ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[FRL-6377-5]

RIN 2060-AH96

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

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule; amendments to rule.

summary: The EPA is taking direct final action on amendments to the national emission standards for hazardous air pollutants (NESHAP) for off-site waste and recovery operations (OSWRO) that the EPA promulgated on July 1, 1996, under authority of section 112 of the Clean Air Act (CAA). The rule applies to owners and operators of facilities that are major sources of hazardous air pollutants (HAP) and manage certain wastes, used oil, or used solvents received from off-site locations. The EPA is amending specific provisions in the rule to resolve issues and questions

raised after promulgation of the final rule. In addition, the EPA is amending other rule language to correct technical omissions; to make specific requirements consistent and up-to-date with recent decisions made by the Agency for other related air rules; and to correct typographical, printing, and grammatical errors. The amendments do not significantly change the EPA's original projections for the rule's environmental benefits, compliance costs, burden on industry, or the number of affected facilities.

DATES: Effective Date. This rule is effective on September 20, 1999 without further notice, unless the EPA receives adverse comment by August 19, 1999. If we receive such comment, we will publish a timely withdrawal in the **Federal Register** informing the public that the rule will not take effect.

ADDRESSES: Comments. Interested parties having adverse comments on this action may submit these comments in writing (in duplicate, if possible) to Docket No. A–92–16 at the following address: Air and Radiation Docket and Information Center (6102), U.S. Environmental Protection Agency, 401 M Street, SW, Room 1500, Washington, DC 20460. The EPA requests that a

separate copy of the comments also be sent to the contact person listed below. The docket is located at the above address in Room M–1500, Waterside mall (ground floor).

Today's document and other materials related to this direct final rulemaking are available for review in the docket. Copies of this information may be obtained by request from the Air Docket by calling (202) 260–7548. A reasonable fee may be charged for copying docket materials.

FOR FURTHER INFORMATION CONTACT: Ms. Elaine Manning, Waste and Chemical Processes Group, Emission Standards Division (MD–13), U.S. Environmental Protection Agency, Research Triangle Park, NC, 27711, telephone number (919) 541–5499, facsimile number (919) 541–0246, electronic mail address "manning.elaine@epa.gov".

SUPPLEMENTARY INFORMATION:

Regulated Entities

Entities potentially regulated by this action include the following types of facilities if the facility receives "off-site material" as defined in the rule, and the facility is determined to be a major source of HAP emissions as defined in 40 CFR 63.2.

Category	Examples of regulated entities
Industry	Businesses that receive waste, used oil, or used solvent from off-site locations and manage this material in any of the following waste management or recovery operations: hazardous waste treatment, storage, and disposal facilities (TSDF); hazardous wastewater treatment operations exempted from air emission control requirements in 40 CFR part 264 or 265; nonhazardous wastewater treatment facilities other than publicly-owned treatment works; used solvent recovery operations; recovery operations that recycle or reprocess hazardous waste and are exempted from regulation as a TSDF in 40 CFR part 264 or 265; and used oil re-refineries.
Federal Government	Federal agency facilities that operate any of the waste management or recovery operations that meet the description of the entities listed under the "Industry" category in this table.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that the EPA is now aware could potentially be regulated by this action.

A comprehensive list of Standard Industrial Classification (SIC) codes cannot be compiled for businesses potentially regulated by this action due to the structure of the rule. The rule may be applicable to any business that receives waste, used oil, or used solvent from an off-site location and then manages this material in one of the operations or processes specified in the rule. Thus, for many businesses subject to the rule, the regulated sources (i.e., off-site waste management or recovery operations) are only a small part of the overall manufacturing process or service

conducted at the facility. In these cases, the SIC code indicates the primary product produced or service provided at the facility rather than the presence of an off-site waste management or recovery operation at the site which is operated to support the predominate function of the facility. For example, SIC code classifications likely to have off-site waste management or recovery operations at some (but not all) facilities include, but are not limited to, petroleum refineries (SIC code 2911), industrial organic chemical manufacturing (SIC code 286x), plastic materials and synthetics manufacturing (SIC code 282x), and miscellaneous chemical products manufacturing (SIC code 289x). However, the EPA also is aware of off-site waste management or recovery operations potentially subject to the rule being located at a few

facilities listed under SIC codes for refuse systems, waste management, business services, miscellaneous services, and nonclassifiable. Thus, the SIC code alone for a given facility does not determine whether the facility is or is not potentially subject to this rule.

To determine whether your facility is regulated by the action, you should carefully examine the applicability criteria in § 63.680 under 40 CFR part 63, subpart DD. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding FOR FURTHER INFORMATION CONTACT section of this document.

Internet

The text of today's document is also available on the EPA's web site on the Internet under recently signed rules at the following address: http://

www.epa.gov/ttn/oarpg/rules.html. The EPA's Office of Air and Radiation (OAR) homepage on the Internet also contains a wide range of information on the air toxics program and many other air pollution programs and issues. The OAR's homepage address is: http://www.epa.gov/oar/.

Electronic Access and Filing Addresses

The official record for this rulemaking, as well as the public version, has been established for this rulemaking under Docket No. A-92-16 (including comments and data submitted electronically). A public version of this record, including printed, paper versions of electronic comments, which does not include any information claimed as confidential business information (CBI), is available for inspection from 8 a.m. to 5:30 p.m., Monday through Friday, excluding legal holidays. The official rulemaking record is located at the address listed in the ADDRESSES section at the beginning of this document.

Interested parties having adverse comments on this action may submit those comments electronically to the EPA's Air and Radiation Docket and Information Center at: "A-and-R-Docket@epa.gov." Electronic comments must be submitted as an ASCII file avoiding the use of special characters and any form of encryption. Comments and data will also be accepted on disks in WordPerfect in 6.1 file format or ASCII file format. All comments and data in electronic form must be identified by the docket number (A-92-16). No CBI should be submitted through electronic mail. Electronic comments may be filed online at many Federal Depository Libraries.

Judicial Review

Under section 307(b)(1) of the CAA, judicial review of an NESHAP is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit within 60 days of today's publication of this final rule. Under section 307(b)(2) of the CAA, the requirements that are the subject of today's document may not be challenged later in civil or criminal proceedings brought by the EPA to enforce these requirements.

Outline

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I. Statutory Authority

The statutory authority for this action is provided by sections 101, 112, 114, 116, and 301 of the CAA, as amended (42 U.S.C. 7401 *et seq.*).

II. Background

The EPA, under 40 CFR part 63, subpart DD promulgated National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations (hereinafter referred to as the "OSWRO NESHAP") on July 1, 1996 (see 61 FR 34140). The OSWRO NESHAP establishes standards

to control HAP emissions from certain waste management and recovery operations that are not subject to Federal air standards under other subparts in 40 CFR parts 61 or 63. Subpart DD specifies the rule's applicability, standards for affected sources, compliance requirements, and reporting and recordkeeping provisions. In addition, subpart DD cross-references other subparts in 40 CFR part 63 for the specific air emissions control requirements to be used for affected tanks, surface impoundments, containers, individual drain systems, and oil-water and organic-water separators. The cross-referenced subparts are Subpart OO—National Emission Standards for Tanks—Level 1, Subpart PP—National Emission Standards for Containers, Subpart QQ— National Emission Standards for Surface Impoundments, Subpart RR—National **Emission Standards for Individual Drain** Systems, and Subpart VV-National **Emission Standards for Oil-Water** Separators and Organic-Water Separators.

Since the promulgation of the OSWRO NESHAP, the EPA has received many inquiries asking for the Agency's interpretation of specific provisions of the rule. In addition, the Chemical Manufacturers Association (CMA), the **Environmental Technology Council** (ETC), and the Hazardous Waste Management Association (HWMA) petitioned for judicial review of the final rule, as provided for in CAA section 307(b), with respect to certain provisions regarding rule applicability, definitions, process vent standards, test methods, and inspection and monitoring requirements.

To resolve issues and questions raised after promulgation of the final rule, the EPA decided that technical amendments to subparts DD, OO, PP, QQ, RR, and VV in 40 CFR part 63 are appropriate and to use a direct final rulemaking action to promulgate these amendments. Also, as part of this action, the EPA is amending other rule language to correct technical omissions; to make specific requirements consistent and up-to-date with recent EPA decisions made for other related air rules; and to correct terminology, typographical, printing, and grammatical errors. The amendments do not significantly change the EPA's original projections for the rule's compliance costs, environmental benefits, burden on industry, or the number of affected facilities.

The EPA is publishing these amendments to subparts DD, OO, PP, QQ, RR, and VV in 40 CFR part 63 without prior proposal, because we

view the amendments to be noncontroversial and anticipate no adverse comment. The amendments do not change the substantive requirements of the rule. However, in the "Proposed Rules" section of today's Federal **Register** publication, we are publishing a separate document that will serve as the proposal of the identical amendments to these subparts if adverse comments are filed. The amendments will be effective 60 days from today's date without further notice, unless we receive adverse comment by the date specified in the DATES section at the beginning of this document. If the EPA receives adverse comment on these amendments, we will publish a timely withdrawal in the Federal Register informing the public that the amendments will not take effect. We will address the comments in a subsequent final rule based on the proposed rule. We will not institute a second comment period for these amendments. Any parties interested in commenting on the amendments must do so at this time (see ADDRESSES section at the beginning of this document).

III. Amendments to Subpart DD— National Emission Standards for Off-Site Waste and Recovery Operations

The EPA is amending 40 CFR part 63, subpart DD, to clarify the Agency's intent for applying and implementing specific rule requirements and to correct unintentional omissions and editorial errors. Also, we are amending the OSWRO NESHAP to make the applicable provisions of the rule consistent (to the extent permissible and practicable under the CAA) with a related set of air standards for hazardous waste treatment, storage, and disposal facilities (TSDF) established under the Resource Conservation Recovery Act (RCRA) in 40 CFR part 264, subpart CC and 40 CFR part 265, subpart CC. A summary of amendments to 40 CFR part 63, subpart DD, and the rationale for the amendments is presented below.

A. Applicability

The EPA is amending § 63.680 to clarify which types of materials received at a plant site are "off-site materials" and to clarify the designation of the affected sources at a plant site subject to the rule as discussed below. In addition, the EPA is extending the compliance date by 7 months to February 1, 2000. We believe this is appropriate to allow affected sources time to comply with today's amended rule.

1. "Off-Site Material"

The OSWRO NESHAP applies to those plant sites that are a "major source" as defined in 40 CFR 63.2 and receive "off-site material" as specified in subpart DD. For implementing the OSWRO NESHAP, a material is an "off-site material" if the material meets all three of the criteria specified in § 63.680(b)(1). To clarify that a given material must meet all three criteria to be considered an "off-site material," the wording in § 63.680(b)(1)(ii) and (b)(1)(iii) is revised by replacing the word "material" with the phrase "waste, used oil, or used solvent."

Section 63.680(b)(2) lists specific categories of wastes that are not considered "off-site material" regardless if the waste contains HAP or is received from an off-site location. The rule language is amended to clarify the compliance liability of an owner or operator potentially subject to the OSWRO NESHAP but receiving a waste that is exempted from the rule because it is already complying with air emission control requirements under the National Emission Standards for Benzene Waste Operations (40 CFR part 61, subpart FF) or the National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry under 40 CFR part 63 (the HON). Section 63.680(b)(2)(v) is revised to clarify that a waste is not an "off-site material" under the OSWRO NESHAP when it is transferred from a chemical manufacturing plant or other facility subject to the HON provisions for wastewater under 40 CFR part 63, subpart G (i.e., § 63.132 through 63.147), and the owner or operator of the facility from which the waste is transferred complies with the HON provisions in § 63.132(g). Similarly, § 63.680(b)(2)(vi) is revised to clarify that a waste is not an "off-site material" under the OSWRO NESHAP when it is transferred from a chemical manufacturing plant, petroleum refinery, or coke by-product recovery plant subject to 40 CFR part 61, subpart FF, and the owner or operator of the facility from which the waste is transferred complies with the provisions of § 61.342(f) of the Benzene Waste Operations NESHAP.

Finally, the list of wastes not considered off-site material under the OSWRO NESHAP is amended by adding another waste category under \$ 63.680(b)(2)(viii). This category is RCRA hazardous waste stored for 10 days or less at a transfer facility and in compliance with the provisions for hazardous waste transporters in 40 CFR part 263. When the EPA was developing

the OSWRO NESHAP, the Agency did not intend that subpart DD be applicable to those waste management operations that serve to consolidate multiple, small hazardous waste shipments into a single, larger load which then can be more efficiently delivered to the final destination for the waste. For example, a hazardous waste transporter may use a fleet of trucks to pickup small shipments of hazardous waste from many different waste generators; deliver these shipments to an interim transfer facility where the small shipments are unloaded; store the waste in the shipping containers at the transporter's facility for a short period (10 days or less); and then, when a sufficient quantity of waste has been collected, consolidate the containers as a single load on another truck or railcar for shipment of the waste to the facility where the waste is to be treated or disposed.

2. Designation of Affected Sources

Section 63.680(c) is revised to clarify for a plant site subject to the OSWRO NESHAP which processes, units, and equipment are designated as affected sources under the rule. These amendments are format and editorial revisions that do not substantively change the affected sources regulated under the rule, but are made to clarify the EPA's intent and improve ease of implementing these affected source designations.

First, the designation of "off-site material management units" in § 63.680(c)(1) is revised to clarify that a given tank or container cannot be subject to both the air standards for offsite material management units (as applicable to the particular type of unit) and for process vents. Language is added to clarify that if a tank or container is equipped with a vent that serves as a process vent for one of the six treatment processes specified in the rule, then the unit is not part of the "offsite material management unit" affected source. Instead, the unit (i.e., the process vent on this unit) is subject to the standards for process vents in § 63.683(c). The standards for off-site material management units in § 63.683(b) do not apply to the unit. An example of such a case is the vent on a distillate receiver vessel serving a distillation column used for reprocessing used solvent. Although the distillate receiver vessel meets the definition for a "tank" in the rule, it is not regulated as a tank under § 63.683(b), but instead the vessel is considered part of the "process vent" affected source.

Second, the designation of "process vents" in $\S 63.680(c)(2)$ is revised to explicitly state the six types of treatment processes vented to the atmosphere that are considered "process vent" affected sources under the OSWRO NESHAP. The EPA intended the air standards for process vents under the OSWRO NESHAP to apply to the same types of processes that the Agency regulates under related RCRA air rules for process vents in 40 CFR part 264, subpart AA, and 40 CFR part 265, subpart AA. These processes are distillation processes, fractionation processes, thin-film evaporation processes, solvent extraction processes, steam stripping processes, and air stripping. The revision to § 63.680(c)(2) includes detailed descriptions for each of the six treatment process types. The description included for each type of process is consistent with the definition used by the EPA for the process under the RCRA air rules in 40 CFR part 264, subpart AA, and 40 CFR part 265, subpart AA.

Finally, the criteria designating which equipment components are subject to the equipment leak standards under the OSWRO NESHAP are moved from § 63.683(b)(3) to § 63.680(c)(3). This is a format and editorial revision to facilitate ease of understanding and implementing the rule and does not change the criteria used to designate which equipment components are subject to the leak standards under the rule.

B. Definitions

The amendments revise several existing rule definitions and add two new definitions to § 63.681. These definition changes are made in support of other amendments that the EPA has made to subpart DD to resolve applicability issues and to clarify the intent of certain standards under the rule.

The definition for a "used solvent" as used in § 63.680(b) to determine which types of materials received at a plant site are "off-site materials" is revised to mean a mixture of aliphatic hydrocarbons or a mixture of one and two ring aromatic hydrocarbons used as a solvent which because of such use is contaminated by physical or chemical impurities. This wording revision is made to clarify that only solvents considered under the rule to be an "offsite material" are those spent or otherwise contaminated solvents resulting from use by a consumer (e.g., solvents used for cleaning, degreasing, paint stripping, etc.) and subsequently returned to a facility for recycling or reprocessing.

The "process vent" definition is revised to be consistent with revisions made to § 63.680(c)(2) designating the "process vent" affected sources under the OSWRO NESHAP (see section III.A.2 of this document). Additional wording is also added to the definition for a "process vent" to clarify that for the purpose of implementing the OSWRO NESHAP, a process vent is neither a vent used as a safety device (as defined in the rule) nor an open-ended line or other vent that is subject to the rule's equipment leak control requirements in § 63.691.

A new definition is added for the term "off-site material service" for use in the revisions made to § 63.680(c)(3) designating the equipment leak affected sources under the OSWRO NESHAP (see section III.A.2 of this document). "Off-site material service" means any time when a pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, or instrumentation system contains or contacts off-site material.

The definition for "HAP" or "hazardous air pollutants" as used throughout subpart DD is clarified. The definition is revised to mean the specific organic chemical compounds, isomers, and mixtures listed in Table 1 of subpart DD. The definition for "volatile organic hazardous air pollutant concentration" (also referred to as "VOHAP concentration") is revised to clarify that the VOHAP concentration of an off-site material by definition is measured using Method 305 in 40 CFR part 63, appendix A. However, as an alternative to using Method 305, an owner or operator may determine the HAP concentration of an off-site material using any one of the alternative test methods specified in $\S 63.694(b)(2)(ii)$. When one of these alternative test methods is used to determine the speciated HAP concentration of an off-site material, the individual compound concentration may be adjusted by the corresponding f_{m305} value listed in Table 1 of subpart DD to determine an equivalent VOHAP concentration.

The definition for "point-of-treatment" is revised to clarify procedures for demonstrating compliance with the off-site material treatment standards in § 63.684. "Point-of-treatment" is revised to mean the point after the treated material exits the treatment process but before the first point downstream of the process where the organic constituents in the treated material have the potential to volatilize and be released to the atmosphere. For applying this definition to the rule, 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 safety devices.

Several definition amendments are made to clarify the requirements for air emission control equipment under § 63.693. The definition for a "control device" is revised to clarify that a control device means equipment used for recovering, removing, oxidizing, or destroying organic vapors. The definition for a "cover" is revised to clarify that a cover must provide a continuous barrier over the off-site material, and that each cover opening (e.g., access hatches, sampling ports) must be in the closed position when the opening is not in use. A new definition is added to the rule for the term "flow indicator" in conjunction with amendments to the closed-vent system standards in § 63.693(c) (see section III.G.1 of this document). A "flow indicator" means a device that indicates whether gas is flowing, or whether the valve position would allow gas to flow

in a bypass line.
Finally, the definition for a "safety device" is amended to mean a closure device (e.g., a pressure relief valve, frangible disc, fusible plug) which functions to prevent physical damage or permanent deformation to equipment by venting gases or vapors from the equipment during unsafe conditions

resulting from an unplanned, accidental, or emergency event. The EPA has made this revision to the wording of the definition to provide owner and operator flexibility in the use and location of these necessary devices. Wording changes clarify that a safety device may be used on not just the air pollution control equipment operated to comply with the rule but also on the controlled source's process and ancillary equipment. Also, instead of venting a safety device directly to the atmosphere when emergency relief is necessary, a common practice at some facilities is to vent the safety device directly to equipment designed specifically and solely to contain or control the vented gases and vapors. The EPA made a second wording change to clarify that the EPA did not intend to preclude from the control equipment operating conditions allowed under the rule, the opening of a safety device when used with additional safety

C. Standards: General

equipment.

Several revisions are made to the exemptions from air standards allowed

under the OSWRO NESHAP for "off-site material management unit" and 'process vent' affected sources. These amendments do not significantly change the HAP emission reductions and the implementation costs expected for the rule. Also, the format and organization used for the section is revised to improve the ease of understanding and applying the standards. The requirements and exemptions are grouped together by affected source type. For example, all of the requirements and exemptions applicable to off-site material management units are now found in § 63.683(b).

1. Off-Site Material Management Unit Exemptions

Amendments are made to two of the exemptions for off-site material management units in §63.683(b). First, the exemption in §63.683(b)(2)(iii) for a tank or surface impoundment used for a biological treatment process is revised to eliminate a redundant qualification condition. As originally published, to qualify for this exemption the OSWRO NESHAP required an owner or operator to demonstrate that the biological treatment process achieves two conditions: (1) an overall HAP reduction efficiency of 95 percent or more, and (2) a HAP biodegradation efficiency of 95 percent or more. Upon review of this requirement, the EPA concluded that demonstrating a HAP biodegradation efficiency of 95 percent or more also means that the process achieves an overall HAP reduction efficiency of at least 95 percent. Consequently, requiring an owner or operator electing to qualify for this exemption to perform the determination of overall HAP reduction efficiency is unnecessary. Therefore, § 63.683(b)(2)(iii) is amended by deleting the requirement to demonstrate that the process achieves a HAP reduction efficiency greater than or equal to 95 percent.

The exemption in $\S 63.683(b)(2)(iv)$ for an off-site material management unit in which RCRA hazardous waste is managed according to the applicable conditions specified by the RCRA Land Disposal Restrictions (LDR) in 40 CFR part 268, is amended. This provision is revised to clarify application of the exemption to those situations when the off-site material is a type of hazardous waste not prohibited from land disposal or is composed of a mixture of different hazardous wastes. The EPA previously addressed this question in amendments to related RCRA air rules in 40 CFR part 264, subpart CC and 40 CFR part 265, subpart CC (see 62 FR 64636, December 8, 1997). The preamble to these

amendments provides a detailed discussion of this provision, how it interacts with the RCRA LDR, and how the EPA interprets the application of this exemption in specific situations (see 62 FR 64643). The EPA is amending § 63.683(b)(2)(iv) by adopting the same rule language used for the provision in the RCRA air rules.

