the docket for this action.*

factor of 1.7 necessitates the use of petroleum refinery leak frequency rates. Since the process equipment and chemicals used at OSWRO facilities are more similar to those of the SOCMI than those at petroleum refineries, we believe it is appropriate to use SOCMI leak frequencies. Further, the factor we applied to the connector leak frequency to account for differences noted between industry-supplied and NEIC-measured data already accounted for potential differences in leak frequencies between petroleum refineries and OSWRO facilities by using the more conservative factor of 1.7 than the factor of 2.6 that would be applied to refinery data. We note that the initial leak frequency of 0.36 percent used in the OSWRO analysis is the same as that reported by the commenter's member companies for the HON initial monitoring, and we made the conservative assumption that the subsequent leak frequency after implementation of Method 21 monitoring of connectors would be the same as the initial leak frequency. However, we also assumed, as we have in other rulemakings, that these leaking connectors would be fixed so that the average leak frequency over each monitoring cycle would be equal to one-half of the subsequent leak frequency (*i.e.,* 0.18 percent).[6]

We disagree with the commenter's claim that the estimated emissions per connector used in the EPA's analysis are too high. The leak rates used were based on those reported in the Protocol for Equipment Leak Emissions Estimates (EPA–453/R–95–017, November 1995), which determined these leak rates based on screening data from 33 chemical production units and bagging data from 22 chemical production units. We consider this to be relevant and robust data, and the resulting average leak emissions rates are appropriate to use in our analyses.

We agree with the commenter that the HAP composition used in our analyses of 82 percent was taken from the 1994 OSWRO NESHAP background information document. The commenter did not provide any information to show that another estimate of HAP composition would be appropriate, and, without any basis for a different value, we have not changed our analyses to include a different HAP composition.

Comment: Two commenters dispute the EPA's assessment of the costs to monitor connectors. Specifically, one commenter disputes the EPA's assumed cost of $2.50 per monitored connector and outlines the various challenges in monitoring connectors in comparison with other types of equipment components. The other commenter states that the EPA underestimated the annual administrative costs of monitoring connectors and provides their own estimate of $27,000. Both commenters provide a revised analysis of the cost of connector monitoring based on a recent study conducted by one company at one facility, and conclude that monitoring connectors would cost $6.50 per component and $18,139/ton. Another commenter states that the requirement to conduct connector monitoring could result in OSWRO facilities being forced to hire outside consultants to perform the monitoring due to the large number of connectors at each site and that the annual monitoring costs for connectors could be the same as that for all other monitored components.

Response: We have considered the commenters' concerns that the estimated connector monitoring costs used in our analysis of the costs of an LDAR program, including periodic connector monitoring using Method 21, are too low. The two areas in which the commenters dispute the estimated connector monitoring costs are in the ongoing monitoring costs per connector and the estimated annual administrative and reporting costs. Regarding ongoing monitoring costs, we do not believe the $2.50 used in the EPA's analysis is an unreasonable estimate of the monitoring costs per connector. This estimate is based on an average monitoring cost per component of $1.00 to $1.50, and then increased to $2.50 to account for industry claims that connectors are more difficult than other components to monitor.[7] However, to determine how a fee of $6.50 per connector, as suggested by the commenters, would affect the cost effectiveness of the provisions, we conducted an additional analysis of costs of an LDAR program using this value. We note that all monitoring costs already assume an outside contractor would be used. Regarding the administrative and reporting costs, the submitted study includes $27,000 per year for these activities for connectors alone. At the labor rates used in the study, this equates to 781 hours per year. We do not find this amount of time to be reasonable for connector administrative and reporting costs, especially considering that connector monitoring may only be required once every four years. However, it may be possible that our estimate of 50 hours per year at a labor rate of $92.92 per hour overestimates the labor rate and underestimates the amount of time required to complete the necessary administrative requirements. Therefore, we conducted an additional analysis of the costs of the LDAR program assuming twice as many hours as we previously estimated and the labor rates provided by the commenter for these administrative actions. Using these more conservative values, the incremental cost effectiveness for connectors would be $6,825/ton. This incremental cost effectiveness is still $7,000/ton of HAP reduced, as was calculated without the alternate connector monitoring costs. Therefore, using these alternative values would not change our determination that the costs of the subpart H LDAR program (including connector monitoring) are reasonable, given the level of HAP emissions reduction that would be achieved, and we are finalizing the equipment leak amendments to require subpart H LDAR (including connector monitoring) as proposed.

Comment: One commenter states the EPA used several assumptions the commenter does not agree with in its estimate of emissions from tanks. One is that the EPA overestimated the tank throughput. The commenter asserts that, based on data from its members, the average waste throughput is typically less than 20,000,000 gallons for each facility, which is much lower than the EPA's estimate of 35,000,000 gallons per facility. The commenter also disagrees with the EPA's assumption that OSWRO tanks contain 100-percent HAP, as hazardous wastes processed by OSWRO facilities contain a large portion of organic and inorganic non-HAP constituents. The commenter estimates that as little as 50 percent of the tank constituents are HAP and provided a suggested mix of HAP constituents. The commenter also states that the EPA's selection of Houston as the location of the model facility is inappropriate because of its average sub-tropical temperatures, and a location more representative of the national average should be selected. The commenter also states that the EPA's use of the default conservation vent pressure settings of 0.03 pounds per square inch (psi) and −0.03 psi in the calculation of uncontrolled emissions is too low, and actual pressure settings for tanks currently subject to the OSWRO Level 1 control requirements are typically set at 0.5 psi.

[6] Memorandum from K. Parrish and D. Randall, RTI International, to K. Rackley, USEPA. October 30, 2007. *Final Impacts Analysis for Regulatory Options for Equipment Leaks of VOC in the SOCMI.*

[7] Memorandum from K. Parrish and D. Randall, RTI International, to K. Rackley, USEPA. October 30, 2007. *Final Impacts Analysis for Regulatory Options for Equipment Leaks of VOC in the SOCMI.*

This commenter also disputes the EPA's estimate of the costs that would be incurred by facilities to comply with the proposed amendments to the vapor pressure thresholds for tank control level. The commenter states that contrary to the EPA's assumptions, there are a significant number of sources that would require the installation of a new control device or would have to upgrade and/or expand their existing control device systems to comply with the Control Level 2 standards. The commenter asserts that the EPA provided no assessment of whether existing control devices are sized to accommodate additional vented sources, and control devices are typically not sized with significant excess capacity due to economic and space considerations. The commenter states that the EPA also did not consider flame arrestors to prevent back-flash to tanks, which would cost $10,000 per unit. In addition, the commenter asserts that the EPA did not consider capital costs related to engineering installation, or regulatory and safety costs, such as additional process hazard reviews and analyses under either the Occupational Safety and Health Administration (OSHA) Process Safety Management or CAA Risk Management Plan regulations that would likely be required if tanks are connected to a control device.

The commenter also disputes EPA's estimate of annual costs, and states that the EPA did not consider the additional cost associated with operation of the control device itself, such as costs associated with replacement and disposal or regeneration of carbon (for a carbon adsorption system). The commenter asserts that the annual cost should still be applied even if there is an existing control device because annual carbon costs are a function of the throughput of the newly affected units. The commenter further asserts that additional annual and capital costs would be incurred from the operation of a nitrogen blanketing system that may be required if carbon adsorption units is used as the HAP control device.

The commenter estimates that the cost effectiveness of the proposed amendments to the tank vapor pressure thresholds is actually $48,000 per ton of HAP controlled, which the commenter claims is an unnecessary cost to achieve minor emission reductions.

Response: Our analysis presented the best quantification of the emission reductions and costs of the proposed amendments to the tank provisions based on the information available at the time. We have revised some of the assumptions used in the analysis to address concerns raised by the commenter and to include additional information that the commenter has provided. Details of this analysis are presented in the memo, *Revised Technology Review for the Off-Site Waste and Recovery Operations Tanks,* which is available in the docket for this action.

We agree with the commenter that OSWRO tanks likely do not contain 100-percent HAP, and have revised the analysis to include a mix of tank constituents that comprises 60-percent HAP, as suggested by the commenter. We have moved the location of the model facility from Houston to a location near the center of the continental United States, which has temperatures more representative of the national average. We have also increased the conservation vent pressure setting from the default value of 0.03 psi to 0.5 psi, as suggested by the commenter. We did not revise the average waste throughput used in the analysis. The commenter did not provide data to support the claim that the average waste throughput is actually 20,000,000 gallons per facility, and the EPA's estimate of 35,000,000 gallons per facility is supported by data obtained through the 2013 CAA section 114 questionnaire for the one OSWRO facility with tanks in the size and vapor pressure range affected by the proposed standards.

In addition, while some facilities may have control devices with adequate capacity to control emissions from the additional tanks that would become subject to Level 2 control requirements as a result of the proposed amendments, it may be possible that some facilities do not have the required excess capacity. Therefore, we have revised the analysis to add the conservative assumption that each facility would need to install a carbon adsorber to comply with the proposed amendments. The revised analysis includes the cost of a carbon adsorber canister system, including installation and other associated capital costs, as well as annual costs for the operation of the device (*e.g.,* cost of carbon). We have also revised the analysis to include costs for flame arrestors, as suggested by the commenter. We have revised the number of tanks in the analysis from 21 to 14 to account for seven tanks that are known to already be controlled based on information collected through the CAA section 114 questionnaire.

We disagree with the commenter that the cost of nitrogen blanketing systems should be included in the analysis. Nitrogen blankets are not required by the OSWRO NESHAP for use with a control device, and we do not believe that nitrogen blankets are necessary for the operation of control devices, including a carbon adsorption system, as suggested by the commenter. Further, nitrogen blanketing systems can be used on tanks that are not controlled by a control device, and may already be in place for the tanks that would be affected by the revised standard. We also disagree with the commenter that we have not considered capital costs related to engineering installation and regulatory and safety costs. We explicitly include installation costs of equipment, and we follow the procedure of the EPA Control Cost Manual for including indirect costs.

Considering the revisions to emission controls and costs identified above, we have determined that the capital costs for the proposed amendments to the tank provisions are approximately $139,000, and the total annualized costs are estimated to be approximately $192,000. The estimated HAP emissions reduction is approximately 26 tpy, and the cost effectiveness is approximately $7,000 per ton of HAP reduced. While the revised analysis resulted in lower emission reductions at a higher cost than the estimates developed prior to proposal, we still find the amendments to the tank control provisions to be cost effective, and are, therefore, finalizing the amendments as proposed.

4. What is the rationale for our final decisions for the technology review?

Based on our revised analysis for tanks, the costs of Option 1 are reasonable, given the level of HAP emissions reduction that would be achieved with this control option. Therefore, as a result of this revised technology review pursuant to CAA section 112(d)(6), we have determined, as we did at proposal, that it is appropriate to revise the OSWRO NESHAP to require Level 2 controls for tanks with capacities greater than or equal to 75 m^3, but less than 151 m^3, if the vapor pressure of the stored material is 13 kPa or greater.

Considering our revised analysis for equipment leaks, we have determined the costs of Option 2, which includes all of the requirements of Option 1, are reasonable, given the level of HAP emissions reduction that would be achieved with this control option. We note that, while we did not include the higher connector monitoring costs analyzed in response to commenter suggestions in this determination, the inclusion of these costs would not change our conclusion that the costs of Option 2 are reasonable, given the level of HAP emissions reduction that would be achieved with this control option.

Therefore, as a result of this revised technology review pursuant to CAA section 112(d)(6), we have determined, as we did at proposal, that it is appropriate to revise the OSWRO NESHAP to require existing and new affected sources to comply with 40 CFR part 63, subpart H rather than 40 CFR part 61, subpart V, including the subpart H requirements for connectors in gas/vapor service and in light liquid service.

As noted in section IV.A.4 of the preamble, we are promulgating these revisions concurrently under section 112(f)(2) of the CAA to provide an ample margin of safety to protect public health. Furthermore, for the reasons discussed above and in the preamble to the proposed rule, we have determined that it is not necessary pursuant to CAA section 112(d)(6) to revise the OSWRO NESHAP to require additional HAP emission controls for process vents or any other equipment or processes at OSWRO facilities.

C. Startup, Shutdown and Malfunction Provisions for the OSWRO Source Category

1. What SSM provisions did we propose for the OSWRO source category?

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

We have eliminated the SSM exemption in this rule. Consistent with *Sierra Club* v. *EPA,* the EPA proposed standards in this rule that apply at all times. We have also revised Table 2 (the General Provisions applicability table) in several respects as is explained in more detail below. For example, we have eliminated the incorporation of the General Provisions' requirement that the source develop an SSM plan. We have also eliminated and revised certain recordkeeping and reporting that is related to the SSM exemption as described in detail in the proposed rule and summarized again here.

In proposing the standards in this rule, the EPA took into account startup and shutdown periods and, for the reasons explained below, did not propose alternate standards for those periods. Information on periods of startup and shutdown received from the facilities through CAA section 114 questionnaire responses indicated that emissions during these periods are the same as during normal operations. The facilities do not process waste unless and until their control devices are operating to fully control emissions. Therefore, we determined that separate standards for periods of startup and shutdown are not necessary.

Periods of startup, normal operations and shutdown are all predictable and routine aspects of a source's operations. Malfunctions, in contrast, are neither predictable nor routine. Instead they are, by definition, sudden, infrequent and not reasonably preventable failures of emissions control, process or monitoring equipment. (40 CFR 63.2) (Definition of malfunction). The EPA interprets CAA section 112 as not requiring emissions that occur during periods of malfunction to be factored into development of CAA section 112 standards. Under CAA section 112, emission standards for new sources must be no less stringent than the level ''achieved'' by the best controlled similar source and for existing sources generally must be no less stringent than the average emission limitation ''achieved'' by the best performing 12 percent of sources in the category. There is nothing in CAA section 112 that directs the EPA to consider malfunctions in determining the level ''achieved'' by the best performing sources when setting emission standards. As the United States Court of Appeals for the District of Columbia Circuit has recognized, the phrase ''average emissions limitation achieved by the best performing 12 percent of'' sources ''says nothing about how the performance of the best units is to be calculated.'' *Nat'l Ass'n of Clean Water Agencies* v. *EPA,* 734 F.3d 1115, 1141 (D.C. Cir. 2013). While the EPA accounts for variability in setting emission standards, nothing in CAA section 112 requires the EPA to consider malfunctions as part of that analysis. A malfunction should not be treated in the same manner as the type of variation in performance that occurs during routine operations of a source. A malfunction is a failure of the source to perform in a ''normal or usual manner'' and no statutory language compels the EPA to consider such events in setting CAA section 112 standards.

Further, accounting for malfunctions in setting emission standards would be difficult, if not impossible, given the myriad different types of malfunctions that can occur across all sources in the category and given the difficulties associated with predicting or accounting for the frequency, degree and duration of various malfunctions that might occur. As such, the performance of units that are malfunctioning is not ''reasonably'' foreseeable. See, *e.g., Sierra Club* v. *EPA,* 167 F.3d 658, 662 (D.C. Cir. 1999) (''The EPA typically has wide latitude in determining the extent of data-gathering necessary to solve a problem. We generally defer to an agency's decision to proceed on the basis of imperfect scientific information, rather than to 'invest the resources to conduct the perfect study.' ''). See also *Weyerhaeuser* v. *Costle,* 590 F.2d 1011, 1058 (D.C. Cir. 1978) (''In the nature of things, no general limit, individual permit, or even any upset provision can anticipate all upset situations. After a certain point, the transgression of regulatory limits caused by 'uncontrollable acts of third parties,' such as strikes, sabotage, operator intoxication or insanity, and a variety of other eventualities, must be a matter for the administrative exercise of case-by-case enforcement discretion, not for specification in advance by regulation.''). In addition, emissions during a malfunction event can be significantly higher than emissions at any other time of source operation. For example, if an air pollution control device with 99-percent removal goes off-line as a result of a malfunction (as might happen if, for example, the bags in a baghouse catch fire) and the emission unit is a steady state type unit that would take days to shut down, the source would go from 99-percent control to zero control until the control device was repaired. The source's emissions during the malfunction would be 100 times higher than during normal operations. As such, the emissions over a 4-day malfunction period would exceed the annual emissions of the source during normal operations. As this example illustrates, accounting for malfunctions could lead to standards that are not reflective of (and significantly less stringent than) levels that are achieved by a well-performing non-malfunctioning source. It is reasonable to interpret CAA section 112 to avoid such a result. The EPA's approach to malfunctions is consistent with CAA section 112 and is a reasonable interpretation of the statute.

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

including preventative and corrective actions, as well as root cause analyses to ascertain and rectify excess emissions. The EPA would also consider whether the source's failure to comply with the CAA section 112(d) standard was, in fact, sudden, infrequent, not reasonably preventable and was not instead caused in part by poor maintenance or careless operation. 40 CFR 63.2 (definition of malfunction).

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

In summary, the EPA interpretation of the CAA and, in particular, section 112 is reasonable and encourages practices that will avoid malfunctions. Administrative and judicial procedures for addressing exceedances of the standards fully recognize that violations may occur despite good faith efforts to comply and can accommodate those situations.

To address the United States Court of Appeals for the District of Columbia Circuit vacatur of portions of the EPA's CAA section 112 regulations governing the emissions of HAP during periods of SSM, *Sierra Club* v. *EPA,* 551 F.3d 1019 (D.C. Cir. 2008), we proposed to revise and add certain provisions to the OSWRO rule. As described in detail below, we proposed to revise the General Provisions Applicability Table (Table 2) to change several references related to requirements that apply during periods of SSM. We also proposed to add the following provisions to the OSWRO rule: (1) The general duty to minimize emissions at all times; (2) the requirement for sources to comply with the emission limits in the rule at all times, with clarification for what constitutes a deviation; (3) performance testing conditions requirements; (4) excused monitoring excursions provisions; and (5) malfunction recordkeeping and reporting requirements.

i. General Duty

We proposed to revise the General Provisions applicability table (Table 2) entry for 40 CFR 63.6(e) by adding rows specifically for 40 CFR 63.6(e)(1)(i), 63.6(e)(1)(ii), 63.6(e)(1)(iii), and 63.6(e)(3) and to include a ''no'' in the column 2 for the 40 CFR 63.6(e)(1)(i) entry. Section 63.6(e)(1)(i) describes the general duty to minimize emissions. Some of the language in that section is no longer necessary or appropriate in light of the elimination of the SSM exemption. We proposed instead to add general duty regulatory text at 40 CFR 63.683(e) that reflects the general duty to minimize emissions while eliminating the reference to periods covered by an SSM exemption. The current language in 40 CFR 63.6(e)(1)(i) characterizes what the general duty entails during periods of SSM. With the elimination of the SSM exemption, there is no need to differentiate between normal operations, startup and shutdown, and malfunction events in describing the general duty. Therefore, the language the EPA proposed for 40 CFR 63.683(e) does not include that language from 40 CFR 63.6(e)(1).

We also proposed to include a ''no'' in column 2 for the newly added entry for 40 CFR 63.6(e)(1)(ii). Section 63.6(e)(1)(ii) imposes requirements that are not necessary with the elimination of the SSM exemption or are redundant with the general duty requirement being added at 63.683(e).

The provisions of 40 CFR 63.6(e)(1)(iii) still apply, and we proposed to keep the ''yes'' in column 2 for that section. For 40 CFR 63.6(e)(2), we proposed to include a ''no'' in the second column for that section because it is a reserved section in the General Provisions.

We also proposed to clarify in the applicability section of 40 CFR 63.680(g)(1) and (2) that the emission limits of subpart DD apply at all times except when the affected source is not operating and that the owner or operator must not shut down items of equipment required or used for compliance with the requirements of subpart DD.

ii. SSM Plan

We proposed to include a ''no'' in column 2 for the newly added 40 CFR 63.6(e)(3) entry. Generally, this paragraph requires development of an SSM plan and specifies SSM recordkeeping and reporting requirements related to the SSM plan. As noted, the EPA proposed to remove the SSM exemptions. Therefore, affected units will be subject to an emission standard during such events. The applicability of a standard during such events will ensure that sources have ample incentive to plan for and achieve compliance and thus the SSM plan requirements are no longer necessary.

iii. Compliance With Standards

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

iv. Performance Testing

We proposed to revise the General Provisions applicability table (Table 2) entry for 40 CFR 63.7(e)(1) by changing the ''yes'' in column 2 to a ''no.'' Section 63.7(e)(1) describes performance testing requirements. The EPA instead proposed to add a performance testing requirement at 40 CFR 63.694(l). The performance testing requirements we proposed to add differ from the General Provisions performance testing provisions in several respects. The regulatory text does not include the language in 40 CFR 63.7(e)(1) that restated the SSM exemption and language that precluded startup and shutdown periods from being considered ''representative'' for purposes of performance testing. The proposed performance testing provisions specified that performance tests conducted under this subpart should be based on representative performance (*i.e.,* performance based on normal operating conditions) of the affected source. As in 40 CFR 63.7(e)(1), performance tests conducted under this subpart should not be conducted during malfunctions because conditions during malfunctions often are not representative of normal operating conditions. The EPA proposed to add language that requires the owner or operator to record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Section 63.7(e) requires that the owner or operator make available to the Administrator such records ''as may be necessary to determine the condition of the performance test'' upon request, but does not specifically require the information to be recorded. The regulatory text the EPA proposed to add to this provision builds on that requirement and makes explicit the requirement to record the information.

v. Monitoring

We proposed to revise the General Provisions applicability table (Table 2) entries for 40 CFR 63.8(c)(1)(i) and (iii) by changing the ''yes'' in column 2 to a ''no.'' The cross-references to the general duty and SSM plan requirements in those subparagraphs are not necessary in light of other requirements of 40 CFR 63.8 that require good air pollution control practices (40 CFR 63.8(c)(1)) and that set out the requirements of a quality control program for monitoring equipment (40 CFR 63.8(d)).

vi. Recordkeeping

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

We proposed to revise the General Provisions applicability table (Table 2) entry for 40 CFR 63.10(b)(2)(ii) by changing the ''yes'' in column 2 to a ''no.'' Section 63.10(b)(2)(ii) describes the recordkeeping requirements during a malfunction. The EPA proposed to add such requirements to 40 CFR 63.696(h). The regulatory text we proposed to add differs from the General Provisions it is replacing in that the General Provisions require the creation and retention of a record of the occurrence and duration of each malfunction of process, air pollution control and monitoring equipment. The EPA proposed that this requirement apply to any failure to meet an applicable standard and is requiring that the source record the date, time and duration of the failure rather than the ''occurrence.'' The EPA also proposed to add to 40 CFR 63.696(h) a requirement that sources keep records that include a list of the affected source or equipment and actions taken to minimize emissions, an estimate of the quantity of each regulated pollutant emitted over the standard for which the source failed to meet the standard, and a description of the method used to estimate the emissions. Examples of such methods would include product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters. The EPA proposed to require that sources keep records of this information to ensure that there is adequate information to allow the EPA to determine the severity of any failure to meet a standard, and to provide data that may document how the source met the general duty to minimize emissions when the source has failed to meet an applicable standard.

We proposed to revise the General Provisions applicability table (Table 2) entry for 40 CFR 63.10(b)(2)(iv) by changing the ''yes'' in column 2 to a ''no.'' When applicable, the provision requires sources to record actions taken during SSM events when actions were inconsistent with their SSM plan. The requirement is no longer appropriate because SSM plans will no longer be required. The requirement previously applicable under 40 CFR 63.10(b)(2)(iv)(B) to record actions to minimize emissions and record corrective actions is now applicable by reference to 40 CFR 63.696(h).

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

vii. Reporting

We proposed to revise the General Provisions applicability table (Table 2) entry for 40 CFR 63.10(d)(5)(i) by consolidating it with the entry for 63.10(d)(5)(ii) and changing the ''yes'' in column 2 to ''no.'' Section 63.10(d)(5)(i) describes the reporting requirements for SSM. To replace the General Provisions reporting requirements, the EPA proposed to add reporting requirements to 40 CFR 63.697(b)(3). The replacement language differs from the General Provisions requirement in that it eliminates periodic SSM reports as a stand-alone report. We proposed language that requires sources that fail to meet an applicable standard at any time to report the information concerning such events in the semiannual summary report already required under this rule. We proposed that the report must contain the number, date, time, duration and the cause of such events (including unknown cause, if applicable), a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.

Examples of such methods would include product-loss calculations, mass balance calculations, measurements when available or engineering judgment based on known process parameters. The EPA proposed this requirement to ensure that there is adequate information to determine compliance, to allow the EPA to determine the severity of the failure to meet an applicable standard, and to provide data that may document how the source met the general duty to minimize emissions during a failure to meet an applicable standard.

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

We proposed to revise the General Provisions applicability table (Table 2) entry for 40 CFR 63.10(d)(5)(ii) by consolidating it with the entry for 63.10(d)(5)(i) and changing the ''yes'' in column 2 to a ''no.'' Section 63.10(d)(5)(ii) describes an immediate report for startups, shutdown and malfunctions when a source failed to meet an applicable standard but did not follow the SSM plan. We will no longer require owners and operators to report when actions taken during a startup, shutdown or malfunction were not consistent with an SSM plan, because plans would no longer be required.

2. How did the SSM provisions change for the OSWRO source category?

We have not changed any aspect of the SSM provisions since the proposal.

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

Comments were received regarding the proposed revisions to remove the SSM exemptions for the OSWRO source category. Some commenters suggested that the rule should provide a six-month compliance period for the SSM provisions, that the rule requirements, which were based on steady-state conditions, should not apply during periods of malfunction, and that the EPA should establish work practice standards for malfunctions. One

commenter generally supported the revised provisions for the emission standards in the OSWRO NESHAP to apply at all times but suggested that more stringent monitoring, recordkeeping, reporting and notification requirements are needed for malfunctions. The commenters did not provide new information or a basis for EPA to change the proposed provisions and did not provide sufficient information to show that facilities cannot comply with the MACT standards at all times, including periods of startup, shutdown and malfunction. The comments and our specific responses to those comments can be found in the Comment Summary and Response document available in the docket for this action (EPA–HQ–OAR–2012–0360).

4. What is the rationale for our final decisions for the SSM provisions?

For the reasons provided above, provided in the preamble for the proposed rule and provided in the comment summary and response document available in the docket, we have removed the SSM exemption from the OSWRO NESHAP; eliminated or revised certain recordkeeping and reporting requirements related to the eliminated SSM exemption; and removed or modified inappropriate, unnecessary or redundant language in the absence of the SSM exemption. We are, therefore, finalizing our proposed determination that facilities comply with the standards at all times and no additional standards are needed to address emissions during startup or shutdown periods.

D. Other Changes Made to the OSWRO NESHAP

1. What other changes did we propose for the OSWRO NESHAP?

i. Electronic Reporting

As stated in the preamble to the proposed rule, to increase the ease and efficiency of data submittal and data accessibility, the EPA proposed to require owners and operators of OSWRO facilities to submit electronic copies of certain required performance test reports.

Data will be collected by direct computer-to-computer electronic transfer using EPA-provided software. This EPA-provided software is an electronic performance test report tool called the ERT. The ERT will generate an electronic report package which will be submitted to the Compliance and Emissions Data Reporting Interface (CEDRI) and then archived to the EPA's Central Data Exchange (CDX). A description and instructions for use of the ERT can be found at *http://www.epa.gov/ttn/chief/ert/index.html* and CEDRI can be accessed through the CDX Web site (*http://www.epa.gov/cdx*).

The requirement to submit performance test data electronically to the EPA will not create any additional performance testing and will apply only to those performance tests conducted using test methods that are supported by the ERT. A listing of the pollutants and test methods supported by the ERT is available at the ERT Web site. The EPA believes, through this approach, industry will save time in the performance test submittal process. Additionally, this rulemaking benefits industry by reducing recordkeeping costs as the performance test reports that are submitted to the EPA using CEDRI will no longer be required to be kept in hard copy.

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

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

ii. Routine Maintenance

The OSWRO NESHAP at 40 CFR 63.693(b)(3)(i) allows a facility to bypass control devices for up to 240 hours per year to perform planned routine maintenance of the closed-vent system or control device in situations when the routine maintenance cannot be performed during periods that the control device is shut down.

The routine maintenance provision was originally established in the HON (see 40 CFR 63.119(e)(3)–(4); 57 FR 62710, December 31, 1992 (proposed); 59 FR 19402, April 22, 1994 (final)) for facilities that elected to use a closed vent system and control device to comply with the emission limitation requirements for tanks. We included the routine maintenance provision in the HON for tanks routing emissions to control devices because the estimated HAP emissions to degas the tank would be greater than the emissions that would result if the tank emitted directly to the atmosphere for a short period of time during routine maintenance of the control device.

We intended for the OSWRO NESHAP to track the HON maintenance provisions, and, therefore, those provisions should have been limited to tanks. We did not identify a basis for applying the routine maintenance provisions in the OSWRO NESHAP to emission points other than tanks, and, therefore, proposed to limit the provision to tanks routing emissions to a control device, consistent with the rationale provided in the HON.

iii. Open-Ended Valves and Lines

The OSWRO NESHAP at 40 CFR 63.691(b) requires an owner or operator to control emissions from equipment leaks according to the requirements of either 40 CFR part 61, subpart V or 40 CFR part 63, subpart H.[8] For OELs, both subpart V in 40 CFR 61.242–6(a) and subpart H in 40 CFR 63.167(a) require that the open end be equipped with a cap, blind flange, plug or second valve that shall ''seal the open end.'' However, ''seal'' is not defined in either subpart, leading to uncertainty for the owner or operator as to whether compliance is being achieved. Inspections under the EPA's Air Toxics LDAR initiative have provided evidence that while certain OELs may be equipped with a cap, blind flange, plug or second valve, they are not operating in a ''sealed'' manner as the EPA interprets that term.

In response to this uncertainty, we proposed to amend 40 CFR 63.691(b) to clarify what ''seal the open end'' means for OELs. The proposed clarification explains that, for the purpose of complying with the requirements of 40 CFR 61.242–6(a)(2) of subpart V or 40 CFR 63.167(a)(2) of subpart H, as applicable, OELs are ''sealed'' by the cap, blind flange, plug or second valve when instrument monitoring of the OELs conducted according to Method 21 of 40 CFR part 60, appendix A indicates no readings of 500 ppm or greater.

In addition, 40 CFR 63.167(d) of subpart H and 40 CFR 61.242–6(d) of subpart V exempt OELs that are in an

[8] As discussed in sections III.A, III.B, IV.A and IV.B of this preamble, we are removing the option from subpart DD to comply with 40 CFR part 61, subpart V for equipment leaks and are requiring compliance with 40 CFR part 63, subpart H. The compliance date for existing sources is 1 year from the effective date of the final amendments, and new sources must comply immediately upon the effective date of the final amendments, or upon startup, whichever is later.

emergency shutdown system, and which are designed to open automatically, from the requirements to be equipped with a cap, blind flange, plug or second valve that seals the open end. We proposed that these OELs be equipped with either a flow indicator or a seal or locking device. We also proposed recordkeeping and reporting requirements for these OELs.

iv. Safety Devices, Pressure Tanks, Bypasses and PRDs

To ensure the OSWRO MACT standards are consistent with the *Sierra Club* decision, we proposed to remove the SSM exemption from the rule. In addition, in order for our treatment of malfunction-caused releases to the atmosphere to conform with the reasoning of the Court's ruling, we proposed to add a provision that releases of HAP listed in Table 1 of 40 CFR part 63, subpart DD directly to the atmosphere from PRDs and closure devices on pressure tanks in off-site material service are prohibited. We also proposed to prohibit bypasses that divert a process vent or closed vent system stream to the atmosphere such that it does not first pass through an emission control device, except to perform planned routine maintenance of the closed-vent system or emission control device for tanks, as discussed in section IV.D.3 of this preamble. We further proposed to require owners or operators to keep records and report any bypass and the amount of HAP released to the atmosphere with the next periodic report. In addition, to add clarity to these provisions, we proposed to add definitions for ''bypass,'' ''pressure release,'' ''pressure relief device or valve,'' ''in gas/vapor service,'' ''in light liquid service,'' ''in heavy liquid service'' and ''in liquid service'' to 40 CFR part 63, subpart DD. We also proposed to remove the definition of ''safety device'' and the provisions related to safety devices from 40 CFR part 63, subpart DD, which would overlap with and be redundant of parts of the proposed definition of ''pressure relief device or valve'' and the provisions related to these devices.

To ensure compliance with these provisions, we also proposed that facilities subject to the OSWRO NESHAP monitor PRDs in off-site material service that release to the atmosphere by using a device or system that is capable of identifying and recording the time and duration of each pressure release and notifying operators immediately that a pressure release is occurring. Owners or operators would be required to keep records and report any pressure release and the amount of organic HAP released to the atmosphere with the next periodic report. As with the prohibition, this proposed monitoring requirement would not apply to PRDs for which HAP releases are captured and routed to a drain system, process or control device.