2. Process Vent Exemptions

Amendments for process vents in § 63.683(c) add new provisions to exempt certain vents that are part of a "process vent" affected source from the air rule standards. Three specific exemptions for process vents are provided in the amended rule. These exemptions do not significantly change the level of HAP emission reduction achieved under the OSWRO NESHAP for process vents.

The first exemption is added to be consistent with an exemption already provided in the rule for off-site material management units. A process vent is exempted from the air emission control requirements of the OSWRO NESHAP if the HAP emissions from the vent are already being controlled in compliance with the provisions specified in another subpart in 40 CFR part 61 or 40 CFR part 63.

The EPA is also adding exemptions for certain process vent streams with low flow, low HAP concentration characteristics, in response to comments received after promulgation of the rule, regarding the technical difficulty and high cost of controlling these process vent streams to achieve standards under the OSWRO NESHAP. The EPA acknowledges that, under certain circumstances, it may be technically difficult and costly to control a low flow, low HAP concentration vent stream to a level that achieves the standard for process vents specified in the rule (i.e., removal or destruction of the HAP from each individual affected process vent gas stream by 95 percent or more on a mass basis). For example, use of a thermal vapor incinerator to control a low flow, low organic HAP concentration vent stream may only achieve a 95 percent emission reduction by incurring the substantially higher equipment and operating costs required to overcome the technical limitations of enclosed combustion control devices. Other conventional air emission control devices commonly used at existing OSWRO sources (e.g., carbon adsorbers, condensers, catalytic vapor incinerators) also have technological constraints relative to controlling low flow, low concentration vent streams. Consequently, the level of potential HAP emission reduction that can be

achieved for the low flow, low organic HAP concentration vent streams typically emitted from processes regulated by the OSWRO NESHAP is limited, in practical terms, by the technical limitations of conventional air pollution control devices and the costs to overcome these limitations.

The EPA reconsidered the potential HAP emission reduction levels achievable when conventional air emission control devices are applied to low flow, low organic HAP concentration vent streams from OSWRO processes. The EPA decided that it is reasonable and appropriate to exempt from the air emission control requirements under the OSWRO NESHAP those process vent streams for which the potential for HAP emission reduction is small and the application of conventional air emission control devices is not practical.

To exempt very low flow rate vent streams, the EPA selected an approach consistent with the approach the Agency has used for other NESHAP to exempt these types of process vent streams. A process vent is exempted from the air emission control requirements of the OSWRO NESHAP if the owner or operator determines the process vent stream flow rate to be less than 0.005 standard cubic meters per minute. Considering the range of the vent stream organic HAP concentrations typically emitted from the types of processes regulated by the OSWRO NESHAP, the potential HAP emission reductions achieved by controlling process vent streams below this flow rate cutoff value are extremely low regardless of the organic HAP concentration level

The EPA decided that it is not appropriate to exempt OSWRO process vent streams with flow rates greater than 0.005 standard cubic meters per minute independent of considering the organic HAP concentration of the vent stream. Even though a given process vent stream has a low organic HAP concentration, the level of total organic HAP emissions to the atmosphere can still be substantial if the gas stream volume emitted is moderately high. Considering the organic HAP concentration of process vent streams for OSWRO sources, the EPA concluded that requiring control of those process vent streams having both a flow rate below 6.0 standard cubic meters per minute and a total organic HAP concentration less than 20 parts per million by volume (ppmv) does not provide sufficient HAP emission reductions from these sources to justify the substantial compliance costs for the OSWRO facility owner and operator. Therefore, the EPA is

amending the OSWRO NESHAP to exempt those affected process vent streams having a flow rate less than 6.0 standard cubic meters per minute and a total HAP concentration in the vent stream less than 20 ppmv. This process vent exemption requires that both the process vent flow rate and the organic HAP concentration criteria be met to qualify for the exemption.

D. Standards: Off-Site Material Treatment

Use of air emission controls for an affected off-site material management unit or process vent is not required under the OSWRO NESHAP if the HAP contained in the off-site material is removed or destroyed before placing the material in the affected unit. To comply with this provision, the rule provides alternative treatment standards in \$63.684. Revisions are made to several of the alternative treatment standards allowed under the rule. These amendments do not significantly change the HAP emission reductions and the implementation costs expected for the rule.

Some facility owners and operators misinterpreted the VOHAP concentration treatment alternative under § 63.684(b)(1)(ii), as published in the July 1996 version of the rule, to apply only to off-site material streams with a VOHAP concentration less than 500 parts per million by weight (ppmw), and that the EPA was requiring treatment of these low HAP streams contrary to the general standards stated in § 63.683. This is not the EPA's intent, and the rule language is amended to clarify that this alternative is used for the situation where the off-site material entering a treatment process is composed of a mixture of off-site material streams having an average VOHAP concentration greater than 500 ppmw with off-site material streams having an average VOHAP concentration less than 500 ppmw.

The HAP efficiency treatment alternative in § 63.684(b)(3) is amended to clarify that this treatment alternative is not applicable to a biological degradation process conducted in open tanks or surface impoundments (for open biodegradation processes an owner or operator may comply with $\S 63.684(b)(4)$). Demonstrating an overall HAP reduction efficiency for a treatment process that is open to the atmosphere does not ensure that the HAP in the offsite material is actually destroyed or removed. A portion or all of the volatile organic HAP constituents present when the off-site material enters the process may volatilize directly to the atmosphere from the exposed surface of

the material in an open tank or surface impoundment before this material finally exits the process.

Also in $\S 63.684(b)(3)$, a correction is made to the value of the HAP removal efficiency performance level required in circumstances where the off-site material stream entering the treatment process has an average VOHAP concentration equal to or greater than 10,000 ppmw at the point-of-delivery. The value for HAP removal efficiency performance level is corrected to read 99 percent (not 95 percent as published in July 1996). A treatment process can only meet the second condition of the standard that requires the average VOHAP concentration of the off-site material at the point-of-treatment to be less than 100 ppmw by achieving a HAP removal efficiency of at least 99 percent.

The biodegradation treatment alternative in § 63.684(b)(4) is amended to clarify that this alternative applies only to a biological degradation treatment process conducted in open tanks or surface impoundments. Also, consistent with the amendment made by the EPA to the exemption in § 63.683(b)(2)(iii) for a tank or surface impoundment used for biological treatment (see section III.B.1 of this document), $\S 63.684(b)(4)(i)$ is revised to eliminate the redundant condition requiring determination of the overall HAP reduction efficiency for the biodegradation process.

Provisions are added in § 63.684(e)(4) requiring the owner or operator to establish and implement a procedure to monitor appropriate parameters that demonstrate proper operation of a biological treatment unit according to the evaluation required in § 63.694(h). Under this requirement, the owner or operator must list the operating parameters monitored and state the frequency of monitoring to ensure that the biological treatment unit is operating between the minimum and maximum operating parameter values to establish that the unit is continuously achieving the relevant performance requirement.

E. Standards: Tanks

The standards for a tank required under § 63.685(b)(1) to use Tank Level 1 controls are amended to provide two alternatives for complying with the rule. First, an alternative is added to the rule (see § 63.685(c)(2)(ii)) to explicitly clarify that the owner or operator of the tank may instead choose to use the more stringent Tank Level 2 controls to comply with the rule. The EPA's intent is that an owner or operator may select a more stringent control level than the minimum control requirement. Second,

an alternative is added to the rule (see $\S63.685(c)(2)(iii)$) for the special circumstance when a tank is used as an interim transfer point to transfer off-site material from containers to another offsite material management unit. An example of such a tank is an in-ground tank into which organic-contaminated debris is dumped from roll-off boxes or dump trucks, and then this debris is promptly transferred from the tank to a macroencapsulation unit by a backhoe. This alternative allows the cover to be removed during those periods of time when the material transfer activity is occurring. At all other times, air emissions from the tank must be controlled in accordance with the provisions specified in 40 CFR part 63, subpart OO—National Emission Standards for Tanks—Level 1. The EPA previously included provisions for these types of tanks in the related air rules for waste management units under the RCRA subpart CC air rules in 40 CFR parts 264 and 265 (see docket A-92-16, document VI–B–2).

The standards in § 63.685(b)(4) for a tank that manages off-site material having a maximum HAP vapor pressure that is equal to or greater than 76.6 kilopascals (kPa) are amended to provide two additional compliance alternatives. These additional compliance alternatives are using either (1) a pressure tank, or (2) a tank located inside an enclosure vented through a closed vent system to an enclosed combustion device. These two additional control alternatives provide a level of HAP emission control equivalent to the original control requirement (i.e., venting the tank directly to a control device), while at the same time providing greater compliance flexibility to the owners and operators subject to the rule.

The requirements in § 63.685(h) for owners and operators electing to use the Tank Level 2 control alternative of a pressure tank are amended to allow the purging of inert materials from the pressure tank. Inert material purging is a short duration maintenance procedure required by good engineering practice to ensure proper operation of this type of tank system.

The requirements in § 63.685(i) for owners and operators electing to use the Tank Level 2 control alternative of an enclosure vented to an enclosed combustion control device are amended to add a provision allowing a safety device to open anytime conditions require it to do so to avoid an unsafe condition. The EPA included this safety provision for all of the other tank control alternatives under the OSWRO NESHAP, but the provision

inadvertently was not included in the regulatory language for this Tank Level 2 control alternative when the final rule was published in July 1996.

F. Standards: Process Vents

The air emission control requirements for process vents in § 63.690(b) are amended to clarify that for the purpose of complying with this standard, the EPA considers a primary condenser associated with an affected process to be part of the process and not the air emission control device. The primary condenser is a condenser for which the predominant function is the recovery or capture of solvents or other organics for use, reuse, or sale. The EPA considers a secondary condenser or other organic recovery device that is operated downstream of the primary condenser to be a control device for the purpose of complying with the OSWRO NESHAP.

G. Standards: Closed-Vent Systems and Control Devices

Amendments to the standards for closed-vent systems and control devices in § 63.693 correct technical omissions, update specific requirements consistent with recent decisions made by the EPA for other NESHAP, and correct terminology, typographical, printing, and grammatical errors. These amendments do not significantly change the HAP emission reductions and implementation costs expected for the rule.

1. Closed-Vent System Requirements

The inspecting and monitoring requirements for a closed-vent system in § 63.693(b)(5) are amended to add an alternative procedure. This alternative allows an owner or operator to inspect and monitor the closed-vent system according to the procedure specified in 40 CFR part 63, subpart H-National **Emission Standards for Organic** Hazardous Air Pollutants for Equipment Leaks (specifically the procedure in § 63.172(f) through (h)). Although some details of the subpart H procedure vary from the procedure already specified in the OSWRO NESHAP, both procedures achieve the same overall result of ensuring that the closed-vent system continues to operate properly after its initial installation and testing. This amendment allows those owners and operators who are already inspecting and monitoring other closed-vent systems at their facility using the subpart H procedure to comply with another NESHAP allowing the flexibility to use a common procedure for all of the affected closed-vent systems at the facility.

Section 63.693(c) is amended to update the requirements for those situations when a closed-vent system bypass device is installed to be consistent with other recently promulgated NESHAP. The revised language does not significantly change the technical requirements but does clarify the requirements for an owner or operator choosing to use a flow indicator to comply with the provision. The rule requires that this device merely indicate the presence of gas flow through the bypass line or duct. The device does not need to measure or quantify the flow rate (although a flow measurement device can be used to comply with this provision of the rule if an owner or operator chooses to do

2. General Control Device Requirements

The requirements in $\S 63.693(b)(8)$ for using a design analysis to demonstrate that a given control device achieves the applicable performance requirements of the rule are amended. If the design analysis prepared by the owner or operator is determined by the Administrator to be incomplete or deficient, the amended rule allows the Administrator to first request that the design analysis be revised or amended by the owner or operator to correct the deficiencies identified by the Administrator. If the owner or operator and the Administrator still do not agree on the acceptability of using this revised design analysis to demonstrate that the control device achieves the applicable performance requirements, then the disagreement is to be resolved using the results of a performance test conducted by the owner or operator.

3. Carbon Adsorption System Requirements

The monitoring requirements in § 63.693(d)(3) for carbon adsorption control devices are amended to clarify the requirements. Section 63.693(d)(3)(i) is amended to clarify that owners and operators choosing this monitoring alternative for regenerative-type carbon adsorption systems must monitor both total regeneration stream mass flow and the carbon bed temperature. Section 63.693(d)(3)(ii) is amended to add a requirement that the daily average concentration level of organic compounds in the exhaust stream from the control device must be monitored. The EPA considers an averaging time to be necessary to properly determine compliance.

The spent carbon management requirements in § 63.693(d)(4) are amended to add two more alternatives. The amendments add the alternatives of

using: (1) a thermal treatment unit using air emission controls according to the control device standards under the OSWRO NESHAP, or (2) a thermal treatment unit using organic air emission controls according to another NESHAP in 40 CFR part 61 or 40 CFR part 63. These changes make this requirement consistent with other air rules that affect similar waste management sources (see section 264.1088(c)(3)(ii) and section 265.1089(c)(3)(ii)).

4. Condenser Requirements

The monitoring requirements in $\S 63.693(e)(3)$ for condenser control devices are amended to clarify the requirements. Section 63.693(e)(3)(i) and (ii) are amended to require monitoring of either the daily average exhaust gas temperature or the daily average concentration level of organic compounds in the exhaust stream. The EPA considers monitoring one of these parameters to be necessary to properly determine compliance.

5. Vapor Incinerator Requirements

The monitoring requirements in § 63.693(f) for vapor incinerators are amended to add a requirement that owners and operators measure and record the daily average of the particular parameter being monitored (i.e., temperature or concentration). The EPA considers monitoring these parameters to be necessary to properly determine compliance.

6. Boiler and Process Heater Requirements

The monitoring requirements in § 63.693(g) for boilers and process heaters are amended to include provisions requiring that the monitoring systems for boilers and process heaters used as control devices measure and record the daily average of the particular parameter being monitored (i.e., temperature or concentration). The provision of a daily averaging time for control device monitoring parameters is necessary to properly determine compliance.

7. Flare Requirements

The requirements in § 63.693(h) for flares are amended to clarify the compliance demonstration and monitoring procedures to be used for a flare. Section 63.693(h)(2) is added to the rule to specify the procedure an owner or operator must use to demonstrate that the flare achieves the requirements in 40 CFR 63.11(b). This amendment is added because the cross-reference to the General Provisions in 40 CFR part 63, subpart A, as specified in

the version of the final rule published in July 1996, does not explain the specific flare compliance demonstration procedure that an owner or operator is to use for the OSWRO NESHAP.

The flare monitoring requirements are now specified in § 63.693(h)(3) and are amended to require that the owner or operator record for each 1-hour period whether the required pilot flame monitor was continuously operating and whether a flame was present during each hour as required. This change is made to add an averaging time.

H. Testing Methods and Procedures

Alternative Methods for Determination of Average VOHAP Concentration

The EPA is adding three more alternative methods in §63.694(b)(ii) that an owner or operator may choose to determine the average HAP concentration of an off-site material. The methods added are Method 625 in 40 CFR part 136, appendix A, and Method 8260 and Method 8270 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846, Third Edition, September 1986, as amended by Update I, November 15, 1992 (or any more recent, updated version of these methods approved by the EPA). The EPA developed these methods for use in implementing rules under the Clean Water Act and RCRA, respectively. The methods measure the concentration of organic pollutants in municipal and industrial wastewaters. Commenters suggested that these methods are also applicable to the OSWRO NESHAP for the determination of off-site material HAP concentration. After review of the methods, the EPA decided that using the three methods for direct measurement of the HAP concentration of certain off-site material is reasonable and adding them to the OSWRO NESHAP is appropriate. The EPA believes that with the addition of these methods, the rule now provides a range of alternatives for determining the HAP concentration of an off-site material such that every owner and operator of facilities subject to the OSWRO NESHAP have available practical and inexpensive VOHAP determination

It is important to note that for each of the alternative methods allowed under § 63.694(b)(ii) (i.e., the listed methods other than Methods 305 and 25D), there is a published list of chemical compounds that the EPA considers the method appropriate to measure. An owner or operator may only use an alternative method to measure

compounds that are on the list associated with that method, unless the specified validation procedures are also performed. Furthermore, for a VOHAP concentration determination, the owner or operator must evaluate the total mass of HAP compounds in an off-site material (i.e., all compounds listed in Table 1 of subpart DD). Therefore, the owner or operator is responsible for determining that the analytical method used for a VOHAP concentration determination is sufficient to evaluate all of the applicable organic compounds contained in the off-site material. If an owner or operator chooses to use an alternative to Method 305 to analyze an off-site material that contains unknown compounds or many different compounds, performing "screening" analyses may first be necessary to verify that the alternative method chosen is, in fact, appropriate to evaluate all the necessary compounds.

The alternative test methods measure the total concentration of the HAP constituents listed in Table 1 of subpart DD. The VOHAP concentration of an off-site material by definition is the fraction by weight of those compounds listed in Table 1 as measured using Method 305. Owners and operators may choose to "correct" the HAP values measured by an alternative method to equate to the VOHAP values that would be measured using Method 305. This correction is made by multiplying the total concentration measured values times the appropriate "f_{m305} factor" listed in Table 1 of subpart DD to obtain the Method 305 VOHAP concentration equivalent.

Method 625 is appropriate for determining the HAP concentration of an off-site material provided that the corrections for the measured compounds in Table 7 of the method are made. Methods 8260 and 8270 are also considered appropriate provided that formal quality assurance procedures are established, followed, and recorded to address those elements of the methods considered relevant for measuring the actual concentration of organic compounds. The quality assurance program must address procedures to minimize the loss of compounds due to volatilization, biodegradation, reaction, or sorption during the sample collection, storage, and preparation steps, as well as addressing the overall accuracy and precision of the specific method used.

None of the alternative methods specify sample collection and handling procedures considered adequate by the EPA to minimize the volatilization of organics from the sample before analysis. Therefore, to ensure that a

representative sample of an off-site material is analyzed, an owner or operator that chooses to use either Method 624, 625, 1624, 1625, 8260, or 8270 for the OSWRO NESHAP is required to develop and follow a written sampling plan. This plan describes a step-by-step procedure for collecting representative samples of the off-site materials such that material integrity is maintained and minimal loss of organics from the sample occurs throughout the collection and analysis process. An example of an acceptable sampling plan is one that incorporates sample collection and sample handling procedures similar to those specified in Method 25D. The sampling plan is to be maintained on-site in the facility records.

The provisions in § 63.694(c)(ii) listing the alternative methods for determining the average VOHAP concentration of an off-site material at the point-of-treatment are revised and simplified to cross-reference all of the methods allowed under § 63.694(b)(ii).

2. Equation Corrections

The equation in § 63.694(b)(2)(iii) used for calculating the average VOHAP concentration of an off-site material is amended to correct the rule citation used to define the term "C_i." The correct citation is § 63.694. The same correction is made for the terms "C_i" in the equation in § 63.694(c)(3), "y" and "C_y" in the equation in § 63.694(e)(4), and "Q_{bj}" and "C_{bl}" in the equation in § 63.694(g)(4).

The equation in $\S 63.694(c)(3)$ used for calculating the average VOHAP concentration on a mass-weighted basis is corrected to clarify the inputs to the equation. In the equation, the value for Q_t is the sum of the Q_i 's used in the equation. This value represents the sum or total off-site material quantity used to characterize the off-site material over the averaging period. Each VOHAP concentration determination must have a corresponding off-site material quantity that represents the amount of material generated or received over the averaging period used to determine the VOHAP concentration value. To calculate a mass-weighted average VOHAP concentration over the averaging period, multiply each VOHAP concentration by the quantity of material it represents and then divide by the total quantity of material (i.e., the sum of the individual off-site material quantities).

3. Procedure for Determination of No Detectable Emissions

Several amendments are made to the procedure for determination of no

detectable emissions in § 63.694(k). As discussed in the appropriate later sections of this document, the same changes are made to the procedure as specified in 40 CFR part 63, subparts OO, PP, QQ, and VV.

The procedure is amended to allow either methane or n-hexane to be used as the calibration gas for the detection instrument. It is the EPA's intent that the calibration procedure be consistent with the procedure as applied to related air rules (e.g., see the equipment leak test methods and procedures at sections 264.1063 and 265.1063). Therefore, the requirement for calibration gases in § 63.694(k)(4) is amended to provide the owner or operator the choice of using methane or n-hexane as allowed under these other rules.

Section 63.694(k)(6) is amended to allow an owner or operator the option of choosing to adjust or not adjust the detection instrument readings to account for the background organic concentration level. Frequently at a source, the maximum organic concentration value measured by the detection instrument is well below the organic concentration value that defines "no detectable emissions." In this case, requiring an ambient background correction is an unnecessary step. Thus, the EPA decided that it is reasonable and appropriate for the correction of the measured value for the ambient background level to be an option used at the owner's or operator's discretion. If an owner or operator chooses to adjust the instrument readings for the background level, the background level value must be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.