For purposes of estimating the costs of the proposed requirement to monitor HAP releases to the atmosphere from PRDs, we assumed that operators would install electronic indicators on each PRD in off-site material service that vents to the atmosphere (rather than to a control device, process or drain system) to identify and record the time and duration of each pressure release. However, the proposed requirements allowed owners or operators to use a range of methods to satisfy these requirements, including the use of a parametric monitoring system (that may already be in use at facilities) on the process system or piping that is sufficient to notify operators immediately that a release is occurring, as well as recording the time and duration of the pressure release. Based on our conservative cost assumptions that the most expensive approach would be used, the nationwide capital cost of installing these monitors was estimated to be $1.75 million, and the total annualized cost of installing and operating these monitors is $250,000 per year for the OSWRO source category.

v. Performance Test Method Clarifications and Alternative Methods

The OSWRO NESHAP at 40 CFR 63.694 specifies test methods and procedures to be used in determining compliance with the requirements of subpart DD. We proposed several minor changes to these provisions to correct errors and to provide consistency, clarification and flexibility. These proposed changes included:

- Requiring that test runs last ''at least 1 hour,'' rather than stating that tests last ''1 hour'' in § 63.694(f)(1) and (i)(1);
- Specifying that a minimum of three test runs are required in § 63.694(l)(3)(i) and (l)(4)(i), consistent with the Part 63 General Provisions and standard testing practices;
- Specifying in § 63.694(m)(2) that in the determination of process vent stream flow rate and total HAP concentration, the sample site selected must be at the center of the vent for vents smaller than 0.10 meter in diameter, which is the point most likely to provide a representative sample of the gas stream;
- Clarifying in § 63.694(j)(3) that results from direct measurement must be used as the maximum HAP vapor pressure for off-site material in a tank if the Administrator and the owner or operator disagree on a determination of the maximum HAP vapor pressure for an off-site material stream using knowledge;
- Correcting a citation in § 63.694(k)(3) to the appropriate section of EPA Method 21 for instrument response factors;
- Allowing the use of either EPA Method 25A or Method 18 in § 63.694(l)(3) for determining compliance with the control device percent reduction requirement and in § 63.694(l)(4) for determining compliance with the enclosed combustion device concentration limit and clarifying that Method 25A must be used when measuring total organic compounds, while Method 18 must be used for measuring the total HAP compounds included in Table 1 to the OSWRO NESHAP;
- Including the use of EPA Method 3A as an alternative to EPA Method 3B in § 63.694(l)(4)(iii)(A) for determining the oxygen concentration to use in oxygen correction equations; and
- Including the use of EPA Methods 2F and 2G as options for flow rate measurement in § 63.694(l)(2) and (m)(3), which are newer velocity measurement methods that were published after the original OSWRO rule.

vi. Other Clarifications and Corrections

We proposed several miscellaneous minor changes to improve the clarity of the OSWRO NESHAP requirements. These proposed changes included:

- Updating the list of combustion devices in § 63.684(b)(5) that may be used to destroy the HAP contained in an off-site material stream. This revision would include incinerators, boilers or industrial furnaces for which the owner or operator complies with the requirements of 40 CFR part 63, subpart EEE, which had not been promulgated when the OSWRO MACT standards were developed. We also proposed conforming changes to the boiler and process heater control device requirements to clarify that combustion units complying with the requirements of subpart EEE may be used for the purposes of compliance with the OSWRO NESHAP.
- To clarify the requirements for tanks of all sizes and tank content vapor pressures, we proposed to revise the tank control level tables to include tanks less than 75 m^3 in capacity with a vapor pressure less than 76.6 kPa along with the requirements for tanks of other sizes and vapor pressures, and we proposed

to remove the requirements for these tanks from the text of § 63.685(b)(4).

• Clarifying that where § 63.691 requires the owner or operator to control the HAP emitted from equipment leaks in accordance with either 40 CFR part 61, subpart V or 40 CFR part 63, subpart H, the definitions in 40 CFR 61.241 and 40 CFR 63.161 apply, with the differences listed, for the purposes of the OSWRO NESHAP.

• Revising the clerical errors to insert ppm values in the requirements where they were omitted. These revisions included clarifying in § 63.683(c)(1)(ii) that the average volatile organic HAP (VOHAP) concentration of the off-site material must be less than 500 parts per million by weight (ppmw) at the point-of-delivery and clarifying the requirements of § 63.693(f)(1)(i)(B) and § 63.693(f)(1)(ii)(B) are to achieve a total incinerator outlet concentration of less than or equal to 20 500 parts per million by volume (ppmv) on a dry basis corrected to 3-percent oxygen.

• Clarifying in §§ 63.684(h), 63.693(b)(8) and 63.694(b)(3)(iv) that the Administrator may require a performance test, revisions to a control device design analysis, or that direct measurement be used in the determination of a VOHAP concentration, rather than that the Administrator may only request such actions.

• Revising several references to the Part 63 General Provisions in Table 2 to correct errors, including errors where the entries in Table 2 conflict with the regulatory text in subpart DD and where references to specific sections of the General Provisions do not exist or are reserved.

2. How did the provisions regarding these other proposed changes to the OSWRO NESHAP change since proposal?

We have not made any changes to the proposed provisions for electronic reporting, routine maintenance, OELs, the proposed performance test method clarifications and alternative methods or the other proposed clarifications and corrections.

For PRDs, in the PRD monitoring requirements at 40 CFR 63.691(c)(3)(i), we are including examples of parametric monitoring systems, in addition to the direct monitoring device examples listed at proposal. We are also clarifying that tank conservation vents are not PRDs in 40 CFR 63.685(c)(2)(iii)(B), and we are adding fuel gas systems to the list of equipment a PRD may be routed to in 40 CFR 63.691(c)(4) to be exempt from the PRD monitoring requirements and pressure release prohibition. In addition to these revisions, we are making the following revisions, clarifications and corrections in the final rule:

• Revisions

○ We are revising the language in 40 CFR 63.680(b)(2)(v) to indicate that facilities complying with the wastewater provisions under any other part 63 regulation, not just the HON, are not required to also comply with the OSWRO NESHAP provisions for that waste.

○ We are revising the requirements for boilers and process heaters and also for incinerators in 40 CFR 63.693(f)(2)(iii) and 63.693(g)(2)(i)(C) to exclude such equipment that has been issued a final or interim status RCRA permit from the OSWRO NESHAP performance test requirements, since the performance tests required under RCRA to obtain a permit satisfy the performance test requirements of the OSWRO NESHAP.

○ We are revising three additional references to the Part 63 General Provisions in Table 2 to correct errors where the entries in Table 2 conflict with the regulatory text in subpart DD regarding notification of performance tests. The specific changes were to revise the entries for 63.7(b), 63.7(c) and 63.9(e) from a ''no'' to a ''yes'' in column 2 of Table 2.

• Clarifications

○ We are revising the definitions of ''in gas/vapor service'' and ''in light liquid service'' in 40 CFR 63.681 to clarify our intent that equipment in off-site material service that ''contains or contacts'' a gas or vapor is ''in gas/vapor service.'' For consistency, we are also revising the definition of ''in light liquid service'' to include equipment that ''contains or contacts'' liquid.

○ To improve clarity we are revising the wording of the proposed tank provisions in 40 CFR 63.685(g)(2) to remove a repeated phrase.

○ We have rephrased the proposed requirements in 40 CFR 63.694(l) to more simply state that performance tests must be conducted under representative performance (*i.e.,* performance based on normal operating conditions).

○ We have added language in 40 CFR 63.691(b)(2)(v) to clarify which requirements apply to PRDs in liquid service and to clarify when the PRD provisions of 40 CFR 63.691(c) apply rather than the PRD provisions of 40 CFR part 63, subpart H or 40 CFR part 61, subpart V.

• Corrections

○ We are revising 40 CFR 63.680(e)(1)(i) through (iii) and 63.680(e)(2) to reference 63.691(b)(2) rather than 63.691(b) to indicate that compliance with 40 CFR part 63, subpart H is required after a specified date. Consistent with our intention discussed in the preamble to the proposed rule, this correction will allow compliance with 40 CFR part 61, subpart V only until the date at which compliance with 40 CFR part 63, subpart H is required.

○ We are including the correct VOHAP concentration of 500 ppmw in 40 CFR 63.683(c)(1)(ii).

○ We are correcting an erroneous reference to 40 CFR part 67 in 40 CFR 63.685(c)(2)(iii)(B) to properly reference 40 CFR part 63.

○ We are adding a reference in the semiannual reporting requirements of 40 CFR 63.697(b)(4) to 40 CFR 63.683(f), which includes additional deviations that must be reported.

○ We are correcting three entries in the General Provisions Applicability table

3. What key comments did we receive on the other changes to the OSWRO NESHAP, and what are our responses?

Several comments were received regarding the proposed revisions to the ERT, OELs, PRDs and other provisions for the OSWRO source category. The following is a summary of several of these comments and our response to those comments. Other comments received and our responses to those comments can be found in the Comment Summary and Response document available in the docket for this action (EPA–HQ–OAR–2012–0360).

i. Electronic Reporting

Comment: One commenter notes that requiring electronic reporting to the EPA does not increase the ease and efficiency of data submittal for the regulated community because state agencies also want the reports submitted to them in their own standard format. The commenter requests that the EPA work with air agencies to provide a one-stop location for submittal of air emissions testing results.

Response: The EPA continues to work with air agencies as well as stack testing companies (who typically prepare test reports) to develop the ERT. E-Enterprise is an EPA-state initiative to improve environmental performance and enhance services to the regulated community, environmental agencies and the public. We currently have active E-Enterprise projects related to electronic reporting that involve several states, and we are actively seeking input from all states willing to participate in such projects with EPA. The current ERT was designed to accept data and information that is typically collected

during a performance test. Some air agencies have begun accepting the ERT as their reporting mechanism, and with experience, we believe acceptance by other air agencies will increase. CEDRI, the portal through which this data is submitted to CDX, includes the ability for states to interact with submitted ERT files directly, immediately after electronic submission. During the first phase in the development of CEDRI, we initiated a multi-disciplinary, cross-functional Integrated Project Team (IPT) consisting of EPA personnel from various offices and representatives from air agencies. The objectives of the CEDRI IPT were to gain insight and ideas regarding the data flow process within the CEDRI. States have the ability to access files in CEDRI as soon as they are submitted and can review these documents from anywhere that has Internet access. While in some instances air agencies may still want a hard copy of a test report, the ERT can generate a printed test report or export the report to a word processor for reformatting. This report can be generated by an air agency with an ERT they have opened, or generated by a regulated entity and submitted to the air agency as an emissions test report.

The EPA believes that electronic reporting is a more efficient way to collect test data and has set up a retrieval system such that air agencies can access files that have been submitted using the ERT. As more air agencies adopt electronic reporting, we believe that the need for paper reports will diminish. The EPA is also developing a web-based ERT and has plans to release an extensible markup language (XML) schema that could be used by third parties to develop customized reporting software that meets the EPA's reporting requirements. The EPA expects these additional reporting options will provide a more robust and user friendly reporting process in the future.

ii. Open-Ended Valves and Lines

Comment: One commenter states that the OEL provisions are ''equipment standards,'' and compliance is determined by whether a cap, blind flange, plug or second valve is physically installed, and the term ''sealed'' historically has meant one of these devices is present.

Response: The EPA disagrees with the commenter. The EPA's intent has always been that caps, blind flanges, plugs or second valves that are installed on OELs provide a seal, *i.e.,* no detectable emissions. This is further supported by examples of compliance audits conducted by the EPA's Office of Enforcement and Compliance Assurance (OECA) and EPA Regional enforcement personnel in which companies were cited for OELs not being sealed. We have placed these audits in the docket for this action.

Comment: Two commenters believe the EPA must show that imposing a new emissions limit for OELs is justified according to the criteria of CAA section 112(d)(6), including the technical feasibility, potential emission reductions and cost effectiveness. The commenters state that the EPA failed to provide new data or rationale showing that the definition of ''seal'' is needed for compliance assurance or to relieve regulatory uncertainty, relying only on enforcement inspections referenced in the 2007 40 CFR part 61, subpart VV rulemaking in which monitoring OELs was determined to not be cost effective and was not the best demonstrated technology (BDT). Another commenter states that the EPA did not provide any data specific to the OSWRO source category for OELs, and the data that were provided did not include the concentration detected, whether the measurements were for HAP or VOCs, or what standardization chemicals were used. One commenter states that the existence of leaks from OELs is low and notes that while the EPA did not request information to support monitoring of OELs, the commenter referred to a monitoring study its member performed for OELs showing that less than 1 percent of OELs were leaking at rates of 500 ppm or greater. Another commenter states that the EPA's proposed definition for a ''seal'' is actually a new loophole that would exempt leaks from OELs below 500 ppm from the standards. The commenter contends this definition is another type of exemption similar to the SSM exemption the United States Court of Appeals for the District of Columbia Circuit found unlawful, and the EPA should not finalize the definition as proposed.

Response: The EPA disagrees with the commenters that we are imposing a new emissions limit for OELs. As discussed in the preamble for the proposed rule and summarized above, the existing OSWRO NESHAP already requires the open end of OELs to be equipped with a cap, blind flange, plug or second valve that shall ''seal the open end.'' In response to compliance uncertainty for owners and operators, we are amending 40 CFR 63.691(b) to clarify that, for the purpose of complying with the requirements of subpart H or subpart V, as applicable,[9] OELs are ''sealed'' by the cap, blind flange, plug or second valve when instrument monitoring of the OEL conducted according to Method 21 of 40 CFR part 60, appendix A indicates no readings of 500 ppm or greater. This is consistent with how we have interpreted the term ''seal'' during inspections and, contrary to the commenters' assertions, is not a new requirement. As demonstrated by the data provided in the docket and the commenter's data showing that about 1 percent of all OELs are leaking, OELs are not uniformly operating in a ''sealed'' manner by keeping emissions below the 500 ppm threshold. The commenters have not identified a reason to conclude that the OEL data provided in the docket are not representative of the OSWRO source category. With this clarification, the EPA is removing any ambiguity regarding what constitutes a ''sealed'' OEL.

The EPA also disagrees with the commenter that clarifying the meaning of ''seal'' creates a new loophole for OELs. As discussed in the preamble to the proposed rule and elsewhere in this document, we are clarifying an existing requirement that OELs be sealed.

iii. PRDs

Comment: Several commenters state or suggest that PRDs are safety devices, and these requirements will ask plant operators to choose between safety and committing a violation. Two of these commenters claim that this position is in direct contrast to the General Duty provisions, which state that, ''at all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions . . .'' Two other commenters state that the proposed rule would require that PRD emissions be vented to a control device, which could reduce the effectiveness of PRD by not allowing over-pressure from the tank or process unit to vent quickly enough to prevent damage. One commenter asserts that an OSHA Process Safety Management Review would indicate that venting a PRD to a control device would create an unacceptable risk. Further, one commenter argues that the requirements will assign the same level

[9] As discussed in sections III.A, III.B, IV.A and IV.B of this preamble, we are removing the option from subpart DD to comply with 40 CFR part 61, subpart V for equipment leaks and are requiring compliance with 40 CFR part 63, subpart H. The compliance date for existing sources is 1 year from the effective date of the final amendments, and new sources must comply immediately upon the effective date of the final amendments, or upon startup, whichever is later.

of importance to minor releases as to significant releases that require immediate attention, which will divert resources from critical safety tasks.

One commenter states that the proposed PRD monitoring requirements will predetermine the imposition of systems that safety experts may deem unnecessary, and the placement of such systems, including monitoring, should rather be determined during a process hazards analysis, which is specific to each situation and is implemented for the explicit purpose of protecting life and property. Another commenter also argues that process safety professionals should make risk-based decisions, and asserts that the proposed requirements do not recognize the variations that exist between different types of systems and that choices must be made for each individual system considering site conditions. The commenter asserts that the management requirements for PRDs should have a wide variety of options depending on the character of the discharge. The commenter states that the industry's success in preventing accidents has lead the EPA to wrongly assume that it is easy to anticipate and prevent all circumstances that may cause an over-pressurization event.

Response: The EPA disagrees with the commenters that we are forcing plant operators to choose between safety and committing a violation. We recognize that industry has stated that they believe releases from PRDs sometimes occur in order to protect systems from failures that could endanger worker safety and the systems that the PRDs are designed to protect. The PRD requirements were established with the recognition that emission releases to the atmosphere from these devices occur only in the event of unplanned and unpredictable events. When PRD releases are due to malfunctions, the EPA would determine an appropriate response based on, among other things, the good faith efforts of the source to minimize emissions, including preventative and corrective actions, as well as root cause analyses to ascertain and rectify excess emissions. This approach is consistent with the General Duty provisions and is designed to minimize emissions while recognizing that these events may be unavoidable even in a well-designed and maintained system.