Finally, the procedure is amended to add provisions for determination of no detectable emissions from a seal used around a rotating shaft that passes through a cover opening. In this case, if the arithmetic difference between the maximum organic concentration indicated by the instrument and the background level is less than 10,000 ppmv, then the potential leak interface is determined to operate with no detectable organic emissions. This addition is made for consistency with other related EPA air rules regarding the determination of no detectable emissions.

4. Determination of Process Vent Stream Flow Rate and Total HAP Concentration

A new § 63.694(m) is added to subpart DD specifying the testing methods and procedures that an owner or operator must follow to determine a process vent stream flow rate and total organic HAP concentration. These new requirements

are added to the rule to support the amendments to § 63.683(b) adding exemptions for process vents based on the vent stream flow rate and total organic HAP concentration (see section III.F of this document). The procedures and test methods added to the rule for these determinations are the EPA reference methods in appendix A of 40 CFR part 60 for measuring gas stream flow rates and organic concentrations.

I. Inspection and Monitoring Requirements

Section 63.695 is amended to consolidate the inspection and monitoring requirements under subpart DD in this section, update the control device monitoring requirements to be consistent with recent decisions made by the EPA for compliance assurance monitoring of sources subject to using air emission controls under a NESHAP, and to make minor technical modifications. The amendments do not significantly change the estimated inspection and monitoring costs for the rule.

The inspection requirements for covers, closed-vent systems, and transfer systems in § 63.695 are amended to make allowances for units or equipment that an owner or operator determines to be unsafe to inspect on an annual interval. The rule requires that the owner or operator perform an initial inspection of the control equipment used to comply with the rule, and follow-up inspections at least once per calendar year. A new paragraph under § 63.695(f) is added to the rule that provides that following the initial inspection of an air pollution control device, an owner or operator may perform subsequent inspections at intervals longer than 1 year when the owner or operator determines that performing the applicable inspection and monitoring procedures would expose a worker to dangerous. hazardous, or otherwise unsafe conditions. In such a case, the owner or operator is required to: (1) Prepare written documentation that explains the reasons why the equipment is unsafe to inspect or monitor on an annual basis; and (2) develop and implement a written plan and schedule to inspect and monitor the air pollution control equipment using the applicable procedures specified in this section during times when a worker can safely access the air pollution control equipment. The required inspections and monitoring must be performed as frequently as practicable but do not need to be performed more frequently than the periodic schedule that would otherwise be applicable to the air

pollution control equipment under the provisions of the rule. For example, when the rule requires a cover to be inspected at least once per calendar year, inspection of a cover designated as "unsafe to inspect" need not be performed more frequently than once during a calendar year if during that year unscheduled process shutdowns or other unexpected events create multiple times when a worker could safely access the cover.

A provision is added to the inspection requirements in § 63.695(b)(1) for tanks and in § 63.695(d)(1) for transfer systems to clarify that in the case where a tank or transfer system is buried partially or entirely underground, inspection is required only for those portions of the equipment and those connections to the equipment (such as fill ports, access hatched, or gauge wells) that extend to or above the ground surface and can be opened to the atmosphere. It was not the EPA's intent that those portions of the tank or transfer system that are located below ground and, consequently, not easily accessible, be inspected annually. The EPA previously included this provision in other related air rules for waste management units (e.g., the RCRA subpart CC air rules in 40 CFR parts 264 and 265).

The control device monitoring requirements under the rule are revised and updated to be consistent with the EPA's application of compliance assurance monitoring to sources under a NESHAP. A new § 63.695(e) is added to consolidate the control device monitoring requirements. This section establishes the technical specifications for continuous monitoring of control device operating parameters; establishes the criteria for calculating the daily average value for each monitored operating parameter; incorporates a requirement that the owner or operator establish appropriate operating parameter limits for the range of conditions at which the control device must be operated to continuously achieve the applicable performance requirements; and defines the conditions under which an excursion for a given control device is determined to have occurred based on the monitoring data results.

The EPA considers an excursion to be a failure to achieve the applicable standards due to improper operation of the control device. The rule allows one excused excursion for a control device per semiannual period for any reason. Should any additional excursions occur during this period (other than those that occur during the specific conditions listed in § 63.695(e)(6)(i)), each of these

additional excursions is a violation of the standard. Conditions under which an excursion of the operating parameter limit is not a violation of the standard are: (1) periods of startup, shutdown, and malfunction if during the period the affected unit or facility is operated according to the facility's startup, shutdown, and malfunction plan; and (2) periods of non-operation of the unit or process that is vented to the control device that result in cessation of HAP emissions to which the monitoring applies.

J. Notification and Reporting Requirements

The notification requirements in § 63.697(a) are amended to allow owners and operators of existing sources subject to the amended OSWRO NESHAP, to file an initial notification (as required in §63.9(b)) on or before 30 days after the date that today's amendments become effective. This provision is added to the rule in recognition by the EPA that, as a result of the clarifying amendments made by today's direct final rulemaking, there may be some facility owners and operators who now understand, for the first time, that their facility is subject to the OSWRO NESHAP.

The reporting requirements in § 63.697(b)(4) are amended by adding language to clarify the type of information the owner or operator should include in the semiannual report regarding control device excursions. The semiannual report must include a description of all excursions, as defined in the subpart, that have occurred during the 6-month reporting period. This includes excursions caused when the daily average value of a monitored operating parameter is outside the established operating parameter limit as well as excursions caused by a lack of adequate monitoring data.

K. HAP List for Subpart DD

Table 1 in subpart DD lists the specific organic chemical compounds, isomers, and mixtures that are HAP for the purpose of implementing the requirements of OSWRO NESHAP. Two changes are made to this table. First, the listing for the compound, 1,1-dimethyl hydrazine, is deleted from Table 1. As discussed in the preamble for the final rule (see 61 FR 34140), 1,1-dimethyl hydrazine was one of the specific compounds that EPA decided to delete from its proposed HAP list for this rulemaking because of the low potential for the compound to be emitted from the type of waste management and recovery operations subject to the rule. This compound inadvertently was not

deleted from the version of Table 1 published in July 1996.

Table 1 also is amended to clarify that for the glycol ethers chemical group listing in the table, only those glycol ethers that have a Henry's Law constant value equal to or greater than 0.1 Y/X (1.8 x 10-6 atm/gm-mole/m3) at 25 °C must be included in the determination of the VOHAP concentration. The group of glycol ether chemicals contains a large number of compounds that have Henry's Law constant values both above and below this cutoff value. Therefore, rather than attempt to list the specific glycol ether compounds in the table and potentially omit a given glycol ether HAP, the criteria for identifying which glycol ether compounds must be included in the VOHAP determination was added to the rule.

IV. Amendments to Subpart OO— National Emission Standards for Tanks—Level 1

The EPA is amending 40 CFR part 63, subpart OO, to clarify several specific rule requirements, to correct minor typographical and terminology errors, and to make the provisions of subpart OO consistent with the technical amendments made to 40 CFR part 63, subpart DD, where applicable. The amendments to 40 CFR part 63, subpart OO, are summarized below.

A. Definitions

The definition for a "safety device" specified in § 63.901 is amended to incorporate the same changes made to the definition for a "safety device" for 40 CFR part 63, subpart DD, in § 63.681. These changes are discussed in section III.B of this document.

B. Standards—Tank Fixed Roof

The standards for fixed roof tanks in § 63.902 are amended with additional language to clarify the EPA's intent for compliance with two specific provisions. First, § 63.902(a) is amended to specifically state that the standards under this section do not apply to a fixed roof tank that is also equipped with an internal floating roof. Second, § 63.902(b) is amended with additional language to specifically state that a facility owner or operator is allowed to install a closure device on a tank manifold system or header vent when a series of tanks have their vents (i.e., tank openings) connected to a common header. This amendment makes EPA's application of the fixed roof standards to a tank connected to a manifold system consistent with other air rules that affect similar waste management sources (see 62 FR 64648, December 8, 1997).

C. Test Methods and Procedures

The procedure for determination of no detectable organic emissions specified in § 63.905 is amended to incorporate the same revisions and additions made to the procedure for 40 CFR part 63, subpart DD, in § 63.694(k). The specific amendments are discussed in section III.G of this document.

D. Inspection and Monitoring Requirements

The inspection and monitoring provisions for owners and operators that use a tank equipped with a fixed roof is amended by adding a new paragraph (d) to § 63.906 which allows alternative inspection intervals longer than 1 year when an owner or operator determines that performing a required inspection or monitoring procedures would expose a worker to dangerous, hazardous, or otherwise unsafe conditions. The alternative inspection interval provision is the same as that for 40 CFR part 63, subpart DD, in § 63.695(f). The alternative inspection interval provision and related compliance requirements are discussed in section III.I of this document.

V. Amendments to Subpart PP— National Emission Standards for Containers

The EPA is amending 40 CFR part 63, subpart PP, to clarify several definitions, to correct minor typographical and terminology errors, and to make the provisions of subpart PP consistent with the technical amendments made to 40 CFR part 63, subpart DD, where applicable. The amendments to 40 CFR part 63, subpart PP, are summarized below.

A. Definitions

Two of the definitions in §63.921 are revised to clarify the EPA's intent in applying each definition to provisions in the rule. The definition for an "empty container" is revised to remove redundant language regarding a container that meets the definition of an "empty container" used for implementing RCRA hazardous waste rules (see 40 CFR 261.7(b)). The definition for a "safety device" is amended to incorporate the same revision made to the definition for a "safety device" for 40 CFR part 63, subpart DD, in § 63.681. This change is discussed in section III.B of this document.

B. Test Methods and Procedures

The procedure for determination of no detectable organic emissions specified in § 63.925 is amended to incorporate the same revisions and additions made

to the procedure for 40 CFR part 63, subpart DD, in § 63.694(k). The specific amendments are discussed in section III.G of this document.

C. Inspection and Monitoring Requirements

The EPA has received questions regarding the implementation of the inspection requirements for containers using either Container Level 1 or Container Level 2 controls as specified under the rule. The EPA is amending several provisions in § 63.926 to clarify which containers are required to be inspected and when these inspections need to be performed.

The regulatory language in § 63.926(a)(1) is amended to clarify when the initial inspection must be performed for a container that already contains a regulated material when it is delivered to a facility. A visual inspection is required when the owner or operator first accepts possession of the container at the facility site if the container is not emptied (i.e., does not meet the conditions for an "empty container" as defined in the rule) within 24 hours after the container has been accepted at the facility site.

For a container that is delivered to an affected facility containing a regulated material but is not emptied within the allowed 24-hour period, the container must be inspected according to the requirements of the rule by the calendar day on which the facility owner or operator accepts possession of the container. For the purpose of compliance with subpart PP, this date of acceptance is the date of signature by the facility owner or operator on the manifest or shipping papers accompanying the container. It is allowable under subpart PP to have a party other than the owner or operator of the affected facility perform the inspection prior to the acceptance date. For example, if an owner or operator of an affected facility accepts a shipment of containers that arrives at the facility on a truck, it is allowable under the rule to have the shipper or transporter perform the visual inspection of the individual containers before or during loading of the containers onto the truck for transport to the affected facility. In this case, the party performing the inspections (e.g., the container shipper or transporter) needs to provide the owner or operator of the recipient facility with written documentation to verify that the containers have been inspected in accordance with the requirements of § 63.926. Regardless of who performs the inspections, it is ultimately the responsibility of the owner or operator of the affected facility

to ensure that the inspections have been performed in compliance with all of the applicable requirements under subpart pp

Section 63.926(a)(2) is amended to clarify the conditions under which additional visual inspections must be conducted for those containers, using either Container Level 1 or Container Level 2 controls that remain at the facility for more than 1 year. When a container, filled or partially filled with regulated-material, remains unopened at the facility site for a period of 1 year or more, the container and its cover and closure devices must be visually inspected by the owner or operator initially, and thereafter, at least once every calendar year.

Section 63.926(a)(3) is amended to provide additional compliance alternatives to owners and operators for those situations when a defective container is found during an inspection. The rule is amended to allow the owner or operator the alternatives of either emptying the regulated-material from the defective container or repairing the defective container. If the owner or operator elects to empty the regulated material from the defective container, the owner or operator must empty the defective container (i.e., meet the conditions for an "empty container" as defined in the rule) and transfer the removed material to either: (1) a container that meets the applicable standards under subpart PP; or (2) to a tank, process, or treatment unit that meets the applicable standards under a NESHAP referencing subpart PP. The defective container must be emptied no later than 5 calendar days after detection of the defect. The emptied defective container must be either repaired, destroyed, or used for purposes other than management of regulated-material. If the owner or operator elects to repair the defective container, first efforts at repair of the defect must be made no later than 24 hours after detection, and repair must be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the regulated-material must be emptied from the container and the container must not be used to manage regulatedmaterial until the defect is repaired.

VI. Amendments to Subpart QQ— National Emission Standards for Surface Impoundments

The EPA is amending 40 CFR part 63, subpart QQ, to clarify several definitions, to correct minor typographical and terminology errors, and to make the provisions of subpart

QQ consistent with the technical amendments made to 40 CFR part 63, subpart DD, where applicable. The amendments to 40 CFR part 63, subpart QQ, are summarized below.

A. Definitions

Two of the definitions in §63.941 are revised to clarify the EPA's intent in applying the definitions. The definition for a "cover" is amended by adding examples of types of surface impoundment covers (e.g., a floating membrane cover placed on the surface of the material in the surface impoundment, an air-supported structure installed over the surface impoundment). The definition for a "safety device" is amended to incorporate the same change made to the definition for a "safety device" for 40 CFR part 63, subpart DD, in § 63.681. This change is discussed in section III.B of this document.

B. Test Methods and Procedures

The procedure for determination of no detectable organic emissions specified in § 63.945 is amended to incorporate the same revisions and additions made to the procedure for 40 CFR part 63, subpart DD, in § 63.694(k). The specific amendments are discussed in section III.G of this document.

C. Inspection and Monitoring Requirements

The inspection and monitoring provisions for air pollution control equipment are amended by adding a new paragraph (d) to § 63.946 which allows alternative inspection intervals longer than 1 year when an owner or operator determines that performing a required inspection or monitoring procedure would expose a worker to dangerous, hazardous, or otherwise unsafe conditions. The alternative inspection interval provision is the same as that for 40 CFR part 63, subpart DD, in § 63.695(f). The alternative inspection interval provision and related compliance requirements are discussed in section III.I of this document.

VII. Amendments to Subpart RR— National Emission Standards for Individual Drain Systems

The EPA is amending 40 CFR part 63, subpart RR, to clarify the EPA's intent with regard to the types of wastewater streams to which air emission controls must be applied in accordance with 40 CFR part 63, subpart RR. A definition for a "regulated-material" is added to § 63.961 to mean the wastewater streams, residuals, and any other materials specified by the referencing

subpart to be managed in accordance with the standards under subpart RR. The definition is needed to clarify the EPA's intent that this rule apply to waste streams and residuals in addition to wastewater. In conjunction with this change, a change is made throughout subpart RR to replace the word "wastewater" with the term "regulated material."

VIII. Amendments to Subpart VV— National Emission Standards for Oil-Water Separators and Organic-Water Separators

The EPA is amending 40 CFR part 63, subpart VV, to add a new air emission control alternative, to clarify several specific rule requirements, to correct minor typographical and terminology errors, and to make the provisions of subpart VV consistent with the technical amendments made to 40 CFR part 63, subpart DD, where applicable. The amendments to 40 CFR part 63, subpart VV, are summarized below.

A. Definitions

The definition for a "safety device" specified in § 63.1041 is amended to incorporate the same changes made to the definition for a "safety device" for 40 CFR part 63, subpart DD, in § 63.681. These changes are discussed in section III.B of this document.

B. Standards—Pressurized Separator

A new section, § 63.1045, is added to subpart VV which allows owners and operators to control air emissions from an oil-water or organic-water separator by using a pressurized separator that is operated as a closed-system. The provision requires that the pressurized separator be designed not to vent to the atmosphere as a result of compression of the vapor headspace during operation of the separator at its design capacity. All separator openings must be equipped with closure devices designed to operate with no detectable organic emissions as determined using the procedure specified in the subpart. Whenever a regulated-material is in the separator, the separator must be operated as a closed system that does not vent to the atmosphere except under emergency and maintenance conditions specified in the rule.

C. Test Methods and Procedures

The procedure for determination of no detectable organic emissions specified in § 63.1046(a) is amended to incorporate the same revisions and additions made to the procedure for 40 CFR part 63, subpart DD, in § 63.694(k). The specific amendments are discussed in section III.G of this document.

D. Inspection and Monitoring Requirements

The inspection and monitoring provisions for owners and operators that use a tank equipped with a fixed roof is amended by adding a new paragraph (e) to § 63.1047 which allows alternative inspection intervals longer than 1 year when an owner or operator determines that performing a required inspection or monitoring procedure would expose a worker to dangerous, hazardous, or otherwise unsafe conditions. This alternative inspection interval provision is the same as that for 40 CFR part 63, subpart DD, in § 63.695(f). The alternative inspection interval provision and related compliance requirements are discussed in section III.I of this document.

IX. Administrative Requirements

A. Docket

The docket is intended to be an organized and complete file of the administrative records complied by the EPA in the development of this rulemaking. The docket is a dynamic file because material is added throughout the rulemaking development. The docketing system is intended to allow members of the public and industries involved to readily identify and locate documents so that they can effectively participate in the rulemaking process. Along with the proposed and promulgated standards and their preambles, the contents of the docket, except for certain interagency documents, will serve as the record for judicial review. (See CAA section 307(d)(7)(A).) The docket for this rulemaking containing the information considered by the EPA in development of the amendments is Docket No. A-92-16. This docket is available for public inspection between 8:00 a.m. and 5:30 p.m., Monday through Friday, except for Federal holidays, at the following address: U.S. Environmental Protection Agency, Air and Radiation Docket and Information Center (MC-6102), 401 M Street SW, Washington, DC 20460; telephone: (202) 260-7548. The docket is located at the above address in Room M-1500, Waterside Mall (ground floor). A reasonable fee may be charged for copying.

B. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the EPA must determine whether the regulatory action is "significant" and therefore subject to review by the Office of Management and Budget (OMB) and the requirements of the Executive Order. The Executive

Order defines "significant regulatory action" as one that is likely to result in a rule that may:

- (1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;
- (2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- (3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the rights and obligation of recipients thereof; or
- (4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

It has been determined that this action amending the OSWRO NESHAP is not a "significant regulatory action" under the terms of Executive Order 12866 and therefore not subject to OMB review.

C. Executive Order 12875: Enhancing the Intergovernmental Partnerships

Under Executive Order 12875, the EPA may not issue a regulation that is not required by statute and that creates a mandate upon a State, local or tribal government, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by those governments or the EPA consults with those governments. If the EPA complies by consulting, Executive Order 12875 requires the EPA to provide OMB a description of the extent of the EPA's prior consultation with representatives of affected State, local and tribal governments, the nature of their concerns, copies of any written communications from the governments, and a statement supporting the need to issue the regulation. In addition, Executive Order 12875 requires the EPA to develop an effective process permitting elected officials and other representatives of State, local and tribal governments "to provide meaningful and timely input in the development of regulatory proposals containing significant unfunded mandates.

The OSWRO NESHAP does not create a mandate on State, local, or tribal governments. The rule does not impose any enforceable duties on these entities, and State, local, and tribal governments are not directly impacted by this rule; i.e., they are not required to purchase control systems to meet the requirements of this rule. Accordingly, the requirements of section 1(a) of

Executive Order 12875 do not apply to this action.

D. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

Executive Order 13045 (62 FR 19885, April 23, 1997) applies to any rule that (1) is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that the EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the EPA must evaluate the environmental health or safety effects of the planned rule on children and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analyses required under section 5–501 of the Order has the potential to influence the regulation. These amendments to the OSWRO NESHAP are not subject to Executive Order 13045 because the OSWRO NESHAP is based on technology performance and not on health or safety risks. In addition, the amendments are not economically significant regulatory actions as defined by E.O. 12866.

E. Executive Order 13084: Consultations and Coordination with Indian Tribal Governments

Under Executive Order 13084, the EPA may not issue a regulation that is not required by statute, that significantly or uniquely affects the communities of Indian tribal governments, and that imposes substantial direct compliance costs on those communities, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by the tribal governments, or the EPA consults with those governments. If the EPA complies by consulting, Executive Order 13084 requires the EPA to provide to the OMB, in a separately identified section of the preamble to the rule, a description of the extent of the EPA's prior consultation with representatives of affected tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires the EPA to develop an effective process permitting elected officials and other representatives of Indian tribal governments "to provide meaningful

and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities."

The OSWRO NESHAP does not significantly or uniquely affect the communities of Indian tribal governments. The rule does not impose any enforceable duties on tribal governments unless they own or operate a facility subject to the OSWRO NESHAP. Indian tribal governments which own or operate facilities subject to the OSWRO NESHAP would incur compliance costs; however, the EPA does not believe that there are many, if any, tribal governments which either own or operate such facilities. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

F. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, the EPA generally must prepare a written statement, including a costbenefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires the EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most costeffective or least-burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows the EPA to adopt an alternative other than the least costly, most costeffective or least-burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before the EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising

small governments on compliance with the regulatory requirements.

The amendments to the OSWRO NESHAP will likely reduce the costs of complying with the rule for many affected owners and operators. These amendments do not increase expenditures by State, local, and tribal governments or the private sector. Therefore, the EPA has not prepared a budgetary impact statement or specifically addressed the selection of the least costly, most cost-effective, or least burdensome alternatives because these amendments are estimated to result in the expenditure by State and local governments, in aggregate, or by the private sector of less than \$100 million in any 1 year. Because small governments will not be affected by this rule, the EPA is not required to develop a plan with regard to small governments. Therefore, the requirements of the Unfunded Mandates Act do not apply to this action.

G. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions. The EPA determined that these amendments to the OSWRO NESHAP do not have a significant impact on a substantial number of small entities. The EPA has also determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this action. These amendments will not result in increased impacts to small entities and will result in reduced impacts in all cases.

H. Paperwork Reduction Act

The information collection requirements of the previously promulgated NESHAP were submitted to and approved by the OMB. A copy of this Information Collection Request (ICR) document (OMB control number 1717.02) may be obtained from Sandy Farmer, OP Regulator Information Division; U.S. Environmental Protection Agency, 401 M Street, SW (mail code 2136), Washington, DC 20460, or by calling (202) 260–2740.

Today's amendments to the OSWRO NESHAP have no impact on the information collection burden estimates made previously. No additional certifications or filings were promulgated. Therefore, the ICR has not been revised.

I. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small **Business Regulatory Enforcement** Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each house of Congress and to the Comptroller General of the United States. The EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal** Register. These amendments are not a "major rule" as defined by 5 U.S.C. 804(2). These amendments will be effective July 20, 1999.

J. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104-113, section 12(d)(15 U.S.C. 272 note) directs the EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, business practices, etc.) that are developed or adopted by voluntary consensus standards bodies. Where available and potentially applicable voluntary consensus standards are not used by the EPA, the NTTAA requires the Agency to provide Congress, through OMB, an explanation of the reasons for not using such standards. This section summarizes the EPA's response to the requirements of the NTTAA for the test methods added to the OSWRO NESHAP as part of today's amendments.

The OSWRO NESHAP involves technical standards. The amendments to the OSWRO NESHAP include the addition of test methods and procedures necessary for the determination of compliance and enforcement of air standards under the rule. Today's amendments increase the number of alternative test methods available to an owner or operator to determine the VOHAP concentration of an off-site material and provide for the use of other methods (i.e., those specified in the rule) subject to EPA approval. The EPA has determined that the owner or

operator of an affected source must use the specified EPA reference methods when needed. While the American Society of Testing and Materials and other organizations have published a number of test methods and procedures applicable to organic content and material specifications which could be used to determine the flow rate and organic concentration of a process vent stream, these methods are not applicable to determining the volume, concentration, and type of air emissions from the affected sources. The use of these voluntary consensus standards would, therefore, have been impractical.

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Containers, Hazardous air pollutants, Incorporation by reference, Individual drain systems, Oil-water separators, Organic-water separators, Recycling, Reporting and recordkeeping requirements, Surface impoundments, Tanks, Used oil, Used solvent, Waste management.

Dated: July 7, 1999.

Carol W. Browner,

Administrator.

For the reasons set forth in the preamble, title 40, chapter I, part 63 of the Code of Federal Regulations is amended as follows:

PART 63—[AMENDED]

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 adding paragraph (b)(2)(viii) and by revising paragraphs (a)(2)(v), (b)(1)(ii), (b)(1)(iii), (b)(2)(v), (b)(2)(vi), (c), (d),and (e) to read as follows:

§ 63.680 Applicability and designation of affected sources.

- (a) * * *
- (2) * * *
- (v) A recovery operation that recycles or reprocesses used solvent which is an off-site material and the operation is not part of a chemical, petroleum, or other manufacturing process that is required to use air emission controls by another subpart of 40 CFR part 63 or 40 CFR part 61.

(b) * * *

- (1) * * *
- (ii) The waste, used oil, or used solvent is not produced or generated

within the plant site, but the material is delivered, transferred, or otherwise moved to the plant site from a location outside the boundaries of the plant site; and (iii) The waste, used oil, or used solvent contains one or more of the hazardous air pollutants (HAP) listed in Table 1 of this subpart based on the composition of the material at the pointof-delivery, as defined in § 63.681 of this subpart.

(v) Waste that is transferred from a chemical manufacturing plant or other facility for which both of the following conditions apply to the waste:

(A) The management of the waste at the facility is required either under part 63 subpart F-National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry or under another subpart in 40 CFR part 63 to meet the air emission control standards for process wastewater specified in 40 CFR 63.132 through 63.147; and

(B) The owner or operator of the facility from which the waste is transferred has complied with the provisions of 40 CFR 63.132(g)(1)(ii) and

(vi) Waste that is transferred from a chemical manufacturing plant, petroleum refinery, or coke by-product recovery plant which is subject to 40 CFR part 61, subpart FF—National **Emission Standards for Benzene Waste** Operations, and for which both of the following conditions apply to the waste:

(A) The waste is generated at a facility that is not exempted under the provisions of 40 CFR 61.342(a) from meeting the air emission control standards of 40 CFR part 61, subpart FF;

(B) The owner or operator of the facility from which the waste is transferred has complied with the provisions of 40 CFR 61.342(f)(2).

(vii) * *

(viii) Hazardous waste that is stored for 10 days or less at a transfer facility in compliance with the provisions of 40 CFR 263.12.

(c) Affected sources. (1) Off-site material management units. For each operation specified in paragraphs (a)(2)(i) through (a)(2)(vi) of this section that is located at the plant site, the affected source is the entire group of offsite material management units associated with the operation. An offsite material management unit is a tank, container, surface impoundment, oilwater separator, organic-water separator, or transfer system used to manage offsite material. For the purpose of implementing the standards under this

subpart, a unit that meets the definition of a tank or container but also is equipped with a vent that serves as a process vent for any of the processes listed in paragraphs (c)(2)(i) through (c)(2)(vi) of this section is not an off-site material management unit but instead is a process vent and is to be included in the appropriate affected source group under paragraph (c)(2) of this section. Examples of such a unit may include, but are not limited to, a distillate receiver vessel, a primary condenser, a bottoms receiver vessel, a surge control tank, a separator tank, and a hot well.

(2) *Process vents.* For each operation specified in paragraphs (a)(2)(i) through (a)(2)(vi) of this section that is located at the plant site, the affected source is the entire group of process equipment associated with the process vents for the processes listed in paragraphs (c)(2)(i) through (c)(2)(vi) of this section.

(i) Distillation process used for the treatment, recycling, or recovery of off-site material. Distillation means a process, either batch or continuous, separating one or more off-site material feed streams into two or more exit streams having different component concentrations from those in the feed stream or streams. The separation is achieved by the redistribution of the components between the liquid and vapor phases as they approach equilibrium within the distillation unit.

(ii) Fractionation process used for the treatment, recycling, or recovery of off-site material. Fractionation means a liquid mixture separation process or method used to separate a mixture of several volatile components of different boiling points in successive stages, each stage removing from the mixture some proportion of one of the components.

(iii) Thin-film evaporation process used for the treatment, recycling, or recovery of off-site material. Thin-film evaporation means a liquid mixture separation process or method that uses a heating surface consisting of a large diameter tube that may be either straight or tapered, horizontal or vertical. Liquid is spread on the tube wall by a rotating assembly of blades that maintain a close clearance from the wall or actually ride on the film of liquid on the wall.

(iv) Solvent extraction process used for the treatment, recycling, or recovery of off-site material. Solvent extraction means a separation process or method in which a solid or a solution is contacted with a liquid solvent (the material and the solvent being relatively insoluble in each other) to preferentially dissolve and transfer one or more components into the solvent.

(v) Steam stripping process used for the treatment, recycling, or recovery of off-site material. Steam stripping means a liquid mixture separation process or method in which vaporization of the volatile components of a liquid mixture occurs by the introduction of steam directly into the process.

(vi) Ğas stripping process used for the treatment, recycling, or recovery of off-site material. Gas stripping means a desorption process or method used to transfer one or more volatile components from a liquid mixture into a gas stream either with or without the application of heat to the liquid. Packed towers, spray towers, and bubble-cap, sieve, or valve-type plate towers are examples of the process configurations used for contacting the gas and a liquid.

(3) Equipment leaks. For each operation specified in paragraphs (a)(2)(i) through (a)(2)(vi) of this section that is located at the plant site, the affected source is the entire group of equipment components for which each component meets all of the conditions specified in paragraphs (c)(3)(i) through (c)(3)(iii) of this section. If any one of these conditions do not apply to an equipment component, then that component is not part of the affected source for equipment leaks.

(i) The equipment component is a pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, or instrumentation system;

(ii) The equipment component contains or contacts off-site material having a total HAP concentration equal to or greater than 10 percent by weight; and

(iii) The equipment component is intended to operate for 300 hours or more during a calendar year in off-site material service, as defined in § 63.681 of this subpart.

(d) Facility-wide exemption. The owner or operator of affected sources subject to this subpart is exempted from the requirements of §§ 63.682 through 63.699 of this subpart in situations when the total annual quantity of the HAP that is contained in the off-site material received at the plant site is less than 1 megagram per year. For a plant site to be exempted under the provisions of this paragraph (d), the owner or operator must meet the requirements in paragraphs (d)(1) through (d)(3) of this section.

(1) The owner or operator must prepare an initial determination of the total annual HAP quantity in the off-site material received at the plant site. This determination is based on the total quantity of the HAP listed in Table 1 of this subpart as determined at the point-of-delivery for each off-site material stream.

(2) The owner or operator must prepare a new determination whenever the extent of changes to the quantity or composition of the off-site material received at the plant site could cause the total annual HAP quantity in the off-site material received at the plant site to exceed the limit of 1 megagram per year.

(3) The owner or operator must maintain documentation to support the owner's or operator's determination of the total annual HAP quantity in the offsite material received at the plant site. This documentation must include the basis and data used for determining the HAP content of the off-site material.

(e) Compliance dates. (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 paragraph (e)(1)(i) or (e)(1)(ii) 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 on or before February 1, 2000 unless an extension has been granted by the Administrator as provided in 40 CFR 63.6(i).

(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, the owner or operator of the affected source must achieve compliance with the provisions of this subpart upon the first date that the affected source begins to manage off-site material.

(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 on or before July 1, 1996, or upon initial startup of operations, whichever date is later as provided in 40 CFR 63.6(b).

3. Section 63.681 is amended by adding in alphabetical order the definitions of "Flow indicator" and "Hazardous air pollutants," by removing the definition of "HAP," and by revising the definitions of "Control device," "Cover," "Point-of-treatment," "Process vent," "Safety device," "Used solvent," "Volatile organic hazardous air pollutant concentration," and "Waste stabilization process" to read as follows:

§ 63.681 Definitions.

* * * *

Control device means equipment used for recovering, removing, oxidizing, or destroying organic vapors. Examples of such equipment include but are not limited to carbon adsorbers, condensers, vapor incinerators, flares, boilers, and process heaters.

Cover means a device or system that provides a continuous barrier over the material managed in a off-site material management unit to prevent or reduce air pollutant emissions to the atmosphere. A cover may have openings needed for operation, inspection, sampling, maintenance, and repair of the unit provided that each opening is closed when not in use (e.g., access hatches, sampling ports). Ă cover may be a separate piece of equipment which can be detached and removed from the unit or a *cover* may be formed by structural features permanently integrated into the design of the unit.

Flow indicator means a device that indicates whether gas is flowing, or whether the valve position would allow gas to flow in a bypass line.

* * * * *

Hazardous air pollutants or HAP means the specific organic chemical compounds, isomers, and mixtures listed in Table 1 of this subpart.

Off-site material service means any time when a pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, or instrumentation system contains or contacts off-site material.

* * * * *

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 safety 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 (c)(2)(vi) of this section. For the purpose

of this subpart, a process vent is none of the following: a pressure-relief vent or other vent that is used as a safety device (as defined in this section); an open-ended line or other vent that is subject to the equipment leak control requirements under § 63.691 of this subpart; or a stack or other vent that is used to exhaust combustion products from a boiler, furnace, process heater, incinerator, or other combustion device.

Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions to prevent physical damage or permanent deformation to equipment by venting gases or vapors during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.

Used solvent means a mixture of aliphatic hydrocarbons or a mixture of one and two ring aromatic hydrocarbons that has been used as a solvent and as a result of such use is contaminated by physical or chemical impurities.

* * * * *

Volatile organic hazardous air pollutant concentration or VOHAP concentration means the fraction by weight of those compounds listed in Table 1 of this subpart that are in an offsite material as measured using Method 305 in appendix A of this part and expressed in terms of parts per million (ppm). As an alternative to using Method 305, an owner or operator may determine the HAP concentration of an off-site material using any one of the other test methods specified in § 63.694(b)(2)(ii) of this subpart. When a test method specified in § 63.694(b)(2)(ii) of this subpart other

than Method 305 is used to determine the speciated HAP concentration of an off-site material, the individual compound concentration may be adjusted by the corresponding $f_{\rm m305}$ value listed in Table 1 of this subpart to determine a VOHAP concentration.

Waste stabilization process means any physical or chemical process used to either reduce the mobility of hazardous constituents in a waste or eliminate free liquids as determined by Test Method 9095—Paint Filter Liquids Test in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846, Third Edition, September 1986, as amended by Update I, November 15, 1992. (As an alternative, an owner or operator may use any more recent, updated version of Method 9095 approved by the EPA.) A waste stabilization process includes mixing the waste with binders or other materials and curing the resulting waste and binder mixture. Other synonymous terms used to refer to this process are 'waste fixation'' or 'waste solidification." A waste stabilization process does not include the adding of absorbent materials to the surface of a waste, without mixing, agitation, or subsequent curing, to absorb free liquid.

4. Section 63.683 is revised to read as follows:

§ 63.683 Standards: General.

(a) The general standards under this section apply to owners and operators of affected sources as designated in § 63.680(c) of this subpart.

(b) Off-site material management units. (1) For each off-site material management unit that is part of an affected source, the owner or operator must meet the requirements in either paragraph (b)(1)(i), (b)(1)(ii), or (b)(1)(iii) of this section except for those off-site material management units exempted under paragraph (b)(2) of this section.

(i) The owner or operator controls air emissions from the off-site material management unit in accordance with the applicable standards specified in §§ 63.685 through 63.689 of this

subpart.

(ii) The owner or operator removes or destroys HAP in the off-site material before placing the material in the off-site material management unit by treating the material in accordance with the standards specified in § 63.684 of this subpart.

(iii) The owner or operator determines before placing off-site material in the off-site material management unit that the average VOHAP concentration of the off-site material is less than 500 parts per million by weight (ppmw) at the point-of-delivery. The owner or operator must perform an initial determination of the average VOHAP concentration of the off-site material using the procedures specified in § 63.694(b) of this subpart. This initial determination must be performed either before the first time any portion of the off-site material stream is placed in the unit or by the compliance date, whichever date is later. Thereafter, the owner or operator must review and update, as necessary, this determination at least once every calendar year following the date of the initial determination for the off-site material stream.

(2) An off-site material management unit is exempted from the requirements in paragraph (b)(1) of this section when the owner or operator meets one of the exemptions provided in paragraphs (b)(2)(i) through (b)(2)(iv) of this section as applicable to the unit.

(i) An off-site material management unit is exempted from the requirements in paragraph (b)(1) of this section if the off-site material management unit is also subject to another subpart under 40 CFR part 63 or 40 CFR part 61, and the owner or operator is controlling the HAP listed in Table 1 of this subpart that are emitted from the unit in compliance with the provisions specified in the other applicable subpart under part 61 or part 63.

(ii) At the discretion of the owner or operator, one or a combination of offsite material management units may be exempted from the requirements in paragraph (b)(1) of this section when these units meet the condition that the total annual quantity of HAP contained in the off-site material placed in the units exempted under this paragraph (b)(2)(ii) is less than 1 megagram per year. For the off-site material management units selected by the owner or operator to be exempted from the requirements in paragraph (b)(1) of this section, the owner or operator must meet the requirements in paragraphs (b)(2)(ii)(A) and (b)(2)(ii)(B) of this section. An owner or operator may change the off-site material management units selected to be exempted under this paragraph (b)(2)(ii) by preparing a new designation for the exempt-units as required by paragraph (b)(2)(ii)(A) of this section and performing a new determination as required by paragraph (b)(2)(ii)(B) of this section.

(A) The owner or operator must designate each of the off-site material management units selected by the owner or operator to be exempt under paragraph (b)(2)(ii) of this section by either submitting to the Administrator a written notification identifying the exempt-units or permanently marking

the exempt-units at the plant site. If an owner or operator chooses to prepare and submit a written notification, this notification must include a site plan, process diagram, or other appropriate documentation identifying each of the exempt-units. If an owner or operator chooses to permanently mark the exempt-units, each exempt-unit must be marked in such a manner that it can be readily identified as an exempt-unit from the other off-site material management units located at the plant site.

- (B) The owner or operator must prepare an initial determination of the total annual HAP quantity in the off-site material placed in the units exempted under this paragraph (b)(2)(ii). This determination is based on the total quantity of the HAP listed in Table 1 of this subpart as determined at the point where the off-site material is placed in each exempted unit. The owner or operator must perform a new determination whenever the extent of changes to the quantity or composition of the off-site material placed in the exempted units could cause the total annual HAP content in the off-site material to exceed 1 megagram per year. The owner or operator must maintain documentation to support the most recent determination of the total annual HAP quantity. This documentation must include the basis and data used for determining the HAP content of the offsite material.
- (iii) A tank or surface impoundment is exempted from the requirements in paragraph (b)(1) of this section if the unit is used for a biological treatment process that meets the requirements in either paragraph (b)(2)(iii)(A) or (b)(2)(iii)(B) of this section and the owner or operator complies with the monitoring requirements in § 63.684(e)(4) of this subpart.
- (A) The HAP biodegradation efficiency ($R_{\rm bio}$) for the biological treatment process is equal to or greater than 95 percent. The HAP biodegradation efficiency ($R_{\rm bio}$) shall be determined in accordance with the requirements of § 63.694(h) of this subpart.
- (B) The total actual HAP mass removal rate ($MR_{\rm bio}$) for the off-site material treated by the biological treatment process is equal to or greater than the required HAP mass removal rate (RMR) for the off-site material. The total actual HAP mass removal rate ($MR_{\rm bio}$) must be determined in accordance with the requirements of § 63.694(i) of this subpart. The required HAP mass removal rate (RMR) must be determined in accordance with the

- requirements of § 63.694(e) of this subpart.
- (iv) An off-site material management unit is exempted from the requirements in paragraph (b)(1) of this section if the off-site material placed in the unit is a hazardous waste that meets the conditions specified in either paragraph (b)(2)(iv)(A) or (b)(2)(iv)(B) of this section.
- (A) The hazardous waste meets the numerical organic concentration limits, applicable to the hazardous waste, as specified in 40 CFR part 268—Land Disposal Restrictions, listed in the table, "Treatment Standards for Hazardous Waste" in 40 CFR 268.40.
- (B) The organic hazardous constituents in the hazardous waste have been treated by the treatment technology established by the EPA for the hazardous waste in 40 CFR 268.42(a), or have been removed or destroyed by an equivalent method of treatment approved by the EPA under 40 CFR 268.42(b).
- (v) A tank used for bulk feed of offsite material to a waste incinerator is exempted from the requirements specified in paragraph (b)(1) of this section if the tank meets all of the conditions specified in paragraphs (b)(2)(v)(A) through (b)(2)(v)(C) of this section.
- (A) The tank is located inside an enclosure vented to a control device that is designed and operated in accordance with all applicable requirements specified under 40 CFR part 61, subpart FF—National Emission Standards for Benzene Waste Operations for a facility at which the total annual benzene quantity from the facility waste is equal to or greater than 10 megagrams per year;
- (B) The enclosure and control device serving the tank were installed and began operation prior to July 1, 1996; and
- (C) The enclosure is designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical or electrical equipment; or to direct air flow into the enclosure. The owner or operator must annually perform the verification procedure for the enclosure as specified in Section 5.0 to "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure.'

(c) *Process vents.* (1) For each process vent that is part of an affected source, the owner or operator must meet the requirements in either paragraph (c)(1)(i) or (c)(1)(ii) of this section except for those process vents exempted under paragraph (c)(2) of this section.

(i) The owner or operator controls air emissions from the process vent in accordance with the standards specified

in § 63.690 of this subpart.