We disagree with the comment that minor releases will divert attention and resources away from critical safety tasks. These releases are associated with malfunction events that would require immediate corrective action and have the potential to emit large quantities of HAP. In addition, while the owner or operator must follow the PRD recordkeeping and reporting requirements for each release to the atmosphere, these tasks can be completed after the release has occurred and should not interfere with any actions needed to ensure process and system safety. Further, we note that the rule does not require PRDs to be vented to control devices, as suggested by a commenter; however, a facility owner or operator may choose to vent PRDs to control devices. We also note that the commenters did not provide data or information in support of their speculation that venting a PRD to a control device would reduce the effectiveness of the PRD or that a safety hazard would be created.

Regarding the comments that the PRD monitoring requirements will dictate the types of systems used at facilities, we note that, as discussed elsewhere in this preamble, the requirements for PRD monitoring provide a wide latitude in the type of monitoring system used, which may be chosen by the facility owner or operator, providing that the basic requirements for the system are met.

Comment: Several commenters state that the EPA added the PRD requirements without regard to the CAA section 112 MACT development process and without providing the legal justification, adequate record basis or technical justification. Two of these commenters add that they do not believe that the EPA has a legal obligation nor the discretion to promulgate the proposed PRD provisions because the PRD monitoring and reporting requirements were not derived from the technology reviews, in response to any residual risks detected, or the United States Court of Appeals for the District of Columbia Circuit's invalidation of the SSM provisions in the 40 CFR part 63 General Provisions. Two commenters suggest that these revisions should be evaluated as part of the technology review, and the EPA should analyze the technical feasibility, potential emissions reductions and cost effectiveness of the revisions.

Several commenters argue that the EPA provided no data to support the claim that a large number of releases occur and may emit large quantities of HAP, or to support the contention that releases are not being identified. One commenter asserts that PRD releases are rare, and that the EPA's data from PRD episodes at California South Coast refineries, which resulted in large emissions, does not apply to chemical operations. Another commenter notes that at its facility, PRD releases are infrequent events that last for 1 or 2 seconds and states that the proposed PRD provisions are not warranted. One commenter states that the industry already quantifies and reports releases through the use of pressure monitoring and other types of process controls that are also implemented to maintain stable operation. The commenter asserts that the EPA is establishing a numeric standard of zero that is based on the premise that most relief devices do not release, which fails to acknowledge the differences between systems.

Response: Under CAA section 112(d)(2), the EPA must promulgate technology-based standards that reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts), and such standards must contain compliance assurance provisions to make sure that they are practicably enforceable. Nothing in the CAA or its legislative history suggests that the EPA is prohibited from reviewing and revising MACT standards and their compliance assurance provisions, except as part of the CAA section 112(d)(6) or CAA section 112(f) reviews or an action taken in response to a ruling by a Court. The amendments being finalized for PRD releases do not impose new emission standards for which a MACT analysis is required by the CAA. Instead, they prohibit releases to the atmosphere from PRDs in off-site material service that are not appropriate for exemption from emission standards following the 2008 *Sierra Club* v. *EPA* ruling, and impose additional monitoring requirements to address potential releases.

In light of, and consistent with, the *Sierra Club* v. *EPA* ruling, the EPA is eliminating the SSM exemption in the OSWRO MACT standards and requiring that the standards apply at all times, including during periods of SSM. In addition, in order for our treatment of malfunction-caused pressure releases to the atmosphere to conform with the reasoning of the Court's ruling, the final rule adds a provision stating that releases of HAP listed in Table 1 of subpart DD directly to the atmosphere from PRDs in off-site material service are prohibited. To prohibit these malfunction-caused releases, it is not necessary for us to set an emission standard that is based on a MACT floor or beyond-the-floor analysis; indeed, the EPA has consistently explained that we are not required to take malfunctions into account in setting standards or to devise standards that apply specifically to malfunction-caused emissions, such as PRD releases that cause HAP emissions only during malfunctions. The final rule requires that sources

monitor PRDs using a system that is capable of detecting and recording the time and duration of each pressure release, and the final rule provides owners and operators flexibility to either install a monitor on the PRD or to use equipment and operations they already have in place if they are sufficient to detect and indicate pressure releases to the atmosphere. The rule also establishes requirements that these release indicators be capable of immediately notifying operators that a release is occurring, so that HAP emissions from these releases can be mitigated as soon as possible. Additionally, the final rule requires reporting of PRD releases to the atmosphere to ensure that these releases will be reported nationally.

Contrary to some commenters' assertions that the EPA did not provide data to support the claim that a large number of PRD releases occur and may emit large quantities of HAP, a report by the South Coast Air Quality Management District (SCAQMD) containing such data was referenced and made available with the proposed rule in the memorandum, *Cost Impacts of Pressure Relief Device Monitoring for the Off-site Waste and Recovery Operations Source Category,* available in the docket for this action. The referenced report shows that releases from PRDs occur randomly and the emissions can only be approximated, but that large quantities of emissions may be released. Based on the SCAQMD analysis of refinery PRD reports of PRD releases from nine facilities in its district, there were eight PRD releases from 2003 to 2006 that were estimated to release greater than 2,000 lbs of emissions to the atmosphere, and eight PRD releases from 2003 to 2006 that were estimated to release between 500 and 2,000 lbs of emissions to the atmosphere. The SCAQMD analysis focuses on VOC emissions (which would include organic HAP emissions) from refineries and marine terminals, and information provided by the commenter also suggests the SCAQMD analysis results are similar to results from another analysis for PRDs at chemical production facilities.[10]

[10] The commenter stated that ''DuPont experience is that PRD releases are rare; DuPont has provided data through ACC to EPA.'' ACC's comments referred to a study submitted with its comments for another rulemaking. We located and reviewed this study, available at Docket ID No. EPA–HQ–OAR–2011–0435–0041, in which the data provided by DuPont is summarized with other data supplied by ACC member companies. Both the data provided by ACC and the SCAQMD showed just over 1 percent of the PRDs had a release. The data provided by ACC showed over 20 percent of PRD releases were over 500 pounds and the SCAQMD data showed that approximately 38 percent of the PRD releases were over 500 pounds.

Additionally, the Texas Commission on Environmental Quality Emission Event Reporting Database is populated with Emission Event Reports from both the refinery and chemical sectors where the reason for the report was due to a PRD release. This database also shows that PRD releases do occur and that the quantity of emissions varies and can be large. While there may be differences in PRD systems and emissions, we continue to believe the requirements proposed and being finalized for the OSWRO NESHAP in this action are necessary to address the otherwise unregulated HAP emissions releases from PRDs.

Comment: Several commenters suggest certain types of PRDs should be excluded from the PRD requirements because they have a low potential to emit large quantities of HAP. These commenters specifically state that PRDs in liquid service should be excluded from these requirements. For PRDs with little potential for loss to the atmosphere, the commenters suggest that the EPA set a reporting threshold value equal to the reportable quantity (RQ) values in Emergency Planning and Community Right-To-Know Act (EPCRA) and/or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). One commenter asserts that the PRD provisions should exclude PRDs in less than 5-percent VOHAP service. The commenter also suggests that the OSWRO MACT should refer to Table 9 of subpart G (VOHAPs) instead of Table 1 of subpart DD, should exclude ethylene glycol from Table 1 of subpart DD, or should exclude heavy liquids from the definition of a PRD.

This commenter states that the exclusion for PRDs discharged to a drain system that meets the requirements of 40 CFR 63.689 is not useful, and states that the EPA provides no cost justification or assessment of potential emission reductions of this alternative requirement. The commenter asserts that hard-piping discharge to a closed sewer system is neither feasible nor safe in many situations, and suggests that the EPA require only that liquids be sent for on-site or off-site treatment, which would be consistent with the Chemical Manufacturing Area Source standard (40 CFR part 63, subpart VVVVVV). This commenter and another commenter state that, to be consistent with the HON, PRDs that are routed to a fuel gas system should be exempted in 40 CFR 63.691(c)(4).

Response: We generally do not agree with the commenters' suggestions to add an exclusion from the PRD requirements for PRDs that emit smaller amounts of HAP. Regarding PRDs in liquid service, equipment is in liquid service when it contains or contacts off-site material that is liquid at operating conditions, and for processes that are under pressure, the liquid may escape as a gas or vapor when released to the atmosphere. For these reasons, we continue to believe PRDs in liquid service, as well as those in gas/vapor service, should be subject to the PRD requirements. We note that the OSWRO NESHAP provides that only PRDs that contain or contact off-site material having a total HAP concentration equal to or greater than 10 percent by weight and that are intended to operate for 300 hours or more during a calendar year in off-site material service are subject to these requirements (see 40 CFR 63.680(c)(3)). We also disagree with the suggestion that the OSWRO MACT refer to Table 9 of subpart G rather than Table 1 of subpart DD for HAPs regulated by the PRD provisions. All of the provisions of the OSWRO NESHAP apply to the chemicals listed in Table 1 of subpart DD, and we do not find that an exception should be made for PRDs to exclude any chemicals with relatively lower volatility from these requirements.

We disagree with the commenter that the provisions that exclude PRDs that are routed to a drain system meeting the requirements of 40 CFR 63.689 from the PRD release and monitoring requirements is an alternate requirement. This provision acknowledges that such equipment would not have uncontrolled HAP emission releases directly to the atmosphere, and therefore the PRD release management and monitoring provisions should not apply, but it does not require that any equipment be routed to such a drain system. We also note that the chemical manufacturing area source standard does not have pressure release management or monitoring requirements, and the standards in that rule are not applicable to the OSWRO NESHAP. The EPA agrees with commenters' suggestion to exclude PRDs that release to a fuel gas system from the PRD monitoring provisions, and we have revised the final rule to reflect this change.

Comment: One commenter requests that the EPA clarify the meaning of PRDs in light liquid versus gas/vapor service. The commenter notes that most facilities subject to the OSWRO MACT operate fixed roof storage tanks that must be operated with a void space at

the top that consists of vapors from the tank and may also include a nitrogen blanket. The commenter asserts that the determination of the service type should be based on the contents of the tank (*i.e.,* liquid) and not the location where the PRD is installed, which will always be at the top of the tank in contact with vapors in the void space. The commenter asserts that if these types of tanks are considered to be in gas/vapor service, then there can be no PRDs on fixed roof tanks that operate in liquid service.

Response: The OSWRO NESHAP directs facility owners/operators to comply with the equipment leak requirements of the HON, which contains different requirements for various components depending upon the type of fluid (whether gas or liquid) that flows through (*e.g.,* contains or contacts) the components. The basis for these different requirements is data collected from petroleum refineries, which indicate that emission rates of equipment leak sources decrease as the vapor pressure (volatility) of the process fluid decreases. For the HON, three classes of volatility were established based on the petroleum refinery data and the potential for emissions through equipment leaks; these include gas/vapor service, light-liquid service and heavy-liquid service. The proposed OSWRO definition stated that in gas/vapor service means that a piece of equipment in off-site material service contains a gas or vapor at operating conditions. To clarify our intent and avoid any confusion as to whether PRDs with a flow of gas or vapor through the device are ''in gas/vapor service,'' we are revising the definition to state that in gas/vapor service means that a piece of equipment in off-site material service contains or contacts a gas or vapor at operating conditions. With this revision, it should be clear that a PRD in off-site material service on the roof of a tank containing liquid, but which only contacts gas/vapor itself and does not contact liquid, would be in gas/vapor service. For consistency, we also are revising the definition of ''in light liquid service'' to include equipment that contains or contacts liquid.

Comment: One commenter states that the EPA revised the Tank Level 1 control requirements in 40 CFR 63.685(c)(2)(i) and (iii)(B) to preclude routine venting of PRD by excluding 40 CFR 63.902(c)(2) and (3); however, the commenter notes that this revision would also preclude the operation of conservation vents on Level 1 tanks. The commenter suggests that the EPA remove the exclusion or amend the provision to allow for the operation of conservation vents.

Response: We agree that conservation vents should be allowed to operate on Level 1 tanks, and, while we do not believe these would meet the definition of a PRD, we have revised the text of the final rule at 40 CFR 63.684(c)(2)(iii)(B)(1) to clarify that the use of these devices is permitted.

iv. Other Comments

Comment: One commenter states that the EPA should provide an exemption in 40 CFR 63.693(b)(9) to the performance testing or design evaluation requirements for combustion devices if a unit has been issued a final or interim status RCRA permit, since performance tests are required to obtain such a permit.

Response: The EPA agrees with the commenter that the combustion units required to obtain a RCRA permit would have conducted performance tests under those provisions which satisfy the performance test requirements of the OSWRO NESHAP and that separate or additional performance testing would not be necessary. We have therefore added a provision to the final rule that excludes combustion devices that have been issued a RCRA permit from the OSWRO NESHAP performance test requirements.

Comment: One commenter states that the OSWRO provisions should more clearly indicate that facilities subject to onsite wastewater provisions under other CAA MACT regulations should not also be required to comply with the OSWRO NESHAP. The commenter references the applicability provisions that exclude certain types of waste subject to other MACT rules in 40 CFR 63.680(b)(2)(v), and states that the exclusion is limited to SOCMI. The commenter suggests removing paragraphs 40 CFR 63.680(b)(2)(v)(A) and (B) to broaden the exclusion to wastewater sources subject to any other subpart in 40 CFR part 63.

Response: The EPA agrees with the commenter that the exclusion of certain types of waste in 40 CFR 63.680(b)(2)(v) should not be limited to SOCMI and has revised the regulatory text to exempt waste that is transferred from a facility at which management of the waste has complied with the air emission control standards for process wastewater specified by another subpart in 40 CFR part 63.

4. What is the rationale for our final decisions regarding these other changes to the OSWRO NESHAP?

For the reasons provided above and in the preamble for the proposed rule, we are finalizing the proposed provisions regarding electronic reporting; routine maintenance; OELs; safety devices, pressure tanks, bypasses and PRDs; performance test method clarifications and alternative methods; and other clarifications and corrections.

For the reasons provided above, we are making the revisions, clarifications and corrections noted in section IV.D.2 in the final rule.

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

A. What are the affected sources?

We estimate that there are 56 major source OSWRO facilities. Based on available permit information, seven facilities are known to be exempt from most of the rule requirements due to the low HAP content of the off-site waste they receive or because they comply instead with 40 CFR part 61, subpart FF, as allowed by the OSWRO NESHAP, and they are not expected to be affected by the final rule revisions. These facilities are only required to document that the total annual quantity of the HAP contained in the off-site material received at the plant site is less than 1 megagram per year, and they are not subject to any other emissions limits or monitoring, reporting or recordkeeping requirements. We are not aware of any new OSWRO facilities that are expected to be constructed in the foreseeable future.

B. What are the air quality impacts?

For equipment leaks, we are eliminating the option of complying with 40 CFR part 61, subpart V, and requiring facilities in the OSWRO source category to comply with 40 CFR part 63, subpart H, including connector monitoring. Our revised estimate of the HAP emission reduction for this change is approximately 185 tpy.

For tanks, we are finalizing requirements for tanks of certain sizes and containing materials above certain vapor pressures to use Level 2 controls. Our revised estimate of the HAP emission reduction for this change is approximately 26 tpy.

We do not anticipate any HAP emission reduction from our clarification of the rule provision ''seal the open end'' (in the context of OELs), clarification of the scope of the routine maintenance provisions, or requirement to electronically report the results of emissions testing.

For the revisions to the MACT standards regarding SSM, including monitoring of PRDs in off-site material service, we were not able to quantify the

possible emission reductions, so none are included in our assessment of air quality impacts.

Therefore, the estimated total HAP emission reductions for the final standards for the OSWRO source category are estimated to be 211 tpy.

C. What are the cost impacts?

For equipment leaks, we are eliminating the option of complying with 40 CFR part 61, subpart V, and requiring facilities in the OSWRO source category to comply with 40 CFR part 63, subpart H (including connector monitoring). We estimate the nationwide capital costs to be $2.1 million and the annualized costs to be $664,000.

For tanks, we are requiring tanks of certain sizes and containing materials above certain vapor pressures to use Level 2 controls. We estimate the nationwide capital costs to be $139,000 and the annualized costs to be $192,000.

We do not anticipate any quantifiable capital or annualized costs for our definition of ''seal'' (in the context of OELs), clarification of the scope of the routine maintenance provisions and requirement to electronically report the results of emissions testing.