- (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 ppmw at the point-of-delivery. The owner or operator must perform an initial determination of the average VOHAP concentration of the off-site material using the procedures specified in § 63.694(b) of this subpart before any portion of the off-site material stream is placed in the unit. Thereafter, the owner or operator must review and update, as necessary, this determination at least once every calendar year following the date of the initial determination for the off-site material stream.
- (2) A process vent is exempted from the requirements of paragraph (c)(1) of this section when the owner or operator meets one of the exemptions provided in paragraphs (c)(2)(i) through (c)(2)(iii) of this section.
- (i) A process vent is exempted from the requirements in paragraph (c)(1) of this section if the process vent is also subject to another subpart under part 63 or 40 CFR part 61, and the owner or operator is controlling the HAP listed in Table 1 of this subpart that are emitted from the process vent in compliance with the provisions specified in the other applicable subpart under part 61 or part 63.
- (ii) A process vent is exempted from the requirements specified in paragraph (c)(1) of this section if the owner or operator determines that the process vent stream flow rate is less than 0.005 cubic meters per minute (m3/min) at standard conditions (as defined in 40 CFR 63.2). The process vent stream flow rate shall be determined in accordance with the procedures specified in § 63.694(m) of this subpart. Documentation must be prepared by the owner or operator and maintained at the plant site to support the determination of the process vent stream flow rate. This documentation must include identification of each process vent exempted under this paragraph and the test results used to determine the process vent stream flow rate.
- (iii) A process vent is exempted from the requirements specified in paragraph (c)(1) of this section if the owner or

- operator determines that the process vent stream flow rate is less than 6.0 m³/ min at standard conditions (as defined in 40 CFR 63.2) and the total HAP concentration is less than 20 ppmv. The process vent stream flow rate and total HAP concentration shall be determined in accordance with the procedures specified in § 63.694(m) of this subpart. Documentation must be prepared by the owner or operator and maintained at the plant site to support the determination of the process vent stream flow rate and total HAP concentration. This documentation must include identification of each process vent exempted under this paragraph (c)(2)(iii) and the test results used to determine the process vent stream flow rate and total HAP concentration. The owner or operator must perform a new determination of the process vent stream flow rate and total HAP concentration when the extent of changes to operation of the unit on which the process vent is used could cause either the process vent stream flow rate to exceed the limit of 6.0 m³/ min or the total HAP concentration to exceed the limit of 20 ppmv.
- (d) Equipment leaks. The owner or operator must control equipment leaks from each equipment component that is part of the affected source specified in § 63.680(c)(3) of this subpart by implementing leak detection and control measures in accordance with the standards specified in § 63.691 of this subpart.
- 5. Section 63.684 is amended by revising paragraphs (a), (b) introductory text, (b)(1)(ii), (b)(3) introductory text, (b)(4) introductory text, (b)(5), (d), (e), (f), and (g) to read as follows:

§ 63.684 Standards: Off-site material treatment.

- (a) The provisions of this section apply to the treatment of off-site material to remove or destroy HAP for which § 63.683(b)(1)(ii) of this subpart references the requirements of this section for such treatment.
- (b) The owner or operator shall remove or destroy the HAP contained in off-site material streams to be managed in the off-site material management unit in accordance with § 63.683(b)(1)(ii) of this subpart using a treatment process that continuously achieves, under normal operations, one or more of the performance levels specified in paragraphs (b)(1) through (b)(5) of this section (as applicable to the type of treatment process) for the range of off-site material stream compositions and quantities expected to be treated.

(1) * * *

- (ii) In the case when off-site material streams entering the treatment process are a mixture of off-site material streams having an average VOHAP concentration equal to or greater than 500 ppmw at the point-of-delivery with off-site material streams having average VOHAP concentrations less than 500 ppmw at the point-of-delivery, then the VOHAP concentration of the off-site material must be reduced to a level at the point-of-treatment that meets the performance level specified in either paragraph (b)(1)(ii)(A) or (b)(1)(ii)(B) of this section.
- (3) HAP reduction efficiency. For any treatment process except a treatment process that uses biological degradation and is performed in an open tank or surface impoundment, the treatment process must achieve the applicable performance level specified in either paragraph (b)(3)(i) or (b)(3)(ii) of this section.
- (4) Biological degradation performed in an open tank or surface impoundment. A treatment process using biological degradation and performed in an open tank or surface impoundment must achieve the performance level specified in either paragraph (b)(4)(i) or (b)(4)(ii) of this section.
- (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 (b)(5)(iv) of this section.
- (i) An incinerator for which the owner or operator has been issued a final permit under 40 CFR part 270, and the incinerator is designed and operated in accordance with the requirements of 40 CFR part 264, subpart O—Incinerators, or
- (ii) An incinerator for which the owner or operator has certified compliance with the interim status requirements of 40 CFR part 265, subpart O—Incinerators.
- (iii) A boiler or industrial furnace for which the owner or operator has been issued a final permit under 40 CFR part 270, and the combustion unit is designed and operated in accordance with the requirements of 40 CFR part 266, subpart H—Hazardous Waste Burned in Boilers and Industrial Furnaces.
- (iv) A boiler or industrial furnace for which the owner or operator has certified compliance with the interim status requirements of 40 CFR part 266,

subpart H Hazardous Waste Burned in Boilers and Industrial Furnaces.

* * * * *

(d) When the owner or operator treats the off-site material to meet one of the performance levels specified in paragraphs (b)(1) through (b)(4) of this section, the owner or operator shall demonstrate that the treatment process achieves the selected performance level for the range of expected off-site material stream compositions expected to be treated. An initial demonstration shall be performed as soon as possible but no later than 30 days after first time an owner or operator begins using the treatment process to manage off-site material streams in accordance with the requirements of either § 63.683(b)(1)(ii) or $\S63.683(b)(2)(ii)$ of this subpart as applicable to the affected off-site material management unit or process equipment. Thereafter, the owner or operator shall review and update, as necessary, this demonstration at least once every calendar year following the date of the initial demonstration.

(e) When the owner or operator treats the off-site material to meet one of the performance levels specified in paragraphs (b)(1) through (b)(4) of this section, the owner or operator shall ensure that the treatment process is achieving the applicable performance requirements by continuously monitoring the operation of the process when it is used to treat off-site material by complying with paragraphs (e)(1) through (e)(3) or, for biological treatment units, paragraph (e)(4) of this section:

(1) A continuous monitoring system shall be installed and operated for each treatment that measures operating parameters appropriate for the treatment process technology. This system shall include a continuous recorder that records the measured values of the selected operating parameters. The monitoring equipment shall be installed, calibrated, and maintained in accordance with the equipment manufacturer's specifications or other written procedures that provide reasonable assurance that the monitoring equipment is operating properly. The continuous recorder shall be a data recording device that records either an instantaneous data value at least once every 15 minutes or an average value for intervals of 15 minutes

(2) For each monitored operating parameter, the owner or operator shall establish a minimum operating parameter value or a maximum operating parameter value, as appropriate, to define the range of conditions at which the treatment

process must be operated to continuously achieve the applicable performance requirements of this section.

(3) When the treatment process is operating to treat off-site material, the owner or operator shall inspect the data recorded by the continuous monitoring system on a routine basis and operate the treatment process such that the actual value of each monitored operating parameter is greater than the minimum operating parameter value or less than the maximum operating parameter value, as appropriate, established for the treatment process.

(4) When the treatment process is a biological treatment process that is complying with paragraph (b)(4) of this section, the owner or operator must establish and implement a written procedure to monitor the appropriate parameters that demonstrate proper operation of the biological treatment unit in accordance with the evaluation required in § 63.694(h) of this subpart. The written procedure must list the operating parameters that will be monitored and state the frequency of monitoring to ensure that the biological treatment unit is operating between the minimum operating parameter values and maximum operating parameter values to establish that the biological treatment unit is continuously achieving

the performance requirement.
(f) The owner or operator must maintain records for each treatment process in accordance with the requirements of § 63.696(a) of this

subpart.
(g) The owner or operator must prepare and submit reports for each treatment process in accordance with the requirements of § 63.697(a) of this subpart.

6. Section 63.685 is amended by adding paragraph (i)(3) and by revising paragraphs (b), (c)(2), (f)(1)(ii)(A), (g)(2)(i)(B), (h)(2), (h)(3), and (i) introductory text to read as follows:

§ 63.685 Standards: Tanks.

* * * * *

(b) The owner or operator shall control air emissions from each tank subject to this section in accordance with the following applicable requirements:

(1) For a tank that is part of an existing affected source but the tank is not used to manage off-site material having a maximum HAP vapor pressure kilopascal (kPa) that is equal to or greater than 76.6 kPa nor is the tank used for a waste stabilization process as defined in § 63.681 of this subpart, 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.

(2) For a tank that is part of a new affected source but the tank is not used to manage off-site material having a maximum HAP vapor pressure that is equal to or greater than 76.6 kPa nor is the tank used for a waste stabilization process as defined in § 63.681 of this subpart, 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.

- (3) For a tank that is used for a waste stabilization process, the owner or operator shall control air emissions from the tank by using Tank Level 2 controls in accordance with the requirements of paragraph (d) of this section.
- (4) For a tank that manages off-site material having a maximum HAP vapor pressure that is equal to or greater than 76.6 kPa, the owner or operator must control air emissions by using one of the tanks specified in paragraphs (b)(4)(i) through (b)(4)(iii) of this section.
- (i) A tank vented through a closedvent system to a control device in accordance with the requirements specified in paragraph (g) of this section:
- (ii) A pressure tank designed and operated in accordance with the requirements specified in paragraph (h) of this section; or
- (iii) A tank located inside an enclosure that is vented through a closed-vent system to an enclosed combustion control device in accordance with the requirements specified in paragraph (i) of this section.

- (c) * * *
- (2) The owner or operator must control air emissions from the tank in accordance with the requirements in either paragraph (c)(2)(i), (c)(2)(ii), or (c)(2)(iii) of this section, as applicable to the tank.
- (i) The owner or operator controls air emissions from the tank in accordance with the provisions specified in subpart 00 of 40 CFR part 63—National Emission Standards for Tanks—Level 1.

(ii) As an alternative to meeting the requirements in paragraph (c)(2)(i) of this section, an owner or operator may control air emissions from the tank in accordance with the provisions for Tank Level 2 controls as specified in paragraph (d) of this section.

- (iii) As an alternative to meeting the requirements in paragraph (c)(2)(i) of this section when a tank is used as an interim transfer point to transfer off-site material from containers to another offsite material management unit, an owner or operator may control air emissions from the tank in accordance with the requirements in paragraphs (c)(2)(iii)(A) and (c)(2)(iii)(B) of this section. An example of such a tank is an in-ground tank into which organiccontaminated debris is dumped from roll-off boxes or dump trucks, and then this debris is promptly transferred from the tank to a macroencapsulation unit by a backhoe.
- (A) During those periods of time when the material transfer activity is occurring, the tank may be operated without a cover.
- (B) At all other times, air emissions from the tank must be controlled in accordance with the provisions specified in 40 CFR part 67, subpart 00-National Emission Standards for Tanks—Level 1.
- (f) * * *
- (1) * * *
- mounted seal or a metallic shoe seal, as defined in §63.681 of this subpart. The total area of the gaps between the tank wall and the primary seal shall not exceed 212 square centimeters (cm2) per meter of tank diameter, and the width of any portion of these gaps shall not exceed 3.8 centimeters (cm). If a metallic shoe seal is used for the primary seal, the metallic shoe seal shall

(A) The primary seal shall be a liquid-

be designed so that one end extends into the liquid in the tank and the other end extends a vertical distance of at least 61 centimeters (24 inches) above the liquid surface.

(g) * * *

- (i)'* * *
- (B) To remove accumulated sludge or other residues from the bottom of the tank.

- (h) * * *
- (2) All tank openings shall be equipped with closure devices designed to operate with no detectable organic emissions as determined using the procedure specified in § 63.694(k) of this subpart.
- (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 under either of the following conditions as specified in paragraph (h)(3)(i) or (h)(3)(ii) of this section.
- (i) At those times when opening of a safety device, as defined in §63.681 of this subpart, is required to avoid an unsafe condition.
- (ii) 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 of this subpart.
- (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 (i)(3) of this section.

(3) Opening of a safety device, as defined in § 63.681 of this subpart, is allowed at any time conditions require it to do so to avoid an unsafe condition.

Section 63.686 is amended by revising the paragraph (b) introductory text and adding paragraph (b)(3) to read as follows:

§ 63.686 Standards: Oil-water and organicwater separators.

- (b) The owner or operator shall control air emissions from each separator subject to this section by using one of the following: * * *
- (3) A pressurized separator that operates as a closed system in accordance with all applicable provisions specified in 40 CFR part 63, subpart VV—National Emission Standards for Oil-Water Separators and Organic-Water Separators.
- 8. Section 63.687 is amended by revising the paragraph (b) introductory text to read as follows:

§ 63.687 Standards: Surface impoundments.

*

- (b) The owner or operator shall control air emissions from each surface impoundment subject to this section by using one of the following:
- 9. Section 63.688 is amended by revising paragraphs (b) and (c) to read as follows:

§63.688 Standards: Containers.

(b) The owner or operator shall control air emissions from each container subject to this section in accordance with the following requirements, as applicable to the container, except when the special provisions for waste stabilization processes specified in paragraph (c) of this section apply to the container.

(1) For a container having a design capacity greater than 0.1 m³ and less than or equal to 0.46 m³, the owner or operator must control air emissions from the container in accordance with the requirements in either paragraph (b)(1)(i) or (b)(1)(ii) of this section.

(i) The owner or operator controls air emissions from the container in accordance with the standards for Container Level 1 controls as specified in 40 CFR part 63, subpart PP—National **Emission Standards for Containers**

- (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 63— National Emission Standards for Containers.
- (2) For a container having a design capacity greater than 0.46 m³ and the container is not in light-material service as defined in § 63.681 of this subpart, the owner or operator must control air emissions from the container in accordance with the requirements in either paragraph (b)(1)(i) or (b)(1)(ii) of this section.
- (3) For a container having a design capacity greater than 0.46 m³ and the container is in light-material service as defined in § 63.681 of this subpart, the owner or operator must control air emissions from the container in accordance with the requirements in either paragraph (b)(3)(i) or (b)(3)(ii) of this section.
- (i) The owner or operator controls air emissions from the container in accordance with the standards for Container Level 2 controls as specified in 40 CFR part 63, subpart PP—National **Emission Standards for Containers.**
- (ii) As an alternative to meeting the requirements in paragraph (b)(3)(i) of

this section, an owner or operator may choose to control air emissions from the container in accordance with the standards for Container Level 3 controls as specified in 40 CFR part 63, subpart PP—National Emission Standards for Containers.

- (c) When a container subject to this subpart and having a design capacity greater than 0.1 m³ is used for treatment of an off-site material by a waste stabilization process as defined in § 63.681 of this subpart, the owner or operator shall control air emissions from the container at those times during the process when the off-site material in the container is exposed to the atmosphere in accordance with the standards for Container Level 3 controls as specified in 40 CFR part 63, subpart PP—National Emission Standards for Containers.
- 10. Section 63.689 is amended by revising paragraphs (b), (c), (d) introductory text, and (d)(5) introductory text to read as follows:

§ 63.689 Standards: Transfer systems.

- (b) For each transfer system that is subject to this section and is an individual drain system, the owner or operator shall control air emissions in accordance with the standards specified in 40 CFR part 63, subpart RR—National Emission Standards for Individual Drain Systems.
- (c) For each transfer system that is subject to this section but is not an individual drain system, the owner or operator shall control air emissions by using one of the transfer systems specified in paragraphs (c)(1) through (c)(3) of this section.
- (1) A transfer system that uses covers in accordance with the requirements specified in paragraph (d) of this section.
- (2) A transfer system that consists of continuous hard-piping. All joints or seams between the pipe sections shall be permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange).
- (3) A transfer system that is enclosed and vented through a closed-vent system to a control device in accordance with the requirements specified in paragraphs (c)(3)(i) and (c)(3)(ii) of this section.
- (i) The transfer system is designed and operated such that an internal pressure in the vapor headspace in the enclosure is maintained at a level less than atmospheric pressure when the control device is operating, and
- (ii) The closed-vent system and control device are designed and

operated in accordance with the requirements of § 63.693 of this subpart.

(d) Owners and operators controlling air emissions from a transfer system using covers in accordance with the provisions of paragraph (c)(1) of this section shall meet the requirements specified in paragraphs (d)(1) through (d)(6) of this section.

(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 as specified in paragraph (d)(5)(i) or (d)(5)(ii) of this section.

11. Section 63.690 is revised to read as follows:

§ 63.690 Standards: Process vents.

- (a) The provisions of this section apply to the control of air emissions from process vents for which § 63.683(c)(1)(i) of this subpart references the use of this section for such air emission control.
- (b) The owner or operator must route the vent stream from each affected process vent through a closed-vent system to a control device that meets the standards specified in § 63.693 of this subpart. For the purpose of complying with this paragraph (b), a primary condenser is not a control device; however, a second condenser or other organic recovery device that is operated downstream of the primary condenser is considered a control device.
- 12. Section 63.691 is revised to read as follows:

§ 63.691 Standards: Equipment leaks.

- (a) The provisions of this section apply to the control of air emissions from equipment leaks for which § 63.683(b)(3) of this subpart references the use of this section for such air emission control.
- (b) 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 (b)(2) of this section.
- (1) The owner or operator controls the HAP emitted from equipment leaks in accordance with § 61.242 through § 61.247 in 40 CFR part 61, subpart V—National Emission Standards for Equipment Leaks; or
- (2) The owner or operator controls the HAP emitted from equipment leaks in accordance with § 63.162 through § 63.182 in subpart H—National Emission Standards for Organic Hazardous Air Pollutants from Equipment Leaks.

13. Section 63.693 is revised to read as follows:

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

- (a) The provisions of this section apply to closed-vent systems and control devices used to control air emissions for which another standard references the use of this section for such air emission control.
- (b) For each closed-vent system and control device used to comply with this section, the owner or operator shall meet the following requirements:
- (1) The owner or operator must use a closed-vent system that meets the requirements specified in paragraph (c) of this section.
- (2) The owner or operator must use a control device that meets the requirements specified in paragraphs (d) through (h) of this section as applicable to the type and design of the control device selected by the owner or operator to comply with the provisions of this section.
- (3) Whenever gases or vapors containing HAP are vented through a closed-vent system connected to a control device used to comply with this section, the control device must be operating except at those times listed in either paragraph (b)(3)(i) or (b)(3)(ii) of this section.
- (i) The control device may 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 the emission point vented to the control device is shutdown. 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.
- (ii) The control device may be bypassed for the purpose of correcting a malfunction of the closed-vent system or control device. The owner or operator shall perform the adjustments or repairs necessary to correct the malfunction as soon as practicable after the malfunction is detected.
- (4) The owner or operator must inspect and monitor each closed-vent system in accordance with the requirements specified in either paragraph (b)(4)(i) or (b)(4)(ii) of this section.
- (i) The owner or operator inspects and monitors the closed-vent system in accordance with the requirements specified in § 63.695(c) of this subpart, and complies with the applicable recordkeeping requirements in § 63.696 of this subpart and the applicable reporting requirements in § 63.697 of this subpart.

- (ii) As an alternative to meeting the requirements specified in paragraph (b)(4)(i) of this section, the owner or operator may choose to inspect and monitor the closed-vent system in accordance with the requirements under 40 CFR part 63, subpart H—National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks as specified in 40 CFR 63.172(f) through (h), and complies with the applicable recordkeeping requirements in 40 CFR 63.181 and the applicable reporting requirements in 40 CFR 63.182.
- (5) The owner or operator must monitor the operation of each control device in accordance with the requirements specified in paragraphs (d) through (h) of this section as applicable to the type and design of the control device selected by the owner or operator to comply with the provisions of this section.
- (6) The owner or operator shall maintain records for each control device in accordance with the requirements of § 63.696 of this subpart.
- (7) The owner or operator shall prepare and submit reports for each control device in accordance with the requirements of § 63.697 of this subpart.
- (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 request 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 requested 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) of this subpart. 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) Closed-vent system requirements.
- (1) The vent stream required to be controlled shall be conveyed to the

- control device by either of the following closed-vent systems:
- (i) A closed-vent system that is designed to operate with no detectable organic emissions using the procedure specified in § 63.694(k) of this subpart; or
- (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 gage 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. For the purpose of complying with this paragraph (c)(2), low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, or pressure relief valves needed for safety reasons are not subject to the requirements of this paragraph (c)(2).
- (i) If a flow indicator is used, the indicator must be installed at the entrance to the bypass line used to divert the vent stream from the closed-vent system to the atmosphere. The flow indicator must indicate a reading at least once every 15 minutes. The owner or operator must maintain records of the following information: hourly records of whether the flow indicator was operating and whether flow was detected at any time during the hour; and records of all periods when flow is detected or the flow indicator is not operating.
- (ii) If a seal or locking device is used, the bypass line valve must be secured in the non-diverting position with a carseal or a lock-and-key type configuration. The seal or locking device must be placed on the mechanism by which the bypass device position is controlled (e.g., valve handle, damper lever) when the bypass device is in the non-diverting position such that the bypass device cannot be moved to the diverting position without breaking the seal or removing the lock. The owner or operator must visually inspect the seal or closure mechanism at least once every month to determine that the bypass line valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line.

- (d) Carbon adsorption control device requirements.
- (1) The carbon adsorption system must achieve the performance specifications in either paragraph (d)(1)(i) or (d)(1)(ii) of this section.
- (i) Recover 95 percent or more, on a weight-basis, of the total organic compounds (TOC), less methane and ethane, contained in the vent stream entering the carbon adsorption system; or
- (ii) Recover 95 percent or more, on a weight-basis, of the total HAP listed in Table 1 of this subpart contained in the vent stream entering the carbon adsorption system.
- (2) The owner or operator must demonstrate that the carbon adsorption system achieves the performance requirements in paragraph (d)(1) of this section by either performing a performance test as specified in paragraph (d)(2)(i) of this section or a design analysis as specified in paragraph (d)(2)(ii) of this section.
- (i) An owner or operator choosing to use a performance test to demonstrate compliance must conduct the test in accordance with the requirements of § 63.694(l) of this subpart.
- (ii) An owner or operator choosing to use a design analysis to demonstrate compliance must include as part of this design analysis the information specified in either paragraph (d)(2)(ii)(A) or (d)(2)(ii)(B) of this section as applicable to the carbon adsorption system design.
- (A) For a regenerable carbon adsorption system, the design analysis shall address the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature and shall establish the design exhaust vent stream organic compound concentration, adsorption cycle time, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total regeneration steam flow over the period of each complete carbon bed regeneration cycle, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of the carbon.
- (B) For a nonregenerable carbon adsorption system (e.g., a carbon canister), the design analysis shall address the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature and shall establish the design exhaust vent stream organic compound concentration, carbon bed capacity, activated carbon type and working capacity, and design carbon replacement interval based on the total

carbon working capacity of the control device and emission point operating schedule.

- (3) The owner or operator must monitor the operation of the carbon adsorption system in accordance with the requirements of § 63.695(e) of this subpart using one of the continuous monitoring systems specified in paragraphs (d)(3)(i) through (d)(3)(iii) of this section.
- (i) For a regenerative-type carbon adsorption system:
- (A) A continuous parameter monitoring system to measure and record the average total regeneration stream mass flow or volumetric flow during each carbon bed regeneration cycle. The integrating regenerating stream flow monitoring device must have an accuracy of ± 10 percent; and
- (B) A continuous parameter monitoring system to measure and record the average carbon bed temperature for the duration of the carbon bed steaming cycle and to measure the actual carbon bed temperature after regeneration and within 15 minutes of completing the cooling cycle. The accuracy of the temperature monitoring device must be ±1 percent of the temperature being measured, expressed in degrees Celsius or ±5°C, whichever is greater.
- (ii) A continuous monitoring system to measure and record the daily average concentration level of organic compounds in the exhaust gas stream from the control device. The accuracy of the organic monitoring device must be ±1 percent of the concentration being measured.
- (iii) A continuous monitoring system that measures other alternative operating parameters upon approval of the Administrator as specified in 40 CFR 63.8(f)(1) through (f)(5) of this part.

(4) The owner or operator shall manage the carbon used for the carbon adsorption system, as follows:

(i) Following the initial startup of the control device, all carbon in the control device shall be replaced with fresh carbon on a regular, predetermined time interval that is no longer than the carbon service life established for the carbon adsorption system.

(ii) The spent carbon removed from the carbon adsorption system must be either regenerated, reactivated, or burned in one of the units specified in paragraphs (d)(4)(ii)(A) through (d)(4)(ii)(G) of this section.

(A) Regenerated or reactivated in a thermal treatment unit for which the owner or operator has been issued a final permit under 40 CFR part 270 that implements the requirements of 40 CFR part 264, subpart X.

(B) Regenerated or reactivated in a thermal treatment unit equipped with and operating air emission controls in accordance with this section.

(C) Regenerated or reactivated in a thermal treatment unit equipped with and operating organic air emission controls in accordance with a national emission standard for hazardous air pollutants under another subpart in 40 CFR part 63 or 40 CFR part 61.

(D) Burned in a hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR part 270 that implements the requirements of 40 CFR part 264, subpart O.

(É) Burned in a hazardous waste incinerator for which the owner or operator has designed and operates the incinerator in accordance with the interim status requirements of 40 CFR part 265, subpart O.

(F) Burned in a boiler or industrial furnace for which the owner or operator has been issued a final permit under 40 CFR part 270 that implements the requirements of 40 CFR part 266,

subpart H.

(Ĝ) Burned in a boiler or industrial furnace for which the owner or operator has designed and operates the unit in accordance with the interim status requirements of 40 CFR part 266, subpart H.

(e) Condenser control device

requirements.

- (1) The condenser must achieve the performance specifications in either paragraph (e)(1)(i) or (e)(1)(ii) of this
- (i) Recover 95 percent or more, on a weight-basis, of the total organic compounds (TOC), less methane and ethane, contained in the vent stream entering the condenser; or
- (ii) Recover 95 percent or more, on a weight-basis, of the total HAP, listed in Table 1 of this subpart, contained in the vent stream entering the condenser.
- (2) The owner or operator must demonstrate that the condenser achieves the performance requirements in paragraph (e)(1) of this section by either performing a performance test as specified in paragraph (e)(2)(i) of this section or a design analysis as specified in paragraph (e)(2)(ii) of this section.

(i) An owner or operator choosing to use a performance tests to demonstrate compliance must conduct the test in accordance with the requirements of § 63.694(l) of this subpart.

(ii) An owner or operator choosing to use a design analysis to demonstrate compliance must include as part of this design analysis the following information: description of the vent stream composition, constituent

- concentrations, flow rate, relative humidity, and temperature; and specification of the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream, and the design average temperatures of the coolant fluid at the condenser inlet and outlet.
- (3) The owner or operator must monitor the operation of the condenser in accordance with the requirements of § 63.695(e) of this subpart using one of the continuous monitoring systems specified in paragraphs (e)(3)(i) through (e)(3)(iii) of this section.
- (i) A continuous parameter monitoring system to measure and record the daily average temperature of the exhaust gases from the control device. The accuracy of the temperature monitoring device shall be ±1 percent of the temperature being measured, expressed in degrees Celsius or ±5°C, whichever is greater.
- (ii) A continuous monitoring system to measure and record the daily average concentration of organic compounds in the exhaust vent stream from the control device. The accuracy of the concentration monitoring device shall be ± 1 percent of the concentration being
- (iii) A continuous monitoring system that measures other alternative operating parameters upon approval of the Administrator as specified in 40 CFR 63.8(f)(1) through (f)(5) of this part.
- (f) Vapor incinerator control device requirements.
- (1) The vapor incinerator must achieve the performance specifications in either paragraph (f)(1)(i), (f)(1)(ii), or (f)(1)(iii) of this section.
- (i) Destroy the total organic compounds (TOC), less methane and ethane, contained in the vent stream entering the vapor incinerator either:
- (A) By 95 percent or more, on a weight-basis, or
- (B) To achieve a total incinerator outlet concentration for the TOC, less methane and ethane, of less than or equal to ppmv on a dry basis corrected to 3 percent oxygen.
- (ii) Destroy the HAP listed in Table 1 of this subpart contained in the vent stream entering the vapor incinerator
- (A) By 95 percent or more, on a total HAP weight-basis, or
- (B) To achieve a total incinerator outlet concentration for the HAP, listed in Table 1 of this subpart, of less than or equal to ppmy on a dry basis corrected to 3 percent oxygen.
- (iii) Maintain the conditions in the vapor incinerator combustion chamber at a residence time of 0.5 seconds or

longer and at a temperature of 760°C or higher.

- (2) The owner or operator must demonstrate that the vapor incinerator achieves the performance requirements in paragraph (f)(1) of this section by either performing 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.
- (i) An owner or operator choosing to use a performance test to demonstrate compliance must conduct the test in accordance with the requirements of § 63.694(l) of this subpart.
- (ii) An owner or operator choosing to use a design analysis to demonstrate compliance must include as part of this design analysis the information specified in either paragraph (f)(2)(ii)(A) or (f)(2)(ii)(B) of this section as applicable to the vapor incinerator design.
- (A) For a thermal vapor incinerator, the design analysis shall address the vent stream composition, constituent concentrations, and flow rate and shall establish the design minimum and average temperatures in the combustion chamber and the combustion chamber residence time.
- (B) For a catalytic vapor incinerator, the design analysis shall address the vent stream composition, constituent concentrations, and flow rate and shall establish the design minimum and average temperatures across the catalyst bed inlet and outlet, and the design service life of the catalyst.
- (3) The owner or operator must monitor the operation of the vapor incinerator in accordance with the requirements of § 63.695(e) of this subpart using one of the continuous monitoring systems specified in paragraphs (f)(3)(i) through (f)(3)(iv) of this section as applicable to the type of vapor incinerator used.
- (i) For a thermal vapor incinerator, a continuous parameter monitoring system to measure and record the daily average temperature of the exhaust gases from the control device. The accuracy of the temperature monitoring device must be ± 1 percent of the temperature being measured, expressed in degrees Celsius of ± 0.5 °C, whichever is greater.
- (ii) For a catalytic vapor incinerator, a temperature monitoring device capable of monitoring temperature at two locations equipped with a continuous recorder. One temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.

- (iii) For either type of vapor incinerator, a continuous monitoring system to measure and record the daily average concentration of organic compounds in the exhaust vent stream from the control device. The accuracy of the concentration monitoring device must be ± 1 percent of the concentration being measured.
- (iv) For either type of vapor incinerator, a continuous monitoring system that measures alternative operating parameters other than those specified in paragraph (f)(3)(i) or (f)(3)(ii) of this section upon approval of the Administrator as specified in 40 CFR 63.8(f)(1) through (f)(5) of this part.
- (g) Boilers and process heaters control device requirements.
- (1) The boiler or process heater must achieve the performance specifications in either paragraph (g)(1)(i), (g)(1)(ii), (g)(1)(iii), (g)(1)(iv), or (g)(1)(v) of this section.
- (i) Destroy the total organic compounds (TOC), less methane and ethane, contained in the vent stream introduced into the flame zone of the boiler or process heater either:
- (A) By 95 percent or more, on a weight-basis, or
- (B) To achieve in the exhausted combustion gases a total concentration for the TOC, less methane and ethane, of less than or equal to 20 parts ppmv on a dry basis corrected to 3 percent oxygen.
- (ii) Destroy the HAP listed in Table 1 of this subpart contained in the vent stream entering the vapor incinerator either.
- (A) By 95 percent or more, on a total HAP weight-basis, or
- (B) To achieve in the exhausted combustion gases a total concentration for the HAP, listed in Table 1 of the subpart, of less than or equal to 20 ppmv on a dry basis corrected to 3 percent oxygen.
- (iii) Introduce the vent stream into the flame zone of the boiler or process heater and maintain the conditions in the combustion chamber at a residence time of 0.5 seconds or longer and at a temperature of 760°C or higher.
- (iv) Introduce the vent stream with the fuel that provides the predominate heat input to the boiler or process heater (i.e., the primary fuel); or
- (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 of this chapter; or has certified compliance with the interim status requirements of 40 CFR part 266, subpart H of this chapter.

- (2) The owner or operator must demonstrate that the boiler or process heater achieves the performance specifications in paragraph (g)(1) of this section chosen by the owner or operator using the applicable method specified in paragraph (g)(2)(i) or (g)(2)(ii) of this section.
- (i) If an owner or operator chooses to comply with the performance specifications in either paragraph (g)(1)(i), (g)(1)(ii), or (g)(1)(iii) of this section, the owner or operator must demonstrate compliance with the applicable performance specifications by either performing 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.
- (A) An owner or operator choosing to use a performance test to demonstrate compliance must conduct the test in accordance with the requirements of § 63.694(l) of this subpart.
- (B) An owner or operator choosing to use a design analysis to demonstrate compliance must include as part of this design analysis the following information: description of the vent stream composition, constituent concentrations, and flow rate; specification of the design minimum and average flame zone temperatures and combustion zone residence time; and description of the method and location by which the vent stream is introduced into the flame zone.
- (ii) If an owner or operator chooses to comply with the performance specifications in either paragraph (g)(1)(v) or (g)(1)(v) of this section, the owner or operator must demonstrate compliance by maintaining the records that document that the boiler or process heater is designed and operated in accordance with the applicable requirements of this section.
- (3) For a boiler or process heater complying with the performance specifications in either paragraph (g)(1)(i), (g)(1)(ii), or (g)(1)(iii) of this section, the owner or operator must monitor the operation of a boiler or process heater in accordance with the requirements of § 63.695(e) of this subpart using one of the continuous monitoring systems specified in paragraphs (g)(3)(i) through (g)(3)(iii) of this section.
- (i) A continuous parameter monitoring system to measure and record the daily average combustion zone temperature. The accuracy of the temperature sensor must be ± 1 percent of the temperature being measured, expressed in degrees Celsius or ± 0.5 °C, whichever is greater;

- (ii) A continuous monitoring system to measure and record the daily average concentration of organic compounds in the exhaust vent stream from the control device. The accuracy of the concentration monitoring device must be ± 1 percent of the concentration being measured.
- (iii) A continuous monitoring system that measures alternative operating parameters other than those specified in paragraph (g)(3)(i) or (g)(3)(ii) of this section upon approval of the Administrator as specified in 40 CFR 63.8(f)(1) through (f)(5) of this part.

(h) Flare control device requirements.

- (1) The flare must be designed and operated in accordance with the requirements in 40 CFR 63.11(b).
- (2) The owner or operator must demonstrate that the flare achieves the requirements in paragraph (h)(1) of this section by performing the procedures specified in paragraph (h)(2)(i) of this section. A previous compliance demonstration for the flare that meets all of the conditions specified in paragraph (h)(2)(ii) of this section may be used by an owner or operator to demonstrate compliance with this paragraph (h)(2).

(i) To demonstrate that a flare achieves the requirements in paragraph (h)(1) of this section, the owner or operator performs all of the procedures specified in paragraphs (h)(2)(i)(A)through (h)(2)(i)(C) of this section.

(A) The owner or operator conducts a visible emission test for the flare in accordance with the requirements specified in 40 CFR 63.11(b)(4).

(B) The owner or operator determines the net heating value of the gas being combusted in the flare in accordance with the requirements specified in 40 CFR 63.11(b)(6); and

(C) The owner or operator determines the flare exit velocity in accordance with the requirements applicable to the flare design as specified in 40 CFR 63.11(b)(7) or 40 CFR 63.11(b)(8).

- (ii) A previous compliance demonstration for the flare may be used by an owner or operator to demonstrate compliance with paragraph (h)(2) of this section provided that all conditions for the compliance determination and subsequent flare operation are met as specified in paragraphs (h)(2)(ii)(A) and (h)(2)(ii)(B) of this section.
- (A) The owner or operator conducted the compliance determination using the procedures specified in paragraph (h)(2)(i) of this section.
- (B) No flare operating parameter or process changes have occurred since completion of the compliance determination which could affect the compliance determination results.

- (3) The owner or operator must monitor the operation of the flare using a heat sensing monitoring device (including but not limited to a thermocouple, ultraviolet beam sensor, or infrared sensor) that continuously detects the presence of a pilot flame. The owner or operator must record, for each 1-hour period, whether the monitor was continuously operating and whether a pilot flame was continuously present during each hour as required in § 63.696(b)(3) of this subpart.
- 14. Section 63.694 is amended by adding paragraphs (a)(12) and (m) and by revising paragraphs (b)(2)(ii), (b)(2)(iii), (b)(3)(i), (c), (e), (f), (g), (h), (i) and (k) to read as follows:

§ 63.694 Testing methods and procedures.

(a) * * *

- (12) To determine process vent stream flow rate and total organic HAP concentration for compliance with the standards specified in § 63.693 of this subpart, the testing methods and procedures are specified in paragraph (m) of this section.
 - (b) * * * (2) * * *
- (ii) Analysis. Each collected sample must be prepared and analyzed in accordance with one of the following methods as applicable to the sampled off-site material for the purpose of measuring the HAP listed in Table 1 of this subpart:
- (A) Method 305 in 40 CFR part 63, appendix A.
- (B) Method 25D in 40 CFR part 60, appendix A.
- (C) Method 624 in 40 CFR part 136, appendix A. If this method is used to analyze one or more compounds that are not on the method's published list of approved compounds, the Alternative Test Procedure specified in 40 CFR 136.4 and 40 CFR 136.5 must be followed.
- (D) Method 625 in 40 CFR part 136, appendix A. For the purpose of using this method to comply with this subpart, the owner or operator must perform corrections to these compounds based on the "accuracy as recovery" using the factors in Table 7 of the method. If this method is used to analyze one or more compounds that are not on the method's published list of approved compounds, the Alternative Test Procedure specified in 40 CFR 136.4 and 40 CFR 136.5 must be followed.
- (E) Method 1624 in 40 CFR part 136, appendix A.
- (F) Method 1625 in 40 CFR part 136, appendix A.
- (G) Method 8260 in "Test Methods for Evaluating Solid Waste, Physical/

Chemical Methods," EPA Publication No. SW-846, Third Edition, September 1986, as amended by Update I, November 15, 1992. As an alternative, an owner or operator may use any more recent, updated version of Method 8260 approved by the EPA. For the purpose of using Method 8260 to comply with this subpart, the owner or operator must maintain a formal quality assurance program consistent with section 8 of Method 8260, and this program must include the following elements related to measuring the concentrations of volatile compounds:

(1) Documentation of site-specific procedures to minimize the loss of compounds due to volatilization, biodegradation, reaction, or sorption during the sample collection, storage,

and preparation steps.

(2) Documentation of specific quality assurance procedures followed during sampling, sample preparation, sample introduction, and analysis.

(3) Measurement of the average accuracy and precision of the specific procedures, including field duplicates and field spiking of the off-site material source before or during sampling with compounds having similar chemical

- characteristics to the target analytes. (H) Method 8270 in "Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods," EPA Publication No. SW-846, Third Edition, September 1986, as amended by Update I, November 15, 1992. As an alternative, an owner or operator may use any more recent, updated version of Method 8270 approved by the EPA. For the purpose of using Method 8270 to comply with this subpart, the owner or operator must maintain a formal quality assurance program consistent with Method 8270, and this program must include the following elements related to measuring the concentrations of volatile compounds:
- (1) Documentation of site-specific procedures to minimize the loss of compounds due to volatilization, biodegradation, reaction, or sorption during the sample collection, storage, and preparation steps.

(2) Documentation of specific quality assurance procedures followed during sampling, sample preparation, sample introduction, and analysis.

(3) Measurement of the average accuracy and precision of the specific procedures, including field duplicates and field spiking of the off-site material source before or during sampling with compounds having similar chemical characteristics to the target analytes.

(I) Any other analysis method that has been validated in accordance with the procedures specified in section 5.1 and

section 5.3 and the corresponding calculations in section 6.1 or section 6.3 of Method 301 in appendix A in 40 CFR part 63. The data are acceptable if they meet the criteria specified in section 6.1.5 or section 6.3.3 of Method 301. If correction is required under section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range of 0.7 to 1.30. Other sections of Method 301 are not required.

(iii) Calculations. The average VOHAP concentration (C) on a mass-weighted basis shall be calculated by using the results for all samples analyzed in accordance with paragraph (b)(2)(ii) of this section and the following equation. An owner or operator using a test method that provides species-specific chemical concentrations may adjust the measured concentrations to the corresponding concentration values which would be obtained had the offsite material samples been analyzed using Method 305. To adjust these data, the measured concentration for each individual HAP chemical species contained in the off-site material is multiplied by the appropriate speciesspecific adjustment factor (f_{m305}) listed in Table 1 of this subpart.

$$\overline{C} = \frac{1}{Q} \times \sum_{i=1}^{n} (Q_i \times C_i)$$

Where:

- C = Average VOHAP concentration of the off-site material at the point-ofdelivery on a mass-weighted basis, ppmw.
- i = Individual sample "i" of the off-site material.
- n = Total number of samples of the offsite material collected (at least 4) for the averaging period (not to exceed 1 year).
- Q_i = Mass quantity of off-site material stream represented by Ci, kg/hr.
- Q_T = Total mass quantity of off-site material during the averaging period, kg/hr.
- C_i = Measured VOHAP concentration of sample "i" as determined in accordance with the requirements of § 63.694(a), ppmw.

(3) * * *

(i) Documentation shall be prepared that presents the information used as the basis for the owner's or operator's knowledge of the off-site material stream's average VOHAP concentration. Examples of information that may be used as the basis for knowledge include: material balances for the source or process generating the off-site material stream; species-specific chemical test data for the off-site material stream from

previous testing that are still applicable to the current off-site material stream; previous test data for other locations managing the same type of off-site material stream; or other knowledge based on information in documents such as manifests, shipping papers, or waste certification notices.

(c) Determination of average VOHAP concentration of an off-site material stream at the point-of-treatment.

- (1) Sampling. Samples of the off-site material stream shall be collected at the point-of-treatment in a manner such that volatilization of organics contained in the sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.
- (i) The averaging period to be used for determining the average VOHAP concentration for the off-site material stream on a mass-weighted average basis shall be designated and recorded. The averaging period can represent any time interval that the owner or operator determines is appropriate for the off-site material stream but shall not exceed 1 year.
- (ii) A sufficient number of samples, but no less than four samples, shall be collected to represent the complete range of HAP compositions and HAP quantities that occur in the off-site material stream during the entire averaging period due to normal variations in the operating conditions for the treatment process. Examples of such normal variations are seasonal variations in off-site material quantity or fluctuations in ambient temperature.
- (iii) All samples shall be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan shall describe the procedure by which representative samples of the off-site material stream are collected such that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan shall be maintained onsite in the plant site operating records. An example of an acceptable sampling plan includes a plan incorporating sample collection and handling procedures in accordance with the requirements specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 or Method 25D in 40 CFR part 60, appendix A.