For the requirement to install and operate monitors on PRDs, we estimate the nationwide capital costs to be $1.9 million and the annualized costs to be $270,000. Therefore, the total capital costs for the final amendments for the OSWRO source category are approximately $4.1 million and the total annualized costs are approximately $1.1 million.

D. What are the economic impacts?

Both the magnitude of control costs needed to comply with a regulation and the distribution of these costs among affected facilities can have a role in determining how the market will change in response to that regulation. Total annualized costs for the final amendments are estimated to be about $1.1 million. The average annualized cost per facility is estimated to be about $23,000. Without detailed industry data, it is not possible to conduct a complete quantitative analysis of economic impacts. However, prior analyses suggest the impacts of these final amendments will be minimal. The Economic Impact Analysis for the final OSWRO NESHAP [11] found that demand for off-site waste services was highly inelastic. This means that suppliers are predominantly able to pass along cost increases to consumers through higher prices with little, if any, decrease in the quantity of service demanded. While we do not have specific information on prices charged or the quantity of services provided, company revenues are a function of both these factors. The cost-to-sales ratio is less than 1 quarter of 1 percent for all of the 27 firms included in this analysis, suggesting any increase in price will be minimal.

E. What are the benefits?

We have estimated that this action will achieve HAP emissions reduction of 211 tpy. The final standards will result in significant reductions in the actual and MACT-allowable emissions of HAP and will reduce the actual and potential cancer risks and non-cancer health effects due to emissions of HAP from this source category, as discussed in the proposal preamble (79 FR 37869–37870). We have not quantified the monetary benefits associated with these reductions; however, these avoided emissions will result in improvements in air quality and reduced negative health effects associate with exposure to air pollution of these emissions.

F. What analysis of environmental justice did we conduct?

The EPA is making environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations in the United States. The EPA has established policies regarding the integration of environmental justice into the agency's rulemaking efforts, including recommendations for the consideration and conduct of analyses to evaluate potential environmental justice concerns during the development of a rule.

Following these recommendations, to gain a better understanding of the source category and near source populations, the EPA conducted a proximity analysis for OSWRO facilities prior to proposal to identify any overrepresentation of minority, low income or indigenous populations. This analysis gives an indication of the prevalence of sub-populations that may be exposed to air pollution from the sources. We have revised this analysis to include four additional OSWRO facilities that the EPA learned about after proposal.

The EPA has determined that this final rule will not have disproportionately high and adverse human health or environmental effects on minority, low income or indigenous populations. Additionally, the final changes to the NESHAP increase the level of environmental protection for all affected populations by reducing emissions from equipment leaks and tanks and do not cause any disproportionately high and adverse human health or environmental effects on any population, including any minority, low income or indigenous populations. Further details concerning this analysis are presented in the memorandum titled, *Updated Environmental Justice Review: Off-Site Waste and Recovery Operations RTR,* a copy of which is available in the docket for this action.

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

As part of the health and risk assessments, as well as the proximity analysis conducted for this action, risks to infants and children were assessed. These analyses are documented in the *Residual Risk Assessment for the Off-Site Waste and Recovery Operations Source Category in Support of the February 2015 Risk and Technology Review Final Rule* and the Updated *Environmental Justice Review: Off-Site Waste and Recovery Operations RTR* documents and are available in the docket for this action.

The results of the proximity analysis show that the average percentage of children 17 years and younger in close proximity to OSWRO is similar to the percentage of the national population in this age group. The difference in the absolute number of percentage points of the population 17 years old and younger from the national average indicates a 7-percent over-representation near OSWRO facilities. Consistent with the EPA's Policy on Evaluating Health Risks to Children, we conducted inhalation and multipathway risk assessments for the OSWRO source category considering risk to infants and children.[12] Children are exposed to chemicals emitted to the atmosphere via two primary routes: Either directly via inhalation, or indirectly via ingestion or dermal contact with various media that have been contaminated with the emitted chemicals. The EPA considers the possibility that children might be more sensitive than adults to toxic chemicals, including chemical carcinogens.

For our inhalation risk assessment, several carcinogens emitted by facilities in this source category have a mutagenic mode of action. For these compounds,

[11] EPA. June 1996.

[12] Policy on Evaluating Health Risks to Children, U.S. Environmental Protection Agency, Washington, DC. May 2014. Available at *http://www2.epa.gov/sites/production/files/2014-05/documents/1995_childrens_health_policy_statement.pdf.*

we applied the age-dependent adjustment factors (ADAF) described in the EPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens.[13] This adjustment has the effect of increasing the estimated lifetime risks for these pollutants by a factor of 1.6. For one group of these chemicals with a mutagenic mode of action, POM, only a small fraction of the total emissions were reported as individual compounds. The EPA expresses carcinogenic potency of POM relative to the carcinogenic potency of benzo[a]pyrene, based on evidence that carcinogenic POM have the same mutagenic mode of action as does benzo[a]pyrene. The EPA's Science Policy Council recommends applying the ADAF to all carcinogenic compounds for which risk estimates are based on potency relative to benzo[a]pyrene. Accordingly, we have applied the ADAF to the benzo[a]pyrene-equivalent mass portion of all POM mixtures.

For our multipathway screening assessment (*i.e.,* ingestion), we assessed risks for adults and various age groups of children. Childrens' exposures are expected to differ from exposures of adults due to differences in body weights, ingestion rates, dietary preferences and other factors. It is important, therefore, to evaluate the contribution of exposures during childhood to total lifetime risk using appropriate exposure factor values, applying ADAF as appropriate. The EPA developed a health protective exposure scenario whereby the receptor, at various lifestages, receives ingestion exposure via both the farm food chain and the fish ingestion pathways. The analysis revealed that fish ingestion is the dominant exposure pathway across all age groups for several pollutants, including POM. For POM, the farm-food-chain also is a major route of exposure, with beef and dairy contributing significantly to the lifetime average daily dose. Preliminary calculations of estimated dermal exposure and risk from these pollutants showed that the dermal exposure route is not a significant risk pathway relative to ingestion exposures.

Based on the analyses described above, the EPA has determined that the changes to this rule, which will reduce emissions of HAP by over 200 tpy, will lead to reduced risk to children and infants.

VI. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *http://www2.epa.gov/laws-regulations/laws-and-executive-orders.*

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

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

B. Paperwork Reduction Act (PRA)

The information collection activities in this rule have been submitted for approval to the OMB under the PRA. The Information Collection Request (ICR) document that the EPA prepared has been assigned EPA ICR number 1717.11. 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.

The information requirements in this rulemaking are based on the notification, recordkeeping and reporting requirements in the NESHAP General Provisions (40 CFR part 63, subpart A), which are mandatory for all operators subject to national emission standards. These notifications, reports and records are essential in determining compliance, and are specifically authorized by CAA section 114 (42 U.S.C. 7414). All information submitted to the EPA pursuant to the recordkeeping and reporting requirements for which a claim of confidentiality is made is safeguarded according to agency policies set forth in 40 CFR part 2, subpart B.

Respondents/affected entities: OSWRO facilities that store, treat, recycle, reprocess, or dispose of wastes containing organic chemical compounds.

Respondent's obligation to respond: Mandatory (42 U.S.C. 7414).

Estimated number of respondents: 49.

Frequency of response: Semiannual.

Total estimated burden: 49,118 hours (per year). Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: $4.1 million (per year), includes $1.2 million annualized capital or operation & 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.

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. The small entities subject to the requirements of this action are businesses that can be classified as small firms using the SBA size standards for their respective industries. The agency has determined that of the 27 firms that own the 49 facilities in the OSWRO source category, four firms, or 15 percent, can be classified as small firms. Based on the sales test screening methodology, all four firms will experience minimal impact, or a cost-to-sales ratio of 1 percent or less. Details of this analysis are presented in the memo, *Economic Impact Analysis for Risk and Technology Review: Off-site Waste and Recovery Operations Source Category,* which is available in the docket for this action.

D. 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 on the private sector.

E. 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.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. There are no OSWRO facilities that are owned or operated by tribal governments. Thus, Executive Order 13175 does not apply to this action.

[13] Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens. Risk Assessment Forum, U.S. Environmental Protection Agency, Washington, DC. EPA/630/R–03/003F. March 2005. Available at *http://www.epa.gov/raf/publications/pdfs/childrens_supplement_final.pdf.*

G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action's health and risk assessments are contained in the: *Residual Risk Assessment for the Off-Site Waste and Recovery Operations Source Category in Support of the February 2015 Risk and Technology Review Final Rule* document, which is available in the docket for this action, and are discussed in section V.G of this preamble.

H. 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.

I. National Technology Transfer and Advancement Act (NTTAA)

This action involves technical standards. The EPA has decided to add EPA Methods 2F and 2G to the list of methods allowed to determine process vent stream gas volumetric flow rate. No applicable voluntary consensus standards (VCS) were identified for these methods. In addition, the EPA is finalizing provisions to allow EPA Method 3A as an alternative to EPA Method 3B for determining the oxygen concentration to use in oxygen correction equations. While the EPA identified several candidate VCS for this method (ANSI/ASME PTC 19–10–1981 Part 10, ASME B133.9–1994 (2001), ISO 10396:1993 (2007), ISO 12039:2001, ASTM D5835–95 (2013), ASTM D6522–00 (2011), and CAN/CSA Z223.2–M86 (1999)) as being potentially applicable, the agency decided not to use them. The use of these VCS would not be practical due to lack of equivalency, documentation, validation data and other important technical and policy considerations. The EPA also is finalizing requirements to use EPA Method 25A to determine compliance with the control device percent reduction requirement, if the owner or operator chooses to measure total organic content. While the EPA identified two candidate VCS (ISO 14965:2000(E), EN 12619 (1999)) as being potentially applicable, we are not including either standard in this final rule. The use of these VCS would not be practical due to the limited measurement ranges of these methods. (For more detail, see the document titled, *Voluntary Consensus Standard Results for NESHAP: Off-Site Waste and Recovery Operations 40 CFR part 63, subpart DD* in the docket for this final rule.) The EPA solicited comments on VCS and invited the public to identify potentially-applicable VCS, but no comments were received regarding this aspect of the rule.

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

The EPA believes the human health or environmental risk addressed by this action will not have potential disproportionately high and adverse human health or environmental effects on minority, low-income or indigenous populations because it increases the level of protection provided to human health or the environment. The results of this evaluation are contained in the memorandum titled, Updated *Environmental Justice Review: Off-Site Waste and Recovery Operations RTR,* which is available in the docket for this action, and are discussed in section V.F of this preamble.

K. 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 procedures, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: February 26, 2015.

Gina McCarthy,

Administrator.

For the reasons stated in the preamble, the Environmental Protection Agency (EPA) is amending title 40, chapter I, of the Code of Federal Regulations (CFR) as follows:

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

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

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

Subpart DD—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FROM OFF-SITE WASTE AND RECOVERY OPERATIONS

■ 2. Section 63.680 is amended by:

■ a. Revising paragraphs (b)(2)(v) introductory text and (e)(1) and (2); and

■ b. Adding paragraph (g).

The revisions and addition read as follows:

§ 63.680 Applicability and designation of affected sources.

* * * * *

(b) * * *

(2) * * *

(v) Waste that is transferred from a chemical manufacturing plant or other facility for which the owner or operator of the facility from which the waste is transferred has complied with the provisions of the air emission control standards for process wastewater specified by another subpart of this part. This exemption does not apply to a source which complies with another subpart of this part by transferring its wastewater off-site for control.

* * * * *

(e) * * * (1) *Existing sources.* The owner or operator of an affected source that commenced construction or reconstruction before October 13, 1994, must achieve compliance with the provisions of this subpart on or before the date specified in paragraphs (e)(1)(i), (ii), or (iii) of this section as applicable to the affected source.

(i) For an affected source that commenced construction or reconstruction before October 13, 1994 and receives off-site material for the first time before February 1, 2000, the owner or operator of this affected source must achieve compliance with the provisions of the subpart (except §§ 63.685(b)(1)(ii), 63.691(b)(2), and 63.691(c)(3)(i) and (ii)) on or before February 1, 2000 unless an extension has been granted by the Administrator as provided in § 63.6(i). These existing affected sources shall be in compliance with the tank requirements of § 63.685(b)(1)(ii) 2 years after the publication date of the final amendments on March 18, 2015, the equipment leak requirements of § 63.691(b)(2) 1 year after the publication date of the final amendments on March 18, 2015, and the pressure relief device monitoring requirements of § 63.691(c)(3)(i) and (ii) 3 years after the publication date of the final amendments on March 18, 2015.

(ii) For an affected source that commenced construction or reconstruction before October 13, 1994, but receives off-site material for the first

time on or after February 1, 2000, but before March 18, 2015, the owner or operator of the affected source must achieve compliance with the provisions of this subpart (except §§ 63.685(b)(1)(ii), 63.691(b)(2), and 63.691(c)(3)(i) and (ii)) upon the first date that the affected source begins to manage off-site material. These existing affected sources shall be in compliance with the tank requirements of § 63.685(b)(1)(ii) 2 years after the publication date of the final amendments on March 18, 2015, the equipment leak requirements of § 63.691(b)(2) 1 year after the publication date of the final amendments on March 18, 2015, and the pressure relief device monitoring requirements of § 63.691(c)(3)(i) and (ii) 3 years after the publication date of the final amendments on March 18, 2015.

(iii) For an affected source that commenced construction or reconstruction before October 13, 1994, but receives off-site material for the first time on or after March 18, 2015, the owner or operator of the affected source must achieve compliance with the provisions of this subpart (except §§ 63.685 (b)(1)(ii), 63.691(b)(2), and 63.691(c)(3)(i) and (ii)) upon the first date that the affected source begins to manage off-site material. These existing affected sources shall be in compliance with the tank requirements of § 63.685(b)(1)(ii) 2 years after the publication date of the final amendments on March 18, 2015, the equipment leak requirements of § 63.691(b)(2) 1 year after the publication date of the final amendments on March 18, 2015, and the pressure relief device monitoring requirements of § 63.691(c)(3)(i) and (ii) 3 years after the publication date of the final amendments on March 18, 2015.

(2) *New sources.* The owner or operator of an affected source for which construction or reconstruction commences on or after October 13, 1994, must achieve compliance with the provisions of this subpart (except §§ 63.685(b)(2), 63.691(b)(2), and 63.691(c)(3)(i) and (ii)) on or before July 1, 1996, or upon initial startup of operations, whichever date is later as provided in 40 CFR 63.6(b). New affected sources that commenced construction or reconstruction after October 13, 1994, but on or before July 2, 2014, shall be in compliance with the tank requirements of § 63.685(b)(2) 2 years after the publication date of the final amendments, the equipment leak requirements of § 63.691(b)(2) 1 year after the publication date of the final amendments, and the pressure relief device monitoring requirements of § 63.691(c)(3)(i) and (ii) 3 years after the effective date of the final amendments. New affected sources that commence construction or reconstruction after July 2, 2014, shall be in compliance with the tank requirements of § 63.685(b)(2), the equipment leak requirements of § 63.691(b)(2), and the pressure relief device monitoring requirements of § 63.691(c)(3)(i) and (ii) upon initial startup or by the effective date of the final amendments, whichever is later.

* * * * *

(g) *Applicability of this subpart.* (1) The emission limitations set forth in this subpart and the emission limitations referred to in this subpart shall apply at all times except during periods of non-operation of the affected source (or specific portion thereof) resulting in cessation of the emissions to which this subpart applies.

(2) The owner or operator shall not shut down items of equipment that are required or utilized for compliance with this subpart during times when emissions are being routed to such items of equipment, if the shutdown would contravene requirements of this subpart applicable to such items of equipment.

■ 3. Section 63.681 is amended by:

■ a. Adding, in alphabetical order, definitions for ''Bypass'', ''In gas/vapor service'', ''In heavy liquid service'', ''In light liquid service'', ''In liquid service'', ''Pressure release'', and ''Pressure relief device or valve'';

■ b. Revising the definitions of ''Point-of-treatment'' and ''Process vent''; and

■ c. Removing the definition of ''Safety device''.

The additions and revisions read as follows:

§ 63.681 Definitions.

* * * * *

Bypass means diverting a process vent or closed vent system stream to the atmosphere such that it does not first pass through an emission control device.

* * * * *

In gas/vapor service means that a piece of equipment in off-site material service contains or contacts a gas or vapor at operating conditions.

In heavy liquid service means that a piece of equipment in off-site material service is not in gas/vapor service or in light liquid service.