(2) Analysis. Each collected sample must be prepared and analyzed in accordance with one of the methods

specified in paragraphs (b)(2)(ii)(A) through (b)(2)(ii)(I) of this section, as applicable to the sampled off-site material, for the purpose of measuring the HAP listed in Table 1 of this subpart.

(3) Calculations. The average VOHAP concentration (C) a mass-weighted basis shall be calculated by using the results for all samples analyzed in accordance with paragraph (c)(2) of this section and the following equation. An owner or operator using a test method that provides species-specific chemical concentrations may adjust the measured concentrations to the corresponding concentration values which would be obtained had the off-site material samples been analyzed using Method 305. To adjust these data, the measured concentration for each individual HAP chemical species contained in the offsite material is multiplied by the appropriate species-specific adjustment factor (f_{m305}) listed in Table 1 of this subpart.

$$\overline{C} = \frac{1}{Q_T} \times \sum_{i=1}^{n} (Q_i \times C_i)$$

Where:

 \bar{C} = Average VOHAP concentration of the off-site material on a mass- $\label{eq:weighted} \begin{aligned} & weighted \ basis, \ ppmw. \\ & i = Individual \ sample \ ``i" \ of \ the \ off-site \end{aligned}$

material.

- n = Total number of samples of the offsite material collected (at least 4) for the averaging period (not to exceed 1 year).
- $Q_i = Mass$ quantity of off-site material stream represented by C_i, kg/hr.
- Q_T = Total mass quantity of off-site material during the averaging period, kg/hr.
- C_i = Measured VOHAP concentration of sample "i" as determined in accordance with the requirements of § 63.694(a), ppmw.

(e) Determination of required HAP mass removal rate (RMR).

(1) Each individual stream containing HAP that enters the treatment process shall be identified.

(2) The average VOHAP concentration at the point-of-delivery for each stream identified in paragraph (e)(1) of this section shall be determined using the test methods and procedures specified in paragraph (b) of this section.

(3) For each stream identified in paragraph (e)(1) of this section that has an average VOHAP concentration equal to or greater than 500 ppmw at the point-of-delivery, the average volumetric flow rate and the density of the off-site material stream at the pointof-delivery shall be determined.

(4) The required HAP mass removal rate (RMR) shall be calculated by using the average VOHAP concentration, average volumetric flow rate, and density determined in paragraph (e)(3) of this section for each stream and the following equation:

$$RMR = \sum_{y=1}^{n} \left[V_{y} \times k_{y} \times \frac{\left(\overline{C_{y}} - 500 \text{ ppmw}\right)}{10^{6}} \right]$$

Where:

RMR = Required HAP mass removal rate, kg/hr.

- y = Individual stream "y" that has a VOHAP concentration equal to or greater than 500 ppmw at the pointof-delivery as determined in § 63.694(b).
- n = Total number of "y" streams treated by process.
- V_y = Average volumetric flow rate of stream "y" at the point-of-delivery, m^3/hr .
- k_y = Density of stream "y", kg/m³.
- \bar{C}_y = Average VOHAP concentration of stream "y" at the point-of-delivery as determined in § 63.694(b)(2), ppmw.
- (f) Determination of actual HAP mass removal rate (MR).
- (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 1 hour.
- (2) The HAP mass flow entering the process (E_b) and the HAP mass flow exiting the process (E_a) shall be determined using the test methods and procedures specified in paragraphs (g)(2) through (g)(4) of this section.
- (3) The actual mass removal rate shall be calculated using the HAP mass flow rates determined in paragraph (f)(2) of this section and the following equation:

 $MR = E_b - E_a$ where:

MR = Actual HAP mass removal rate, kg/hr.

 E_b = HAP mass flow entering process as determined in paragraph (f)(2) of this section, kg/hr.

 $E_a = HAP$ mass flow exiting process as determined in paragraph (f)(2) of this section, kg/hr.

- (g) Determination of treatment process HAP reduction efficiency (R).
- (1) The HAP reduction efficiency (R) for a treatment process shall be determined based on results for a minimum of three consecutive runs.

- (2) Each individual stream containing HAP that enters the treatment process shall be identified. Each individual stream containing HAP that exits the treatment process shall be identified. The owner or operator shall prepare a sampling plan for measuring the identified streams that accurately reflects the retention time of the material in the process.
- (3) For each run, information shall be determined for each stream identified in paragraph (g)(2) of this section as specified in paragraphs (g)(3)(i) through (g)(3)(iii) of this section.
- (i) The mass quantity shall be determined for each stream identified in paragraph (g)(2) of this section as entering the process (Q_b) . The mass quantity shall be determined for each stream identified in paragraph (g)(2) of this section as exiting the process (Q_a) .
- (ii) The average VOHAP concentration at the point-of-delivery shall be determined for each stream entering the process (C_b) (as identified in paragraph (g)(2) of this section) using the test methods and procedures specified in paragraph (b) of this section.
- (iii) The average VOHAP concentration at the point-of-treatment shall be determined for each stream exiting the process (C_a) (as identified in paragraph (g)(2) of this section) using the test methods and procedures specified in paragraph (c) of this section.
- (4) The HAP mass flow entering the process (E_b) and the HAP mass flow exiting the process (E_a) shall be calculated using the results determined in paragraph (g)(3) of this section and the following equations:

$$E_a = \frac{1}{10^6} \sum_{j=1}^{m} \left(Q_{aj} \times \overline{C_{aj}} \right)$$

$$E_b = \frac{1}{10^6} \sum_{j=1}^{m} \left(Q_{bj} \times \overline{C_{bj}} \right)$$

Where:

 E_b = HAP mass flow entering process, kg/hr.

 $E_a = HAP$ mass flow exiting process, kg/hr.

m = Total number of runs (at least 3) j = Individual run "j"

Q_{bj} = Mass quantity of material entering process during run "j", kg/hr.

 Q_{aj} = Average mass quantity of material exiting process during run "j", kg/hr

- $\begin{array}{l} C_{aj} = Average \; VOHAP \; concentration \; of \\ material \; exiting \; process \; during \; run \\ \text{``j''} \; as \; determined \; in \; \S \; 63.694(c), \\ ppmw. \end{array}$
- C_{bj} = Average VOHAP concentration of material entering process during run "j" as determined in \S 63.694(b)(2), ppmw.
- (5) The HAP reduction efficiency (R) shall be calculated using the HAP mass flow rates determined in paragraph (g)(4) of this section and the following equation:

$$R = \frac{E_b - E_a}{E_b} \times 100$$

Where:

R = HAP reduction efficiency, percent.

 E_b = HAP mass flow entering process as determined in paragraph (g)(4) of this section, kg/hr.

 $E_{\rm a}$ = HAP mass flow exiting process as determined in accordance with the requirements of paragraph (g)(4) of this section, kg/hr.

- (h) Determination of HAP biodegradation efficiency (R_{bio}).
- (1) The fraction of HAP biodegraded ($F_{\rm bio}$) shall be determined using one of the procedures specified in appendix C of this part 63.
- (2) The HAP biodegradation efficiency (R_{bio}) shall be calculated by using the following equation:

$$R_{\rm bio} = F_{\rm bio} \times 100$$

where:

 R_{bio} = HAP biodegradation efficiency, percent.

 $F_{
m bio}$ = Fraction of HAP biodegraded as determined in paragraph (h)(1) of this section.

- (i) Determination of actual HAP mass removal rate (MR_{bio}).
- (1) The actual HAP mass removal rate (MR $_{\rm bio}$) shall be determined based on results for a minimum of three consecutive runs. The sampling time for each run shall be 1 hour.
- (2) The HAP mass flow entering the process (E_b) shall be determined using the test methods and procedures specified in paragraphs (g)(2) through (g)(4) of this section.
- (3) The fraction of HAP biodegraded ($F_{\rm bio}$) shall be determined using the procedure specified in 40 CFR part 63, appendix C of this part.
- (4) The actual mass removal rate shall be calculated by using the HAP mass

flow rates and fraction of HAP biodegraded determined in paragraphs (i)(2) and (i)(3), respectively, of this section and the following equation:

 $MR_{bio} = E^b \times F_{bio}$

Where:

 MR_{bio} = Actual HAP mass removal rate, kg/hr.

 $E_b = HAP$ mass flow entering process, kg/hr.

 F_{bio} = Fraction of HAP biodegraded. *

(k) Procedure for determining no detectable organic emissions for the purpose of complying with this subpart.

- (1) The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.
- (2) The test shall be performed when the unit contains a material having a total organic concentration representative of the range of concentrations for the materials expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position.
- (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 3.1.2(a) of Method 21 shall be for the average composition of the organic constituents in the material placed in the unit, not for each individual organic constituent.
- (4) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix
- (5) Calibration gases shall be as follows:
- (i) Zero air (less than 10 ppmv hydrocarbon in air): and
- (ii) A mixture of methane or n-hexane in air at a concentration of approximately, but less than, 10,000 ppmv.
- (6) An owner or operator may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If an owner or operator chooses to adjust the instrument readings for the

background level, the background level value must be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.

(7) Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.

(8) An owner or operator must determine if a potential leak interface operates with no detectable emissions using the applicable procedure specified in paragraph (k)(8)(i) or (k)(8)(ii) of this

(i) If an owner or operator chooses not to adjust the detection instrument readings for the background organic concentration level, then the maximum organic concentration value measured by the detection instrument is compared directly to the applicable value for the potential leak interface as specified in paragraph (k)(9) of this section.

(ii) If an owner or operator chooses to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (k)(6) of this section is compared with the applicable value for the potential leak interface as specified in paragraph (k)(9) of this section.

- (9) A potential leak interface is determined to operate with no detectable emissions using the applicable criteria specified in paragraphs (k)(9)(i) and (k)(9)(ii) of this section.
- (i) For a potential leak interface other than a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (k)(8) is less than 500 ppmv.
- (ii) For a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration

value determined in paragraph (k)(8) is less than 10,000 ppmv.

(m) Determination of process vent stream flow rate and total HAP concentration.

(1) Method 1 or 1A of 40 CFR part 60, appendix A, as appropriate, must be used for selection of the sampling site.

(2) No traverse site selection method is needed for vents smaller than 0.10 meter in diameter.

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

(4) Process vent stream total HAP concentration must be measured using

the following procedures:

(i) Method 18 of 40 CFR part 60, appendix A, must be used to measure the total HAP concentration. Alternatively, any other method or data that has been validated according to the protocol in Method 301 of appendix A of this part may be used.

(ii) Where Method 18 of 40 CFR part 60, appendix A, is used, the following procedures must be used to calculate parts per million by volume

concentration:

- (A) The minimum sampling time for each run must be 1 hour in which either an integrated sample or four grab samples must be taken. If grab sampling is used, then the samples must be taken at approximately equal intervals in time, such as 15 minute intervals during the run.
- (B) The total HAP concentration (C_{HAP}) must be computed according to the following equation:

$$C_{\text{HAP}} = \frac{\sum_{i=1}^{x} \left(\sum_{j=1}^{n} C_{ji} \right)}{Y}$$

Where:

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

 C_{ii} = Concentration of sample component j of the sample i, dry basis, parts per million by volume.

n = Number of components in the sample.

x = Number of samples in the sample

15. Section 63.695 is revised to read as follows:

§ 63.695 Inspection and monitoring requirements.

(a) This section specifies the inspection and monitoring procedures required to perform the following:

(1) To inspect tank fixed roofs and floating roofs for compliance with the Tank Level 2 controls standards specified in § 63.685 of this subpart, the inspection procedures are specified in paragraph (b) of this section.

(2) To inspect and monitor closedvent systems for compliance with the standards specified in § 63.693 of this subpart, the inspection and monitoring procedures are specified in paragraph

(c) of this section.

(3) To inspect and monitor transfer system covers for compliance with the standards specified in § 63.689(c)(1) of this subpart, the inspection and monitoring procedures are specified in paragraph (d) of this section.

(4) To monitor control devices for compliance with the standards specified in § 63.693 of this subpart, the monitoring procedures are specified in

paragraph (e) of this section.

(b) Tank Level 2 fixed roof and floating roof inspection requirements.

- (1) Owners and operators that use a tank equipped with an internal floating roof in accordance with the provisions of § 63.685(e) of this subpart shall meet the following inspection requirements:
- (i) The floating roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air emissions. Defects include, but are not limited to, the internal floating roof is not floating on the surface of the liquid inside the tank; liquid has accumulated on top of the internal floating roof; any portion of the roof seals have detached from the roof rim; holes, tears, or other openings are visible in the seal fabric; the gaskets no longer close off the waste surfaces from the atmosphere; or the slotted membrane has more than 10 percent open area.
- (ii) The owner or operator shall inspect the internal floating roof components as follows except as provided for in paragraph (b)(1)(iii) of this section:
- (A) Visually inspect the internal floating roof components through openings on the fixed-roof (e.g., manholes and roof hatches) at least once every calendar year after initial fill, and
- (B) Visually inspect the internal floating roof, primary seal, secondary seal (if one is in service), gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least every 10 years. Prior to each inspection, the owner or operator shall notify the Administrator in accordance with the reporting requirements specified in § 63.697 of this subpart.
- (iii) As an alternative to performing the inspections specified in paragraph

- (b)(1)(ii) of this section for an internal floating roof equipped with two continuous seals mounted one above the other, the owner or operator may visually inspect the internal floating roof, primary and secondary seals, gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least every 5 years. Prior to each inspection, the owner or operator shall notify the Administrator in accordance with the reporting requirements specified in § 63.697 of this subpart.
- (iv) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (b)(4) of this section.
- (v) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in § 63.696 of this subpart.
- (2) Owners and operators that use a tank equipped with an external floating roof in accordance with the provisions of § 63.685(f) of this subpart shall meet the following requirements:
- (i) The owner or operator shall measure the external floating roof seal gaps in accordance with the following requirements:
- (A) The owner or operator shall perform measurements of gaps between the tank wall and the primary seal within 60 days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every 5 years. Prior to each inspection, the owner or operator shall notify the Administrator in accordance with the reporting requirements specified in § 63.697 of this subpart.
- (B) The owner or operator shall perform measurements of gaps between the tank wall and the secondary seal within 60 days after initial operation of the separator following installation of the floating roof and, thereafter, at least once every year. Prior to each inspection, the owner or operator shall notify the Administrator in accordance with the reporting requirements specified in § 63.697 of this subpart.
- (C) If a tank ceases to hold off-site material for a period of 1 year or more, subsequent introduction of off-site material into the tank shall be considered an initial operation for the purposes of paragraphs (b)(2)(i)(A) and (b)(2)(i)(B) of this section.
- (D) The owner shall determine the total surface area of gaps in the primary seal and in the secondary seal individually using the following procedure.
- (1) The seal gap measurements shall be performed at one or more floating

roof levels when the roof is floating off the roof supports.

(2) Seal gaps, if any, shall be measured around the entire perimeter of the floating roof in each place where a 0.32-centimeter (cm) (½-inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the tank and measure the circumferential distance of each such location.

(3) For a seal gap measured under paragraph (b)(2) of this section, the gap surface area shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

(4) The total gap area shall be calculated by adding the gap surface areas determined for each identified gap location for the primary seal and the secondary seal individually, and then dividing the sum for each seal type by the nominal diameter of the tank. These total gap areas for the primary seal and secondary seal are then compared to the respective standards for the seal type as specified in § 63.685(f)(1) of this subpart.

(É) In the event that the seal gap measurements do not conform to the specifications in § 63.685(f)(1) of this subpart, the owner or operator shall repair the defect in accordance with the requirements of paragraph (b)(4) of this section.

(F) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in § 63.696 of this subpart.

(ii) The owner or operator shall visually inspect the external floating roof in accordance with the following

requirements:

- (A) The floating roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air emissions. Defects include, but are not limited to: holes, tears, or other openings in the rim seal or seal fabric of the floating roof; a rim seal detached from the floating roof; all or a portion of the floating roof deck being submerged below the surface of the liquid in the tank; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.
- (B) The owner or operator shall perform the inspections following installation of the external floating roof and, thereafter, at least once every year.
- (C) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the

requirements of paragraph (b)(4) of this section.

(D) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in § 63.696(d) of this subpart.

(3) Owners and operators that use a tank equipped with a fixed roof in accordance with the provisions of § 63.685(g) of this subpart shall meet the

following requirements:

- (i) The fixed roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the separator wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices. In the case when a tank is buried partially or entirely underground, inspection is required only for those portions of the cover that extend to or above the ground surface, and those connections that are on such portions of the cover (e.g., fill ports, access hatches, gauge wells, etc.) and can be opened to the atmosphere.
- (ii) The owner or operator must perform an initial inspection following installation of the fixed roof. Thereafter, the owner or operator must perform the inspections at least once every calendar year except as provided for in paragraph (f) of this section.
- (iii) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (b)(4) of this

(iv) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in § 63.696(e) of this subpart.

(4) The owner or operator shall repair each defect detected during an inspection performed in accordance with the requirements of paragraph (b)(1), (b)(2), or (b)(3) of this section in the following manner:

(i) The owner or operator shall within 45 calendar days of detecting the defect either repair the defect or empty the tank and remove it from service. If within this 45-day period the defect cannot be repaired or the tank cannot be removed from service without disrupting operations at the plant site, the owner or operator is allowed two 30day extensions. In cases when an owner or operator elects to use a 30-day extension, the owner or operator shall prepare and maintain documentation describing the defect, explaining why alternative storage capacity is not available, and specify a schedule of

actions that will ensure that the control equipment will be repaired or the tank emptied as soon as possible.

(ii) When a defect is detected during an inspection of a tank that has been emptied and degassed, the owner or operator shall repair the defect before refilling the tank.

(c) Owners and operators that use a closed-vent system in accordance with the provisions of § 63.693 of this subpart shall meet the following inspection and

monitoring requirements:

(1) Each closed-vent system that is used to comply with $\S 63.693(c)(1)(i)$ of this subpart shall be inspected and monitored in accordance with the

following requirements:

- (i) At initial startup, the owner or operator shall monitor the closed-vent system components and connections using the procedures specified in § 63.694(k) of this subpart to demonstrate that the closed-vent system operates with no detectable organic emissions.
- (ii) After initial startup, the owner or operator shall inspect and monitor the closed-vent system as follows:
- (A) Closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted and gasketed ducting flange) shall be visually inspected at least once per year to check for defects that could result in air emissions. The owner or operator shall monitor a component or connection using the procedures specified in § 63.694(k) of this subpart to demonstrate that it operates with no detectable organic emissions following any time the component is repaired or replaced (e.g., a section of damaged hard piping is replaced with new hard piping) or the connection is unsealed (e.g., a flange is unbolted).

(B) Closed-vent system components or connections other than those specified in paragraph (c)(1)(ii)(A) of this section, shall be monitored at least once per year using the procedures specified in § 63.694(k) of this subpart to demonstrate that components or connections operate with no detectable

organic emissions.

(iii) In the event that a defect or leak is detected, the owner or operator shall repair the defect or leak in accordance with the requirements of paragraph (c)(3) of this section.

- (iv) The owner or operator shall maintain a record of the inspection and monitoring in accordance with the requirements specified in § 63.696 of this subpart.
- (2) Each closed-vent system that is used to comply with § 63.693(c)(1)(ii) of

this subpart shall be inspected and monitored in accordance with the following requirements:

(i) The closed-vent system shall be visually inspected by the owner or operator to check for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork or piping; loose connections; or broken or missing caps or other closure devices.

(ii) The owner or operator must perform an initial inspection following installation of the closed-vent system. Thereafter, the owner or operator must perform the inspections at least once every calendar year except as provided for in paragraph (f) of this section.

(iii) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (c)(3) of this

section.

(iv) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in § 63.696 of this subpart.

(3) The owner or operator shall repair

all detected defects as follows: (i) The owner or operator shall make first efforts at repair of the defect no

later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 45

calendar days after detection.

(ii) Repair of a defect may be delayed beyond 45 calendar days if either of the conditions specified in paragraph (c)(3)(ii)(A) or (c)(3)(ii)(B) occurs. In this case, the owner or operator must repair the defect the next time the process or unit that vents to the closed-vent system is shutdown. Repair of the defect must be completed before the process or unit resumes operation.

(A) Completion of the repair is technically infeasible without the shutdown of the process or unit that vents to the closed-vent system.

- (B) The owner or operator determines that the air emissions resulting from the repair of the defect within the specified period would be greater than the fugitive emissions likely to result by delaying the repair until the next time the process or unit that vents to the closed-vent system is shutdown.
- (iii) The owner or operator shall maintain a record of the defect repair in accordance with the requirements specified in § 63.696 of this subpart.
- (d) Owners and operators that use a transfer system equipped with a cover in accordance with the provisions of § 63.689(c)(1) of this subpart shall meet the following inspection requirements:
- (1) The cover and its closure devices shall be visually inspected by the owner or operator to check for defects that

could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover sections or between the cover and its mounting; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices. In the case when a transfer system is buried partially or entirely underground, inspection is required only for those portions of the cover that extend to or above the ground surface, and those connections that are on such portions of the cover (e.g., access hatches, etc.) and can be opened to the atmosphere.

(2) The owner or operator must perform an initial inspection following installation of the cover. Thereafter, the owner or operator must perform the inspections at least once every calendar year except as provided for in paragraph

(f) of this section.