In light liquid service means that a piece of equipment in off-site material service contains or contacts a liquid that meets the following conditions:

(1) The vapor pressure of one or more of the organic compounds is greater than 0.3 kilopascals at 20 °C;

(2) The total concentration of the pure organic compounds constituents having a vapor pressure greater than 0.3 kilopascals at 20 °C is equal to or greater than 20 percent by weight of the total process stream; and

(3) The fluid is a liquid at operating conditions. Note to *In light liquid service:* Vapor pressures may be determined by the methods described in 40 CFR 60.485(e)(1). *In liquid service* means that a piece of equipment in off-site material service is not in gas/vapor service.

* * * * *

Point-of-treatment means a point after the treated material exits the treatment process but before the first point downstream of the treatment process exit where the organic constituents in the treated material have the potential to volatilize and be released to the atmosphere. For the purpose of applying this definition to this subpart, the first point downstream of the treatment process exit is not a fugitive emission point due to an equipment leak from any of the following equipment components: Pumps, compressors, valves, connectors, instrumentation systems, or pressure relief devices.

Pressure release means the emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device. This release can be one release or a series of releases over a short time period.

Pressure relief device or valve means a safety device used to prevent operating pressures from exceeding the maximum allowable working pressure of the process equipment. A common pressure relief device is a spring-loaded pressure relief valve. Devices that are actuated either by a pressure of less than or equal to 2.5 pounds per square inch gauge or by a vacuum are not pressure relief devices.

* * * * *

Process vent means an open-ended pipe, stack, or duct through which a gas stream containing HAP is continuously or intermittently discharged to the atmosphere from any of the processes listed in § 63.680(c)(2)(i) through (vi). For the purpose of this subpart, a process vent is none of the following: a pressure relief device; an open-ended line or other vent that is subject to the equipment leak control requirements under § 63.691; or a stack or other vent that is used to exhaust combustion products from a boiler, furnace, process heater, incinerator, or other combustion device.

* * * * *

■ 4. Section 63.683 is amended by:

■ a. Revising the first sentence of paragraph (c)(1)(ii); and
■ b. Adding paragraphs (e) and (f).

The revision and addition read as follows:

§ 63.683 Standards: General.

* * * * *

(c) * * *

(1) * * *

(ii) The owner or operator determines before placing off-site material in the process equipment associated with the process vent that the average VOHAP concentration of the off-site material is less than 500 ppmw at the point-of-delivery. * * *

* * * * *

(e) *General duty.* At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(f) In addition to the cases listed in § 63.695(e)(4), deviation means any of the cases listed in paragraphs (f)(1) through (6) of this section.

(1) Any instance in which an affected source subject to this subpart, or an owner or operator of such a source, fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emission limit, operating limit or work practice standard.

(2) When a performance test indicates that emissions of a pollutant in Table 1 to this subpart are exceeding the emission standard for the pollutant specified in Table 1 to this subpart.

(3) When the average value of a monitored operating parameter, based on the data averaging period for compliance specified in § 63.695, does not meet the operating limit specified in § 63.693.

(4) When an affected source discharges directly into the atmosphere from any of the sources specified in paragraphs (f)(4)(i) and (ii) of this section.

(i) A pressure relief device, as defined in § 63.681.

(ii) A bypass, as defined in § 63.681.

(5) Any instance in which the affected source subject to this subpart, or an owner or operator of such a source, fails to meet any term or condition specified in paragraph (f)(5)(i) or (ii) of this section.

(i) Any term or condition that is adopted to implement an applicable requirement in this subpart.

(ii) Any term or condition relating to compliance with this subpart that is included in the operating permit for an affected source to obtain such a permit.

(6) Any failure to collect required data, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments).

■ 5. Section 63.684 is amended by:
■ a. Revising paragraph (b)(5) introductory text;
■ b. Adding paragraph (b)(5)(v); and
■ c. Revising paragraph (h).

The revisions and addition read as follows:

§ 63.684 Standards: Off-site material treatment.

* * * * *

(b) * * *

(5) *Incineration.* The treatment process must destroy the HAP contained in the off-site material stream using one of the combustion devices specified in paragraphs (b)(5)(i) through (v) of this section.

* * * * *

(v) An incinerator, boiler, or industrial furnace for which the owner or operator has submitted a Notification of Compliance under §§ 63.1207(j) and 63.1210(d) and complies with the requirements of subpart EEE of this part at all times (including times when non-hazardous waste is being burned).

* * * * *

(h) The Administrator may at any time conduct or require that the owner or operator conduct testing necessary to demonstrate that a treatment process is achieving the applicable performance requirements of this section. The testing shall be conducted in accordance with the applicable requirements of this section. The Administrator may elect to have an authorized representative observe testing conducted by the owner or operator.

■ 6. Section 63.685 is amended by:
■ a. Revising paragraphs (b) introductory text, (b)(1), and (2);
■ b. Removing paragraph (b)(4);
■ c. Revising paragraphs (c)(1), (c)(2)(i) and (iii)(B), (g)(2), (h)(3), (i) introductory text; and
■ d. Removing paragraph (i)(3) and redesignating paragraph (i)(4) as paragraph (i)(3).

The revisions read as follows:

§ 63.685 Standards: Tanks.

* * * * *

(b) According to the date an affected source commenced construction or reconstruction and the date an affected source receives off-site material for the first time as established in § 63.680(e)(i) through (iii), the owner or operator shall control air emissions from each tank subject to this section in accordance with either paragraph (b)(1)(i) or (ii) of this section.

(1)(i) For a tank that is part of an existing affected source but the tank is not used for a waste stabilization process as defined in § 63.681, the owner or operator shall determine whether the tank is required to use either Tank Level 1 controls or Tank Level 2 controls as specified for the tank by Table 3 of this subpart based on the off-site material maximum HAP vapor pressure and the tank's design capacity. The owner or operator shall control air emissions from a tank required by Table 3 to use Tank Level 1 controls in accordance with the requirements of paragraph (c) of this section. The owner or operator shall control air emissions from a tank required by Table 3 to use Tank Level 2 controls in accordance with the requirements of paragraph (d) of this section.

(ii) For a tank that is part of an existing affected source but the tank is not used for a waste stabilization process as defined in § 63.681, the owner or operator shall determine whether the tank is required to use either Tank Level 1 controls or Tank Level 2 controls as specified for the tank by Table 4 of this subpart based on the off-site material maximum HAP vapor pressure and the tank's design capacity. The owner or operator shall control air emissions from a tank required by Table 4 to use Tank Level 1 controls in accordance with the requirements of paragraph (c) of this section. The owner or operator shall control air emissions from a tank required by Table 4 to use Tank Level 2 controls in accordance with the requirements of paragraph (d) of this section.

(2) For a tank that is part of a new affected source but the tank is not used for a waste stabilization process as defined in § 63.681, the owner or operator shall determine whether the tank is required to use either Tank Level

1 controls or Tank Level 2 controls as specified for the tank by Table 5 of this subpart based on the off-site material maximum HAP vapor pressure and the tank's design capacity. The owner or operator shall control air emissions from a tank required by Table 5 to use Tank Level 1 controls in accordance with the requirements of paragraph (c) of this section. The owner or operator shall control air emissions from a tank required by Table 5 to use Tank Level 2 controls in accordance with the requirements of paragraph (d) of this section.

* * * * *

(c) * * *

(1) The owner or operator shall determine the maximum HAP vapor pressure for an off-site material to be managed in the tank using Tank Level 1 controls before the first time the off-site material is placed in the tank. The maximum HAP vapor pressure shall be determined using the procedures specified in § 63.694(j). Thereafter, the owner or operator shall perform a new determination whenever changes to the off-site material managed in the tank could potentially cause the maximum HAP vapor pressure to increase to a level that is equal to or greater than the maximum HAP vapor pressure limit for the tank design capacity category specified in Table 3, Table 4, or Table 5 of this subpart, as applicable to the tank.

(2) * * *

(i) The owner or operator controls air emissions from the tank in accordance with the provisions specified in subpart OO of this part—National Emission Standards for Tanks—Level 1, except that § 63.902(c)(2) and (3) shall not apply for the purposes of this subpart.

* * * * *

(iii) * * *

(B) At all other times, air emissions from the tank must be controlled in accordance with the provisions specified in subpart OO of this part—National Emission Standards for Tanks—Level 1, with the exceptions specified in paragraphs (c)(2)(iii)(B)(*1*) and (*2*) of this section.

(*1*) Where § 63.902(c)(2) provides an exception for a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere, only a conservation vent shall be eligible for the exception for the purposes of this subpart.

(*2*) Section 63.902(c)(3) shall not apply for the purposes of this subpart.

* * * * *

(g) * * *

(2) Whenever an off-site material is in the tank, the fixed roof shall be installed with each closure device secured in the closed position and the vapor headspace underneath the fixed roof vented to the control device except that venting to the control device is not required, and opening of closure devices or removal of the fixed roof is allowed at the following times:

(i) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.

(ii) To remove accumulated sludge or other residues from the bottom of the tank.

* * * * *

(h) * * *

(3) Whenever an off-site material is in the tank, the tank shall be operated as a closed system that does not vent to the atmosphere except at those times when purging of inerts from the tank is required and the purge stream is routed to a closed-vent system and control device designed and operated in accordance with the requirements of § 63.693.

(i) The owner or operator who elects to control air emissions by using an enclosure vented through a closed-vent system to an enclosed combustion control device shall meet the requirements specified in paragraphs (i)(1) through (3) of this section.

* * * * *

■ 7. Section 63.686 is amended by revising paragraphs (b)(1) through (3) to read as follows:

§ 63.686 Standards: Oil-water and organic water separators.

* * * * *

(b) * * *

(1) A floating roof in accordance with all applicable provisions specified in subpart VV of this part—National Emission Standards for Oil-Water Separators and Organic-Water Separators, except that §§ 63.1043(c)(2), 63.1044(c)(2), and 63.1045(b)(3)(i) shall not apply for the purposes of this subpart. For portions of the separator where it is infeasible to install and operate a floating roof, such as over a weir mechanism, the owner or operator shall comply with the requirements specified in paragraph (b)(2) of this section.

(2) A fixed-roof that is vented through a closed-vent system to a control device in accordance with all applicable provisions specified in subpart VV of this part—National Emission Standards for Oil-Water Separators and Organic-Water Separators, except that §§ 63.1043(c)(2), 63.1044(c)(2), and 63.1045(b)(3)(i) shall not apply for the purposes of this subpart.

(3) A pressurized separator that operates as a closed system in accordance with all applicable provisions specified in subpart VV of this part—National Emission Standards for Oil-Water Separators and Organic-Water Separators, except that §§ 63.1043(c)(2), 63.1044(c)(2), and 63.1045(b)(3)(i) shall not apply for the purposes of this subpart.

■ 8. Section 63.687 is amended by revising paragraphs (b)(1) and (2) to read as follows:

§ 63.687 Standards: Surface impoundments.

* * * * *

(b) * * *

(1) A floating membrane cover in accordance with the applicable provisions specified in subpart QQ of this part—National Emission Standards for Surface Impoundments, except that §§ 63.942(c)(2) and (3) and 63.943(c)(2) shall not apply for the purposes of this subpart; or

(2) A cover that is vented through a closed-vent system to a control device in accordance with all applicable provisions specified in subpart QQ of this part—National Emission Standards for Surface Impoundments, except that §§ 63.942(c)(2) and (3) and 63.943(c)(2) shall not apply for the purposes of this subpart.

■ 9. Section 63.688 is amended by revising paragraphs (b)(1)(i), (ii), and (3)(i) to read as follows:

§ 63.688 Standards: Containers.

* * * * *

(b) * * *

(1) * * *

(i) The owner or operator controls air emissions from the container in accordance with the standards for Container Level 1 controls as specified in subpart PP of this part—National Emission Standards for Containers, except that §§ 63.922(d)(4) and (5) and 63.923(d)(4) and (5) shall not apply for the purposes of this subpart.

(ii) As an alternative to meeting the requirements in paragraph (b)(1)(i) of this section, an owner or operator may choose to control air emissions from the container in accordance with the standards for either Container Level 2 controls or Container Level 3 controls as specified in subpart PP of this part—National Emission Standards for

Containers, except that §§ 63.922(d)(4) and (5) and 63.923(d)(4) and (5) shall not apply for the purposes of this subpart.

* * * * *

(3) * * *

(i) The owner or operator controls air emissions from the container in accordance with the standards for Container Level 2 controls as specified in subpart PP of this part—National Emission Standards for Containers, except that §§ 63.922(d)(4) and (5) and 63.923(d)(4) and (5) shall not apply for the purposes of this subpart.

* * * * *

■ 10. Section 63.689 is amended by revising paragraph (d)(5) to read as follows:

§ 63.689 Standards: Transfer systems.

* * * * *

(d) * * *

(5) Whenever an off-site material is in the transfer system, the cover shall be installed with each closure device secured in the closed position, except the opening of closure devices or removal of the cover is allowed to provide access to the transfer system for performing routine inspection, maintenance, repair, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a hatch or remove the cover to repair conveyance equipment mounted under the cover or to clear a blockage of material inside the system. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable.

* * * * *

■ 11. Section 63.691 is amended by:

■ a. Revising paragraph (b); and

■ b. Adding paragraph (c).

The revision and addition read as follows:

§ 63.691 Standards: Equipment leaks.

* * * * *

(b) According to the date an affected source commenced construction or reconstruction and the date an affected source receives off-site material for the first time, as established in § 63.680(e)(i) through (iii), the owner or operator shall control the HAP emitted from equipment leaks in accordance with the applicable provisions specified in either paragraph (b)(1) or (2) of this section.

(1)(i) The owner or operator controls the HAP emitted from equipment leaks in accordance with §§ 61.241 through 61.247 in 40 CFR part 61, subpart V—National Emission Standards for Equipment Leaks, with the difference noted in paragraphs (b)(1)(iii) and (iv) of this section for the purposes of this subpart; or

(ii) The owner or operator controls the HAP emitted from equipment leaks in accordance with §§ 63.161 through 63.182 in subpart H of this part—National Emission Standards for Organic Hazardous Air Pollutants from Equipment Leaks, with the differences noted in paragraphs (b)(2)(i) through (iv) of this section for the purposes of this subpart.

(iii) On or after March 18, 2015, for the purpose of complying with the requirements of 40 CFR 61.242–6(a)(2) or the requirements of § 63.167(a)(2), the open end is sealed when instrument monitoring of the open-ended valve or line conducted according to Method 21 of 40 CFR part 60, appendix A indicates no readings of 500 ppm or greater.

(iv) On or after March 18, 2015, for the purpose of complying with the requirements of 40 CFR 61.242–6(d) or the requirements of § 63.167(d), open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset and that are exempt from the requirements in 40 CFR 61.242–6(a), (b), and (c) or § 63.167(a), (b), and (c) must comply with the requirements in § 63.693(c)(2).

(2) The owner or operator controls the HAP emitted from equipment leaks in accordance with §§ 63.161 through 63.183 in subpart H of this part—National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks, with the differences noted in paragraphs (b)(2)(i) through (v) of this section for the purposes of this subpart.

(i) For each valve in gas/vapor or in light liquid service, as defined in § 63.681, that is part of an affected source under this subpart, an instrument reading that defines a leak is 500 ppm or greater as detected by Method 21 of 40 CFR part 60, appendix A.

(ii) For each pump in light liquid service, as defined in § 63.681, that is part of an affected source under this subpart, an instrument reading that defines a leak is 1,000 ppm or greater as detected by Method 21 of 40 CFR part 60, appendix A. Repair is not required unless an instrument reading of 2,000 ppm or greater is detected.

(iii) On or after March 18, 2015, for the purpose of complying with the requirements of § 63.167(a)(2), the open end is sealed when instrument monitoring of the open-ended valve or line conducted according to Method 21 of 40 CFR part 60, appendix A indicates no readings of 500 ppm or greater.

(iv) On or after March 18, 2015, for the purpose of complying with the requirements of § 63.167(d), open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset and that are exempt from the requirements in § 63.167(a), (b), and (c) must comply with the requirements in § 63.693(c)(2).

(v) For the purposes of this subpart, the pressure relief device requirements of § 63.691(c) of this subpart rather than those of § 63.165 or of 40 CFR 61.242–4, as applicable, shall apply. The pressure relief device requirements of § 63.691(c)(3) and (4) apply in addition to the requirements of § 63.169 or of 40 CFR 61.242–8, as applicable, for pressure relief devices in liquid service.

(c) *Requirements for pressure relief devices.* Except as provided in paragraph (c)(4) of this section, the owner or operator must comply with the requirements specified in paragraphs (c)(1) through (3) of this section for pressure relief devices in off-site material service.

(1) *Operating requirements.* Except during a pressure release event, operate each pressure relief device in gas/vapor service with an instrument reading of less than 500 ppm above background as detected by Method 21 of 40 CFR part 60, appendix A.

(2) *Pressure release requirements.* For pressure relief devices in gas/vapor service, the owner or operator must comply with either paragraph (c)(2)(i) or (ii) of this section following a pressure release, as applicable.

(i) If the pressure relief device does not consist of or include a rupture disk, the pressure relief device shall be returned to a condition indicated by an instrument reading of less than 500 ppm above background, as detected by Method 21 of 40 CFR part 60, appendix A, no later than 5 calendar days after the pressure release device returns to off-site material service following a pressure release, except as provided in § 63.171.

(ii) If the pressure relief device consists of or includes a rupture disk, except as provided in § 63.171, install a replacement disk as soon as practicable but no later than 5 calendar days after the pressure release.

(3) *Pressure release management.* Except as provided in paragraph (c)(4) of this section, emissions of HAP listed in Table 1 of this subpart may not be discharged directly to the atmosphere from pressure relief devices in off-site material service, and according to the date an affected source commenced construction or reconstruction and the date an affected source receives off-site

material for the first time, as established in § 63.680(e)(1)(i) through (iii), the owner or operator must comply with the requirements specified in paragraphs (c)(3)(i) and (ii) of this section for all pressure relief devices in off-site material service.

(i) The owner or operator must equip each pressure relief device in off-site material service with a device(s) or use a monitoring system. The device or monitoring system may be either specific to the pressure release device itself or may be associated with the process system or piping, sufficient to indicate a pressure release to the atmosphere. Examples of these types of devices or monitoring systems include, but are not limited to, a rupture disk indicator, magnetic sensor, motion detector on the pressure relief valve stem, flow monitor, pressure monitor, or parametric monitoring system. The devices or monitoring systems must be capable of meeting the requirements specified in paragraphs (c)(3)(i)(A) through (C) of this section.

(A) Identifying the pressure release;

(B) Recording the time and duration of each pressure release; and

(C) Notifying operators immediately that a pressure release is occurring.

(ii) If any pressure relief device in off-site material service releases directly to the atmosphere as a result of a pressure release event, the owner or operator must calculate the quantity of HAP listed in Table 1 of this subpart released during each pressure release event and report this quantity as required in § 63.697(b)(5). Calculations may be based on data from the pressure relief device monitoring alone or in combination with process parameter monitoring data and process knowledge.

(4) *Pressure relief devices routed to a drain system, fuel gas system, process or control device.* If a pressure relief device in off-site material service is designed and operated to route all pressure releases through a closed vent system to a drain system, fuel gas system, process or control device, paragraphs (c)(1), (2), and (3) of this section do not apply. The fuel gas system or closed vent system and the process or control device (if applicable) must meet the requirements of § 63.693. The drain system (if applicable) must meet the requirements of § 63.689.

■ 12. Section 63.693 is amended by:

■ a. Revising paragraphs (b)(3) and (8), (c)(1)(ii), and (c)(2) introductory text;

■ b. Adding paragraph (c)(2)(iii); and

■ c. Revising paragraphs (f)(1)(i)(B), (f)(1)(ii)(B), and (f)(2) introductory text;

■ d. Adding paragraph (f)(2)(iii);

■ e. Revising paragraphs (g)(1)(v) and (g)(2)(i); and

■ f. Adding paragraph (g)(2)(i)(C).

The revisions and additions read as follows:

§ 63.693 Standards: Closed-vent systems and control devices.

* * * * *

(b) * * *

(3) Whenever gases or vapors containing HAP are routed from a tank through a closed-vent system connected to a control device used to comply with the requirements of § 63.685(b)(1), (2), or (3), the control device must be operating except as provided for in paragraphs (b)(3)(i) and (ii) of this section.

(i) The control device may only be bypassed for the purpose of performing planned routine maintenance of the closed-vent system or control device in situations when the routine maintenance cannot be performed during periods that tank 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.

* * * * *

(8) In the case when an owner or operator chooses to use a design analysis to demonstrate compliance of a control device with the applicable performance requirements specified in this section as provided for in paragraphs (d) through (g) of this section, the Administrator may require that the design analysis be revised or amended by the owner or operator to correct any deficiencies identified by the Administrator. If the owner or operator and the Administrator do not agree on the acceptability of using the design analysis (including any changes required by the Administrator) to demonstrate that the control device achieves the applicable performance requirements, then the disagreement must be resolved using the results of a performance test conducted by the owner or operator in accordance with the requirements of § 63.694(l). The Administrator may choose to have an authorized representative observe the performance test conducted by the owner or operator. Should the results of this performance test not agree with the determination of control device performance based on the design analysis, then the results of the performance test will be used to establish compliance with this subpart.

* * * * *

(c) * * *

(1) * * *

(ii) A closed-vent system that is designed to operate at a pressure below atmospheric pressure. The system shall be equipped with at least one pressure gauge or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the control device is operating.

(2) In situations when the closed-vent system includes bypass devices that could be used to divert a vent stream from the closed-vent system to the atmosphere at a point upstream of the control device inlet, each bypass device must be equipped with either a flow indicator as specified in paragraph (c)(2)(i) of this section or a seal or locking device as specified in paragraph (c)(2)(ii) of this section, except as provided for in paragraph (c)(2)(iii) of this section:

* * * * *

(iii) Equipment needed for safety reasons, including low leg drains, open-ended valves and lines not in emergency shutdown systems, and pressure relief devices subject to the requirements of § 63.691(c) are not subject to the requirements of paragraphs (c)(2)(i) and (ii) of this section.

* * * * *

(f) * * *

(1) * * *

(i) * * *

(B) To achieve a total incinerator outlet concentration for the TOC, less methane and ethane, of less than or equal to 20 ppmv on a dry basis corrected to 3 percent oxygen.

(ii) * * *

(B) To achieve a total incinerator outlet concentration for the HAP, listed in Table 1 of this subpart, of less than or equal to 20 ppmv on a dry basis corrected to 3 percent oxygen.

* * * * *

(2) The owner or operator must demonstrate that the vapor incinerator achieves the performance requirements in paragraph (f)(1) of this section by conducting either a performance test as specified in paragraph (f)(2)(i) of this section or a design analysis as specified in paragraph (f)(2)(ii) of this section, except as provided for in paragraph (f)(2)(iii) of this section.

* * * * *

(iii) An owner or operator is not required to conduct a performance test or design analysis if the incinerator has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 264, subpart O, or has certified compliance with the interim status requirements of 40 CFR part 265, subpart O.

(g) * * *

(1) * * *

(v) Introduce the vent stream to a boiler or process heater for which the owner or operator either has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 266, subpart H; or has certified compliance with the interim status requirements of 40 CFR part 266, subpart H; or has submitted a Notification of Compliance under §§ 63.1207(j) and 63.1210(d) and complies with the requirements of subpart EEE of this part at all times (including times when non-hazardous waste is being burned).

(2) * * *

(i) If an owner or operator chooses to comply with the performance specifications in either paragraph (g)(1)(i), (ii), or (iii) of this section, the owner or operator must demonstrate compliance with the applicable performance specifications by conducting either a performance test as specified in paragraph (g)(2)(i)(A) of this section or a design analysis as specified in paragraph (g)(2)(i)(B) of this section, except as provided for in paragraph (g)(2)(i)(C) of this section.

* * * * *

(C) An owner or operator is not required to conduct a performance test or design analysis if the boiler or process heater has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 266, subpart H; or has certified compliance with the interim status requirements of 40 CFR part 266, subpart H.

* * * * *

■ 13. Section 63.694 is amended by revising paragraphs (b)(3)(iv), (f)(1), (i)(1), (j)(3), (k)(3), (l) introductory text, (l)(2), (l)(3) introductory text, (l)(3)(i), (l)(3)(ii)(B), (l)(4) introductory text, (l)(4)(i), (l)(4)(ii)(A) and (B), (l)(4)(iii)(A), and (m)(2) and (3) to read as follows:

§ 63.694 Testing methods and procedures.

* * * * *

(b) * * *

(3) * * *

(iv) In the event that the Administrator and the owner or operator disagree on a determination of the average VOHAP concentration for an off-site material stream using knowledge, then the results from a determination of VOHAP concentration using direct measurement as specified in paragraph (b)(2) of this section shall be used to establish compliance with the applicable requirements of this subpart. The Administrator may perform or require that the owner or operator perform this determination using direct measurement.

* * * * *

(f) * * *

(1) The actual HAP mass removal rate (MR) shall be determined based on results for a minimum of three consecutive runs. The sampling time for each run shall be at least 1 hour.

* * * * *

(i) * * *

(1) The actual HAP mass removal rate (MR_{bio}) shall be determined based on results for a minimum of three consecutive runs. The sampling time for each run shall be at least 1 hour.

* * * * *

(j) * * *

(3) *Use of knowledge to determine the maximum HAP vapor pressure of the off-site material.* Documentation shall be prepared and recorded that presents the information used as the basis for the owner's or operator's knowledge that the maximum HAP vapor pressure of the off-site material is less than the maximum vapor pressure limit listed in Table 3, Table 4, or Table 5 of this subpart for the applicable tank design capacity category. Examples of information that may be used include: the off-site material is generated by a process for which at other locations it previously has been determined by direct measurement that the off-site material maximum HAP vapor pressure is less than the maximum vapor pressure limit for the appropriate tank design capacity category. In the event that the Administrator and the owner or operator disagree on a determination of the maximum HAP vapor pressure for an off-site material stream using knowledge, then the results from a determination of HAP vapor pressure using direct measurement as specified in paragraph (j)(2) of this section shall be used to establish compliance with the applicable requirements of this subpart. The Administrator may perform or require that the owner or operator perform this determination using direct measurement.

(k) * * *

(3) The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 8.1.1 of Method 21 shall be for the weighted average composition of the organic constituents in the material placed in the unit at the time of monitoring, not for each individual organic constituent.

* * * * *

(l) *Control device performance test procedures.* Performance tests shall be based on representative performance (*i.e.,* performance based on normal operating conditions) and shall exclude periods of startup and shutdown unless specified by the Administrator. The owner or operator may not conduct performance tests during periods of malfunction. The owner or operator must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

* * * * *

(2) The gas volumetric flow rate shall be determined using Method 2, 2A, 2C, or 2D, 2F, or 2G of 40 CFR part 60, appendix A, as appropriate.

(3) To determine compliance with the control device percent reduction requirement, the owner or operator shall use Method 18 of 40 CFR part 60, appendix A to measure the HAP in Table 1 of this subpart or Method 25A of 40 CFR part 60, appendix A to measure TOC. Method 18 may be used to measure methane and ethane, and the measured concentration may be subtracted from the Method 25A measurement. Alternatively, any other method or data that has been validated according to the applicable procedures in Method 301 in appendix A of this part may be used. The following procedures shall be used to calculate percent reduction efficiency:

(i) A minimum of three sample runs must be performed. The minimum sampling time for each run shall be 1 hour. For Method 18, either an integrated sample or a minimum of four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time such as 15 minute intervals during the run.

(ii) * * *

(B) When the TOC mass rate is calculated, the average concentration reading (minus methane and ethane) measured by Method 25A of 40 CFR part 60, appendix A shall be used in the equation in paragraph (l)(3)(ii)(A) of this section.

* * * * *

(4) To determine compliance with the enclosed combustion device total HAP concentration limit of this subpart, the owner or operator shall use Method 18 of 40 CFR part 60, appendix A to measure the total HAP in Table 1 of this subpart or Method 25A of 40 CFR part 60, appendix A to measure TOC. Method 18 may be used to measure

methane and ethane and the measured concentration may be subtracted from the Method 25A measurement. Alternatively, any other method or data that has been validated according to Method 301 in appendix A of this part, may be used. The following procedures shall be used to calculate parts per million by volume concentration, corrected to 3 percent oxygen:

(i) A minimum of three sample runs must be performed. The minimum sampling time for each run shall be 1 hour. For Method 18, either an integrated sample or a minimum of four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15 minute intervals during the run.

(ii) * * *

(A) The TOC concentration (C_{TOC}) is the average concentration readings provided by Method 25 A of 40 CFR part 60, appendix A, minus the concentration of methane and ethane.

(B) The total HAP concentration (C_{HAP}) shall be computed according to the following equation:

$$C_{HAP} = \sum_{i=1}^{x} \frac{\sum_{j=1}^{n} C_{ji}}{x}$$

where:

C_{HAP} = Total concentration of HAP compounds listed in Table 1 of this subpart, dry basis, parts per million by volume.

C_{ij} = Concentration of sample components j of sample i, dry basis, parts per million by volume.

n = Number of components in the sample.

x = Number of samples in the sample run.

(iii) * * *

(A) The emission rate correction factor or excess air, integrated sampling and analysis procedures of Method 3B of 40 CFR part 60, appendix A shall be used to determine the oxygen concentration ($\%O_{2dry}$). Alternatively, the owner or operator may use Method 3A of 40 CFR part 60, appendix A to determine the oxygen concentration. The samples shall be collected during the same time that the samples are collected for determining TOC concentration or total HAP concentration.

* * * * *

(m) * * *

(2) No traverse site selection method is needed for vents smaller than 0.10 meter in diameter. For vents smaller than 0.10 meter in diameter, sample at the center of the vent.

(3) Process vent stream gas volumetric flow rate must be determined using Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR part 60, appendix A, as appropriate.

* * * * *

■ 14. Section 63.695 is amended by:
■ a. Revising paragraph (a) introductory text;
■ b. Adding paragraph (a)(5);
■ c. Revising paragraphs (e) introductory text and (e)(4) and (5); and
■ d. Removing paragraphs (e)(6) and (7).

The revisions and addition read as follows:

§ 63.695 Inspection and monitoring requirements.

(a) The owner or operator must install, calibrate, maintain, and operate all monitoring system components according to §§ 63.8, 63.684(e), 63.693(d)(3), (e)(3), (f)(3), (g)(3), and (h)(3), and paragraph (a)(5) of this section and perform the inspection and monitoring procedures specified in paragraphs (a)(1) through (4) of this section.

* * * * *

(5)(i) Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator must operate the continuous monitoring system at all times the affected source is operating. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. The owner or operator is required to complete monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable.

(ii) The owner or operator may not use data recorded during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities in calculations used to report emissions or operating levels. The owner or operator must use all the data collected during all other required data collection periods in assessing the operation of the control device and associated control system. The owner or operator must report any periods for which the monitoring system failed to collect required data.

* * * * *

(e) *Control device monitoring requirements.* For each control device required under § 63.693 to be monitored in accordance with the provisions of this paragraph (e), the owner or operator must ensure that each control device operates properly by monitoring the control device in accordance with the requirements specified in paragraphs (e)(1) through (5) of this section.

* * * * *

(4) A deviation for a given control device is determined to have occurred when the monitoring data or lack of monitoring data result in any one of the criteria specified in paragraphs (e)(4)(i) through (iii) of this section being met. When multiple operating parameters are monitored for the same control device and during the same operating day more than one of these operating parameters meets a deviation criterion specified in paragraphs (e)(4)(i) through (iii) of this section, then a single deviation is determined to have occurred for the control device for that operating day.

(i) A deviation occurs when the daily average value of a monitored operating parameter is less than the minimum operating parameter limit (or, if applicable, greater than the maximum operating parameter limit) established for the operating parameter in accordance with the requirements of paragraph (e)(3) of this section.

(ii) A deviation occurs when the period of control device operation is 4 hours or greater in an operating day and the monitoring data are insufficient to constitute a valid hour of data for at least 75 percent of the operating hours. Monitoring data are insufficient to constitute a valid hour of data if measured values are unavailable for any of the 15-minute periods within the hour.

(iii) A deviation occurs when the period of control device operation is less than 4 hours in an operating day and more than 1 of the hours during the period does not constitute a valid hour of data due to insufficient monitoring data. Monitoring data are insufficient to constitute a valid hour of data if measured values are unavailable for any of the 15-minute periods within the hour.

(5) For each deviation, except when the deviation occurs during periods of non-operation of the unit or the process that is vented to the control device (resulting in cessation of HAP emissions to which the monitoring applies), the owner or operator shall be deemed to have failed to have applied control in a manner that achieves the required operating parameter limits. Failure to achieve the required operating

parameter limits is a violation of this standard.

* * * * *

■ 15. Section 63.696 is amended by revising paragraph (h) and adding paragraphs (i) and (j) to read as follows:

§ 63.696 Recordkeeping requirements.

* * * * *

(h) An owner or operator shall record the malfunction information specified in paragraphs (h)(1) through (3) of this section.

(1) In the event that an affected unit fails to meet an applicable standard, record the number of failures. For each failure, record the date, time and duration of the failure.

(2) For each failure to meet an applicable standard, record and retain a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.

(3) Record actions taken to minimize emissions in accordance with § 63.683(e) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(i) For pressure relief devices in off-site material service, keep records of the information specified in paragraphs (i)(1) through (5) of this section, as applicable.

(1) A list of identification numbers for pressure relief devices that the owner or operator elects to route emissions through a closed-vent system to a control device, process or drain system under the provisions in § 63.691(c)(4).

(2) A list of identification numbers for pressure relief devices that do not consist of or include a rupture disk, subject to the provisions in § 63.691(c)(2)(i).

(3) A list of identification numbers for pressure relief devices equipped with rupture disks, subject to the provisions in § 63.691(c)(2)(ii).

(4) The dates and results of the Method 21 of 40 CFR part 60, appendix A, monitoring following a pressure release for each pressure relief device subject to the provisions in § 63.691(c)(2)(i). The results of each monitoring event shall include:

(i) The measured background level.

(ii) The maximum instrument reading measured at each pressure relief device.

(5) For pressure relief devices in off-site material service subject to § 63.691(c)(3), keep records of each pressure release to the atmosphere, including the following information:

(i) The source, nature, and cause of the pressure release.

(ii) The date, time, and duration of the pressure release.

(iii) An estimate of the quantity of HAP listed in Table 1 of this subpart emitted during the pressure release and the calculations used for determining this quantity.

(iv) The actions taken to prevent this pressure release.

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

(j) (1) For pressure tank closure devices, as specified in § 63.685(h)(2), keep records of each release to the atmosphere, including the information specified in paragraphs (j)(3) though (7) of this section.

(2) For each closed vent system that includes bypass devices that could divert a stream away from the control device and into the atmosphere, as specified in § 63.693(c)(2), and each open-ended valve or line in an emergency shutdown system which is designed to open automatically in the event of a process upset, as specified in § 63.167(d) or 40 CFR 61.242–6(d), keep records of each release to the atmosphere, including the information specified in paragraphs (j)(3) though (9) of this section.

(3) The source, nature, and cause of the release.

(4) The date, time, and duration of the release.

(5) An estimate of the quantity of HAP listed in Table 1 of this subpart emitted during the release and the calculations used for determining this quantity.

(6) The actions taken to prevent this release.

(7) The measures adopted to prevent future such release.

(8) Hourly records of whether the bypass flow indicator specified under § 63.693(c)(2) was operating and whether a diversion was detected at any time during the hour, as well as records of the times of all periods when the vent stream is diverted from the control device or the flow indicator is not operating.

(9) Where a seal mechanism is used to comply with § 63.693(c)(2), hourly records of flow are not required. In such cases, the owner or operator shall record that the monthly visual inspection of the seals or closure mechanism has been done, and shall record the duration of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type lock has been checked out, and records of any car-seal that has broken.

■ 16. Section 63.697 is amended by:

■ a. Revising paragraph (a) introductory text;

■ b. Adding paragraphs (a)(1)(i) and (ii) and (a)(3);

■ c. Revising paragraph (b)(3) and (4); and

■ d. Adding paragraphs (b)(5) and (6).

The revisions and additions read as follows:

§ 63.697 Reporting requirements.

(a) Each owner or operator of an affected source subject to this subpart must comply with the notification requirements specified in paragraph (a)(1) of this section and the reporting requirements specified in paragraphs (a)(2) and (3) of this section.

(1) * * *

(i) For pressure relief devices in off-site material service subject to the requirements of § 63.691(c), the owner or operator must submit the information listed in paragraph (a)(1)(ii) of this section in the notification of compliance status required under § 63.9(h) within 150 days after the first applicable compliance date for pressure relief device monitoring.

(ii) For pressure relief devices in off-site material service, a description of the device or monitoring system to be implemented, including the pressure relief devices and process parameters to be monitored (if applicable), a description of the alarms or other methods by which operators will be notified of a pressure release, and a description of how the owner or operator will determine the information to be recorded under § 63.696(i)(5)(ii) through (iii) (*i.e.,* the duration of the pressure release and the methodology and calculations for determining the quantity of HAP listed in Table 1 of this subpart emitted during the pressure release).

* * * * *

(3) *Electronic reporting.* Within 60 days after the date of completing each performance test (as defined in § 63.2) required by this subpart, the owner or operator must submit the results of the performance test according to the manner specified by either paragraph (a)(3)(i) or (ii) of this section.

(i) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (*http://www.epa.gov/ttn/chief/ert/index.html*), the owner or operator must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI) accessed through the EPA's Central Data Exchange (CDX) (*http://cdx.epa.gov/epa_home.asp*). Performance test data must be submitted in a file format generated through the use of the EPA's ERT. Owners or operators who claim that some of the performance test information being submitted is confidential business information (CBI) must submit a

complete file generated through the use of the EPA's ERT, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Road, Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph (a)(3)(i).

(ii) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site, the owner or operator must submit the results of the performance test to the Administrator at the appropriate address listed in 40 CFR 60.4.

(b) * * *

(3) *Reports of malfunctions.* If a source fails to meet an applicable standard, report such events in the Periodic Report. Report the number of failures to meet an applicable standard. For each instance, report the date, time and duration of each failure. For each failure the report must include a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

(4) A summary report specified in § 63.10(e)(3) shall be submitted on a semiannual basis (*i.e.,* once every 6-month period). The summary report must include a description of all deviations as defined in §§ 63.683(f) and 63.695(e) that have occurred during the 6-month reporting period. For each deviation caused when the daily average value of a monitored operating parameter is less than the minimum operating parameter limit (or, if applicable, greater than the maximum operating parameter limit), the report must include the daily average values of the monitored parameter, the applicable operating parameter limit, and the date and duration of the period that the deviation occurred. For each deviation caused by lack of monitoring data, the report must include the date and duration of period when the monitoring data were not collected and the reason why the data were not collected.

(5) For pressure relief devices in off-site material service subject to § 63.691(c), Periodic Reports must include the information specified in paragraphs (b)(5)(i) through (iii) of this section.

(i) For pressure relief devices in off-site material service subject to § 63.691(c), report the results of all monitoring conducted within the reporting period.

(ii) For pressure relief devices in gas/vapor service subject to § 63.691(c)(2)(i), report any instrument reading of 500 ppm above background or greater, if detected more than 5 days after the pressure release.

(iii) For pressure relief devices in off-site material service subject to § 63.691(c)(3), report each pressure release to the atmosphere, including the following information:

(A) The source, nature, and cause of the pressure release.

(B) The date, time, and duration of the pressure release.

(C) An estimate of the quantity of HAP listed in Table 1 of this subpart emitted during the pressure release and the method used for determining this quantity.

(D) The actions taken to prevent this pressure release.

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

(6) *Pressure tank closure device or bypass deviation report.* The owner or operator must submit to the Administrator the information specified in paragraph (b)(6)(iv) of this section when any of the conditions in paragraphs (b)(6)(i) through (iii) of this section are met.

(i) Any pressure tank closure device, as specified in § 63.685(h)(2), has released to the atmosphere.

(ii) Any closed vent system that includes bypass devices that could divert a vent a stream away from the control device and into the atmosphere, as specified in § 63.693(c)(2), has released directly to the atmosphere.

(iii) Any open-ended valve or line in an emergency shutdown system which is designed to open automatically in the event of a process upset, as specified in § 63.167(d) or 40 CFR 61.242–6(d), has released directly to the atmosphere.

(iv) The pressure tank closure device or bypass deviation report must include the information specified in paragraphs (b)(6)(iv)(A) through (E) of this section.

(A) The source, nature and cause of the release.

(B) The date, time and duration of the discharge.

(C) An estimate of the quantity of HAP listed in Table 1 of this subpart emitted during the release and the method used for determining this quantity.

(D) The actions taken to prevent this release.

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

* * * * *

■ 17. Section 63.698 is amended by revising paragraph (c) introductory text and adding paragraph (c)(5) to read as follows:

§ 63.698 Implementation and enforcement.

* * * * *

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (5) of this section.

* * * * *

(5) Approval of alternatives to the electronic reporting requirements in § 63.697(a)(3).

■ 18. Table 2 to subpart DD of part 63 is amended by:

■ a. Removing entries 63.1(a)(13) and 63.1(a)(14);

■ b. Revising entries 63.1(b)(2), 63.1(c)(3), and 63.1(c)(4);

■ c. Removing entry 63.4(a)(1)–63.4(a)(3);

■ d. Adding entries 63.4(a)(1)–63.4(a)(2) and 63.4(a)(3);

■ e. Revising entries 63.4(a)(5), 63.5(a)(1), 63.5(b)(5), 63.6(b)(3), and 63.6(b)(4);

■ f. Removing entry 63.6(e);

■ g. Adding entries 63.6(e)(1)(i), 63.6(e)(1)(ii), 63.6(e)(1)(iii), 63.6(e)(2), and 63.6(e)(3);

■ h. Revising entry 63.6(f)(1);

■ i. Adding entry 63.7(a)(4);

■ j. Revising entries 63.7(b), 63.7(c), 63.7(e)(1), 63.7(f), 63.8(c)(1)(iii), 63.9(e), 63.9(g), 63.10(b)(2)(i), 63.10(b)(2)(ii), 63.10(b)(2)(iii), 63.10(b)(2)(iv), and 63.10(b)(2)(v);

■ k. Removing entry 63.10(c);

■ l. Adding entries 63.10(c)(1)–(6), 63.10(c)(7)–(8), and 63.10(c)(9)–(15);

■ m. Removing entries 63.10(d)(5)(i) and 63.10(d)(5)(ii);

■ n. Adding entry 63.10(d)(5);

■ o. Removing entry 63.10(e);

■ p. Adding entries 63.10(e)(1)–63.10(e)(2), 63.10(e)(3), and 63.10(e)(4); and

■ q. Adding entry 63.16.

The revisions and additions read as follows:

TABLE 2 TO SUBPART DD OF PART 63—APPLICABILITY OF PARAGRAPHS IN SUBPART A OF THIS PART 63—GENERAL PROVISIONS TO SUBPART DD

Subpart A reference	Applies to Subpart DD	Explanation
* *	*	* * * * *
63.1(b)(2)	No	Reserved.
* *	*	* * * * *
63.1(c)(3)	No	Reserved.
63.1(c)(4)	No	Reserved.
* *	*	* * * * *
63.4(a)(1)–63.4(a)(2)	Yes	
63.4(a)(3)	No	Reserved.
* *	*	* * * * *
63.4(a)(5)	No	Reserved.
* *	*	* * * * *
63.5(a)(1)	Yes	
* *	*	* * * * *
63.5(b)(5)	No	Reserved.
* *	*	* * * * *
63.6(b)(3)	No	
63.6(b)(4)	No	
* *	*	* * * * *
63.6(e)(1)(i)	No	See § 63.683(e) for general duty requirement.
63.6(e)(1)(ii)	No	
63.6(e)(1)(iii)	Yes	
63.6(e)(2)	No	Reserved.
63.6(e)(3)	No	
63.6(f)(1)	No	
* *	*	* * * * *
63.7(a)(4)	Yes	
63.7(b)	Yes	
63.7(c)	Yes	
* *	*	* * * * *
63.7(e)(1)	No	See § 63.694(l).
* *	*	* * * * *
63.7(f)	Yes	
* *	*	* * * * *
63.8(c)(1)(iii)	No	

TABLE 2 TO SUBPART DD OF PART 63—APPLICABILITY OF PARAGRAPHS IN SUBPART A OF THIS PART 63—GENERAL PROVISIONS TO SUBPART DD—Continued

Subpart A reference	Applies to Subpart DD	Explanation
* *	*	* * * * *
63.9(e)	Yes	
* *	*	* * * * *
63.9(g)	Yes	
* *	*	* * * * *
63.10(b)(2)(i)	No	
63.10(b)(2)(ii)	No	See § 63.696(h) for recordkeeping of (1) date, time and duration; (2) listing of affected source or equipment, and an estimate of the volume of each regulated pollutant emitted over the standard; and (3) actions to minimize emissions and correct the failure.
63.10(b)(2)(iii)	Yes	
63.10(b)(2)(iv)	No	
63.10(b)(2)(v)	No	
* *	*	* * * * *
63.10(c)(1)–(6)	No	
63.10(c)(7)–(8)	Yes	
63.10(c)(9)–(15)	No	
* *	*	* * * * *
63.10(d)(5)	No	See § 63.697(b)(3) for reporting of malfunctions.
63.10(e)(1)–63.10(e)(2)	No	
63.10(e)(3)	Yes	
63.10(e)(4)	No	
* *	*	* * * * *
63.16	No	

* * * * *

■ 19. Table 3 to subpart DD of part 63 is revised to read as follows:

TABLE 3 TO SUBPART DD OF PART 63—TANK CONTROL LEVELS FOR TANKS AT EXISTING AFFECTED SOURCES AS REQUIRED BY 40 CFR 63.685(b)(1)(i)

Tank design capacity (cubic meters)	Maximum HAP vapor pressure of off-site material managed in tank (kilopascals)	Tank control level
Design capacity less than 75 m^3	Maximum HAP vapor pressure less than 76.6 kPa.	Level 1.
Design capacity less than 75 m^3	Maximum HAP vapor pressure equal to or greater than 76.6 kPa.	Level 2, except that fixed roof tanks equipped with an internal floating roof and tanks equipped with an external floating roof as provided for in § 63.685(d)(1) and (2) shall not be used.
Design capacity equal to or greater than 75 m^3 and less than 151 m^3.	Maximum HAP vapor pressure less than 27.6 kPa.	Level 1.
	Maximum HAP vapor pressure equal to or greater than 27.6 kPa.	Level 2.
Design capacity equal to or greater than 151 m^3.	Maximum HAP vapor pressure less than 5.2 kPa.	Level 1.
	Maximum HAP vapor pressure equal to or greater than 5.2 kPa.	Level 2.

■ 20. Table 4 to subpart DD of part 63 is revised to read as follows:

TABLE 4 TO SUBPART DD OF PART 63—TANK CONTROL LEVELS FOR TANKS AT EXISTING AFFECTED SOURCES AS REQUIRED BY 40 CFR 63.685(b)(1)(ii)

Tank design capacity (cubic meters)	Maximum HAP vapor pressure of off-site material managed in tank (kilopascals)	Tank control level
Design capacity less than 75 m^3	Maximum HAP vapor pressure less than 76.6 kPa.	Level 1.
Design capacity less than 75 m^3	Maximum HAP vapor pressure equal to or greater than 76.6 kPa.	Level 2, except that fixed roof tanks equipped with an internal floating roof and tanks equipped with an external floating roof as provided for in § 63.685(d)(1) and (2) shall not be used.
Design capacity equal to or greater than 75 m^3 and less than 151 m^3.	Maximum HAP vapor pressure less than 13.1 kPa.	Level 1.
	Maximum HAP vapor pressure equal to or greater than 13.1 kPa.	Level 2.
Design capacity equal to or greater than 151 m^3.	Maximum HAP vapor pressure less than 5.2 kPa.	Level 1.
	Maximum HAP vapor pressure equal to or greater than 5.2 kPa.	Level 2.

■ 21. Table 5 is added to subpart DD of part 63 to read as follows:

TABLE 5 TO SUBPART DD OF PART 63—TANK CONTROL LEVELS FOR TANKS AT NEW AFFECTED SOURCES AS REQUIRED BY 40 CFR 63.685(b)(2)

Tank design capacity (cubic meters)	Maximum HAP vapor pressure of off-site material managed in tank (kilopascals)	Tank control level
Design capacity less than 38 m^3	Maximum HAP vapor pressure less than 76.6 kPa.	Level 1.
Design capacity less than 38 m^3	Maximum HAP vapor pressure equal to or greater than 76.6 kPa.	Level 2, except that fixed roof tanks equipped with an internal floating roof and tanks equipped with an external floating roof as provided for in § 63.685(d)(1) and (2) shall not be used.
Design capacity equal to or greater than 38 m^3 and less than 151 m^3.	Maximum HAP vapor pressure less than 13.1 kPa.	Level 1.
	Maximum HAP vapor pressure equal to or greater than 13.1 kPa.	Level 2.
Design capacity equal to or greater than 151 m^3.	Maximum HAP vapor pressure less than 0.7 kPa.	Level 1.
	Maximum HAP vapor pressure equal to or greater than 0.7 kPa.	Level 2.

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