- (3) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (d)(5) of this section.
- (4) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in § 63.696 of this subpart.

(5) The owner or operator shall repair all detected defects as follows:

- (i) The owner or operator shall make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in paragraph (d)(5)(ii) of this section.
- (ii) Repair of a defect may be delayed beyond 45 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the transfer system and no alternative transfer system is available at the site to accept the material normally handled by the system. In this case, the owner or operator shall repair the defect the next time the process or unit that is generating the material handled by the transfer system stops operation. Repair of the defect must be completed before the process or unit resumes operation.

(iii) The owner or operator shall maintain a record of the defect repair in accordance with the requirements specified in § 63.696 of this subpart.

(e) Control device monitoring requirements. For each control device required under § 63.693 of this subpart 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 (e)(7) of this section.
- (1) A continuous parameter monitoring system must be used to measure the operating parameter or parameters specified for the control device in § 63.693(d) through § 63.693(g) of this subpart as applicable to the type and design of the control device. The continuous parameter monitoring system must meet the following specifications and requirements:
- (i) The continuous parameter monitoring system must measure either an instantaneous value at least once every 15 minutes or an average value for intervals of 15 minutes or less and continuously record either:
 - (A) Each measured data value; or
- (B) Each block average value for each 1-hour period or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values.
- (ii) The monitoring system must be installed, calibrated, operated, and maintained in accordance with the manufacturer's specifications or other written procedures that provide reasonable assurance that the monitoring equipment is operating properly.
- (2) Using the data recorded by the monitoring system, the owner or operator must calculate the daily average value for each monitored operating parameter for each operating day. If operation of the control device is continuous, the operating day is a 24-hour period. If control device operation is not continuous, the operating day is the total number of hours of control device operation per 24-hour period. Valid data points must be available for 75 percent of the operating hours in an operating day to compute the daily average.
- (3) For each monitored operating parameter, the owner or operator must establish a minimum operating parameter value or a maximum operating parameter value, as appropriate, to define the range of conditions at which the control device must be operated to continuously achieve the applicable performance requirements specified in § 63.693(b)(2) of this subpart. Each minimum or maximum operating parameter value must be established in accordance with the requirements in paragraphs (e)(3)(i) and (e)(3)(ii) of this section.

- (i) If the owner or operator conducts a performance test to demonstrate control device performance, then the minimum or maximum operating parameter value must be established based on values measured during the performance test and supplemented, as necessary, by the control device design specifications, manufacturer recommendations, or other applicable information.
- (ii) If the owner or operator uses a control device design analysis to demonstrate control device performance, then the minimum or maximum operating parameter value must be established based on the control device design analysis and supplemented, as necessary, by the control device manufacturer recommendations or other applicable information.
- (4) An excursion 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 (e)(4)(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 an excursion criterion specified in paragraphs (e)(4)(i) through (e)(4)(iii) of this section, then a single excursion is determined to have occurred for the control device for that operating day.
- (i) An excursion 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) An excursion 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) An excursion 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 excursion, except as provided for in paragraph(e)(6) of this section, 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.

(6) An excursion is not a violation of this standard under any one of the conditions specified in paragraphs (e)(6)(i) and (e)(6)(ii) of this section.

(i) An excursion is not a violation nor does it count toward the number of excused excursions allowed under paragraph (e)(6)(ii) of this section when the excursion occurs during any one of the following periods:

(A) During a period of startup, shutdown, or malfunction when the affected facility is operated during such period in accordance with the facility's startup, shutdown, and malfunction plan; or

(B) 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).

(ii) For each control device, one excused excursion is allowed per semiannual period for any reason. The initial semiannual period is the 6-month reporting period addressed by the first semiannual report submitted by the owner or operator in accordance with § 63.697(b)(4) of this subpart.

(7) Nothing in paragraphs (e)(1) through (e)(6) of this section shall be construed to allow or excuse a monitoring parameter excursion caused by any activity that violates other applicable provisions of this subpart.

(f) Alternative inspection and monitoring interval. Following the initial inspection and monitoring of a piece of air pollution control equipment in accordance with the applicable provisions of this section, subsequent inspection and monitoring of the equipment may be performed at intervals longer than 1 year when an owner or operator determines that performing the required inspection or monitoring procedures would expose a worker to dangerous, hazardous, or otherwise unsafe conditions and the owner or operator complies with the requirements specified in paragraphs (f)(1) and (f)(2) of this section.

- (1) The owner or operator must prepare and maintain at the plant site written documentation identifying the specific air pollution control equipment designated as "unsafe to inspect and monitor." The documentation must include for each piece of air pollution control equipment designated as such a written explanation of the reasons why the equipment is unsafe to inspect or monitor using the applicable procedures under this section.
- (2) The owner or operator must develop and implement a written plan and schedule to inspect and monitor the air pollution control equipment using the applicable procedures specified in this section during times when a worker can safely access the air pollution control equipment. The required inspections and monitoring must be performed as frequently as practicable but do not need to be performed more frequently than the periodic schedule that would be otherwise applicable to the air pollution control equipment under the provisions of this section. A copy of the written plan and schedule must be maintained at the plant site.
- 16. Section 63.697 is amended by revising paragraphs (a) and (b) to 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 paragraph (a)(2) of this section.
- (1) The owner or operator of an affected source must submit notices to the Administrator in accordance with the applicable notification requirements in 40 CFR 63.9 as specified in Table 2 of this subpart. For the purpose of this subpart, an owner or operator subject to the initial notification requirements under 40 CFR 63.9(b)(2) must submit the required notification on or before October 19, 1999.
- (2) The owner or operator of an affected source must submit reports to the Administrator in accordance with the applicable reporting requirements in 40 CFR 63.10 as specified in Table 2 of
- (b) The owner or operator of a control device used to meet the requirements of § 63.693 of this subpart shall submit the

- following notifications and reports to the Administrator:
- (1) A Notification of Performance Tests specified in § 63.7 and § 63.9(g) of this part,
- (2) Performance test reports specified in $\S 63.10(d)(2)$ of this part, and
- (3) Startup, shutdown, and malfunction reports specified in § 63.10(d)(5) of this part.
- (i) If actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not completely consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in $\S 63.6(e)(3)$ of this part, the owner or operator shall state such information in the report. The startup, shutdown, or malfunction report shall consist of a letter, containing the name, title, and signature of the responsible official who is certifying its accuracy, that shall be submitted to the Administrator, and
- (ii) Separate startup, shutdown, or malfunction reports are not required if the information is included in the summary report specified in paragraph (b)(4) of this section.
- (4) A summary report specified in $\S 63.10(e)(3)$ of this part shall be submitted on a semiannual basis (i.e., once every 6-month period). The summary report must include a description of all excursions as defined in § 63.695(e) of this subpart that have occurred during the 6-month reporting period. For each excursion 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 exceedance occurred. For each excursion 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.

17. Table 1 in Subpart DD is revised to read as follows:

TABLE 1 TO SUBPART DD-LIST OF HAZARDOUS AIR POLLUTANTS (HAP) FOR SUBPART DD

CAS No.a	Chemical name	f _{m 305}
75-07-0	Acetaldehyde	1.000
75–05–8 98–86–2	Acetonitrile	0.989 0.314

TABLE 1 TO SUBPART DD—LIST OF HAZARDOUS AIR POLLUTANTS (HAP) FOR SUBPART DD—Continued

CAS No.a	Chemical name	
07–02–8	Acrolein	1.0
07–13–1	Acrylonitrile	0.9
)7–05–1	Allyl chloride	1.0
-43-2	Benzene (includes benzene in gasoline)	1.0
–07–7	Benzotrichloride (isomers and mixture)	0.9
0–44–7		1.0
-52–4		3.0
2–88–1		0.9
-25–2		0.9
5–99–0		1.0
-15–0		1.0
-23–5		1.0
-58-1		1.0
3–90–4		0.0
3–90–7		1.0
-66-3		1.0
7–30–2		1.0
5–99–8	· ·	1.0
-82-8		1.0
-75–7		0.
1–88–3		0.9
2–64–9		0.
-12–8		1.
5–46–7	1,4-Dichlorobenzene(p)	1.
′–06–2		1.
1–44–4		0.
2–75–6		1.
-44-7	· · · · · · · · · · · · · · · · · · ·	0.
-67–5		0.
-78–1)	0.
/-69-7		0.
		0.
-28–5		
1–14–2		0.
3–91–1		0.
6-89-8		0.
6–88–7		1.
0–88–5		1.
0–41–4		1.
–00–3	Ethyl chloride (Chloroethane)	1.0
6-93-4	Ethylene dibromide (Dibromoethane)	0.9
7–06–2	Ethylene dichloride (1,2-Dichloroethane)	1.0
1–56–4		0.8
–21–8		1.0
-34-3		1.
	Glycol ethers d that have a Henry's Law constant value equal to or greater than 0.1 Y/X (1.8 x 10-6 atm/gm-mole/m³) at 25°C.	(e)
8–74–1	9 ,	0.
-68-3		0.
-00-3 -72-1		0.
)–54–3		1.
-59–1		0.
-99–1 -89–9	· ·	
•• •		1.
-56–1		0.
-83-9		1.
-87–3		1.
-55-6		1.
-93–3		0.
-88–4		1.
3–10–1		0.
- 83-9	Methyl isocyanate	1.
-62–6		0.
4-04-4		1.
09–2		1.
-20–3	,	0.
-20–3 -95–3		0.
-95–3 -46–9		
		0.
-68-8		0.
<u>-86-5</u>	·	0.
–44–5	Phosgene ^c	1.
3–38–6	Propionaldehyde	0.
-87-5	Propylene dichloride (1,2-Dichloropropane)	1.
		1.

TABLE 1 TO SUBPART DD—LIST OF HAZARDOUS AIR POLLUTANTS (HAP) FOR SUBPART DD—Continued

CAS No.a	Chemical name	$f_{m\ 305}$
75–55–8	1,2-Propylenimine (2-Methyl aziridine)	0.945
100-42-5	Styrene	1.000
96-09-3	Styrene oxide	0.830
79–34–5	1,1,2,2-Tetrachloroethane	0.999
127–18–4	Tetrachloroethylene (Perchloroethylene)	1.000
108-88-3	Toluene	1.000
95-53-4	o-Toluidine	0.152
120-82-1	1,2,4-Trichlorobenzene	1.000
71–55–6	1,1,1-Trichloroethane (Methyl chlorform)	1.000
79–00–5	1,1,2-Trichloroethane (Vinyl trichloride)	1.000
79–01–6	Trichloroethylene	1.000
95–95–4	2,4,5-Trichlorophenol	0.108
88-06-2	2,4,6-Trichlorophenol	0.132
121–44–8	Triethylamine	1.000
540-84-1	2,2,4-Trimethylpentane	1.000
108-05-4	Vinyl acetate	1.000
593–60–2	Vinyl bromide	1.000
75–01–4	Vinyl chloride	1.000
75–35–4	Vinylidene chloride (1,1–Dichloroethylene)	1.000
1330–20–7	Xylenes (isomers and mixture)	1.000
95–47–6	o-Xylenes	1.000
108–38–3	m-Xylenes	1.000
106–42–3	p-Xylenes	1.000

- fm 305 = Method 305 fraction measure factor.
 a. CAS numbers refer to the Chemical Abstracts Services registry number assigned to specific compounds, isomers, or mixtures of compounds.
 - b. Denotes a HAP that hydrolyzes quickly in water, but the hydrolysis products are also HAP chemicals.
 c. Denotes a HAP that may react violently with water, exercise caustic is an expected analyte.
 d. Denotes a HAP that hydrolyzes slowly in water.
- e. The f_{m305} factors for some of the more common glycol ethers can be obtained by contacting the Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711.

18. Table 2 in Subpart DD is revised to read as follows:

TABLE 2 TO SUBPART DD-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(a)(1)	Yes	
63.1(a)(2)	Yes	
63.1(a)(3)	Yes	
63.1(a)(4)	No	Subpart DD (this table) specifies applicability of each paragraph in subpart A to subpart DD.
63.1(a)(5)–63.1(a)(9)	No	
63.1(a)(10)	Yes	
63.1(a)(11)	Yes	
63.1(a)(12)	Yes	
63.1(a)(13)	Yes	
63.1(a)(14)	Yes	
63.1(b)(1)	No	Subpart DD specifies its own applicability.
63.1(b)(2)	Yes	, , , , , , , , , , , , , , , , , , , ,
63.1(b)(3)	No	
63.1(c)(1)	No	Subpart DD explicitly specifies requirements that apply.
63.1(c)(2)	No	Area sources are not subject to subpart DD.
63.1(c)(3)	No	, '
63.1(c)(4)	Yes	
63.1(c)(5)	Yes	Except that sources are not required to submit notifications over- ridden by this table.
63.1(d)	No	
63.1(e)	No	
63.2	Yes	§63.681 of subpart DD specifies that if the same term is defined in subparts A and DD, it shall have the meaning given in subpart DD.
63.3	Yes	
63.4(a)(1)–63.4(a)(3)	Yes	
63.4(a)(4)	No	Reserved.
63.4(a)(5)	Yes	
63.4(b)		

Table 2 to Subpart DD—Applicability of Paragraphs in Subpart A of This Part 63—General Provisions to Subpart DD—Continued

63.4(c)	d to § 63.9(b)(4) and
63.5(a)(2)	d to § 63.9(b)(4) and
63.5(b)(1)	
63.5(b)(2)	
63.5(b)(3)	
63.5(b)(4)	
63.5(b)(5)	
63.5(b)(6)	
63.5(c)	
63.5(d)(1)(i) Yes	
63.5(d)(1)(ii)	
63.5(d)(1)(iii)	
63.5(d)(3)	
63.5(d)(4)	
63.5(e) Yes	
63.5(f)(1)	
63.5(f)(2)	
63.6(b)(1)	ces subject to sub-
part DD.	·
63.6(b)(2)	
63.6(b)(4)	ection 112(f) of the
Clean Air Act.	.,
63.6(b)(5)	ements.
63.6(b)(7)	
63.6(c)(1)	late.
63.6(c)(2)–63.6(c)(4) No	
63.6(c)(5)	
63.6(d)	
63.6(e)	
63.6(f)(2)(i)	
63.6(f)(2)(ii)	n determining com-
63.6(f)(2)(iii) (A), (B), and (C) Yes	
63.6(f)(2)(iii) (D)	
63.6(f)(2)(iv)	
63.6(f)(2)(v)	
63.6(g)	
63.6(h)	mission standards.
63.6(i)	
63.6(j)	ance demonstration
63.7(a)(2)	
63.7(a)(3) Yes	
63.7(b)	
63.7(c)	
63.7(d) Yes 63.7(e)(1) Yes	
63.7(e)(2)	
63.7(e)(3)	S.
63.7(e)(4)	
63.7(f)	/ides alternatives.
63.7(h)(1)	
63.7(h)(2)	
63.7(h)(3)	
63.7(h)(4)	
63.7(h)(5)	
63.8(a)	
63.8(b)(2)	ing.
63.8(b)(3) Yes	-

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

Subpart A reference	Applies to Subpart DD	Explanation
63.8(c)(1)(i)	Yes	
63.8(c)(1)(ii)	Yes	
63.8(c)(1)(iii)	Yes	
63.8(c)(2)	Yes	
63.8(c)(3)	Yes	
63.8(c)(4)	No	Subpart DD specifies monitoring frequency
63.8(c)(5)–63.8(c)(8)	No	
63.8(d)	No	
63.8(e)	No	
63.8(f)(1)	Yes	
63.8(f)(2)	Yes	
63.8(f)(3)	Yes	
63.8(f)(4)(i)	Yes	
63.8(f)(4)(ii)	Yes	
63.8(f)(4)(iii)	No Vac	
63.8(f)(5)(i)	Yes	
63.8(f)(5)(ii)	No Yes	
63.8(f)(5)(iii)	Yes	
63.8(g)	Yes	
63.9(a)	Yes	
63.9(b)(1)(i)	Yes	
63.9(b)(1)(ii)	No	
63.9(b)(2)	Yes	
63.9(b)(3)	No	
63.9(b)(4)	Yes	
63.9(b)(5)	Yes	
63.9(c)	Yes	
63.9(d)	Yes	
63.9(e)	No	
63.9(f)	No	
63.9(g)	No	
63.9(h)	Yes	
63.9(i)	Yes	
63.9(j)	No Vac	
63.10(a)	Yes	
63.10(b)(1)	Yes Yes	
63.10(b)(2)(i)	Yes	
63.10(b)(2)(iii)	No	
63.10(b)(2)(iv)	Yes	
63.10(b)(2)(v)	Yes	
63.10(b)(2)(vi)–(ix)	Yes	
63.10(b)(2)(x)	Yes	
63.10(b)(2) (xii)–(xiv)	No	
63.10(b)(3)	Yes	
63.10(c)	No	
63.10(d)(1)	No	
63.10(d)(2)	Yes	
63.10(d)(3)	No	
63.10(d)(4)	Yes	
63.10(d)(5)(i)	Yes	
63.10(d)(5)(ii)	Yes	
63.10(e)	No You	
63.10(f)	Yes Yes	
00.11=00.10	100	

^aWherever subpart A specifies "postmark" dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent by the specified dates, but a postmark is not required.

Subpart OO—National Emission Standards for Tanks—Level 1

19. Section 63.901 is amended by revising the definition of "Safety device" to read as follows:

§ 63.901 Definitions.

* * * * *

Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions to prevent physical damage or permanent deformation to equipment by venting gases or vapors during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal

ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.

20. Section 63.902 is amended by revising paragraphs (a) and (b)(3) introductory text to read as follows:

§ 63.902 Standards—Tank fixed roof.

- (a) This section applies to owners and operators subject to this subpart and controlling air emissions from a tank using a fixed roof. This section does not apply to a fixed-roof tank that is also equipped with an internal floating roof.
- (3) Each opening in the fixed roof, and any manifold system associated with the fixed roof, shall be either:
- 21. Section 63.905 is revised to read as follows:

§ 63.905 Test methods and procedures.

(a) Procedure for determining no detectable organic emissions for the purpose of complying with this subpart.

- (1) The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.
- (2) The test shall be performed when the unit contains a material having a total organic concentration representative of the range of concentrations for the materials expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position.
- (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 3.1.2(a) of Method 21 shall be for the average composition of the organic constituents in the material placed in the unit, not for each individual organic constituent.
- (4) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.
- (5) Calibration gases shall be as follows:

(i) Zero air (less than 10 ppmv hydrocarbon in air); and

(ii) A mixture of methane or n-hexane in air at a concentration of approximately, but less than 10,000 ppmv.

(6) An owner or operator may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If an owner or operator chooses to adjust the instrument readings for the background level, the background level value must be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.

(7) Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.

(8) An owner or operator must determine if a potential leak interface operates with no detectable emissions using the applicable procedure specified in paragraph (a)(8)(i) or (a)(8)(ii) of this section.

(i) If an owner or operator chooses not to adjust the detection instrument readings for the background organic concentration level, then the maximum organic concentration value measured by the detection instrument is compared directly to the applicable value for the potential leak interface as specified in paragraph (a)(9) of this section.

(ii) If an owner or operator chooses to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value

- as determined in paragraph (a)(6) of this section is compared with the applicable value for the potential leak interface as specified in paragraph (a)(9) of this section.
- (9) A potential leak interface is determined to operate with no detectable emissions using the applicable criteria specified in paragraphs (a)(9)(i) and (a)(9)(ii) of this section.
- (i) For a potential leak interface other than a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(8) is less than 500 ppmv.
- (ii) For a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(8) is less than 10,000 ppmv.

(b) [Reserved]

22. Section 63.906 is amended by revising paragraphs (a)(2) and (b)(2), and adding paragraph (d) to read as follows:

§ 63.906 Inspection and monitoring requirements.

(a) * * *

(2) The owner or operator must perform an initial inspection following installation of the fixed roof. Thereafter, the owner or operator must perform the inspections at least once every calendar year except as provided for in paragraph (d) of this section.

* * * * *

(b) * * *

(2) Repair of a defect may be delayed beyond 45 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the regulated material normally managed in the tank. In this case, the owner or operator shall repair the defect the next time alternative tank capacity becomes available and the tank can be emptied or temporarily removed from service, as necessary to complete the repair.

* * * * *

(d) Alternative inspection and monitoring interval. Following the initial inspection and monitoring of a fixed roof in accordance with this section, subsequent inspection and monitoring of the equipment may be performed at intervals longer than 1 year when an owner or operator determines that performing the required inspection or monitoring procedures would expose a worker to dangerous,

hazardous, or otherwise unsafe conditions and the owner or operator complies with the requirements specified in paragraphs (d)(1) and (d)(2) of this section.

- (1) The owner or operator must prepare and maintain at the plant site written documentation identifying the specific air pollution control equipment designated as "unsafe to inspect and monitor." The documentation must include for each piece of air pollution control equipment designated as such a written explanation of the reasons why the equipment is unsafe to inspect or monitor using the applicable procedures under this section.
- (2) The owner or operator must develop and implement a written plan and schedule to inspect and monitor the air pollution control equipment using the applicable procedures specified in this section during times when a worker can safely access the air pollution control equipment. The required inspections and monitoring must be performed as frequently as practicable but do not need to be performed more frequently than the periodic schedule that would be otherwise applicable to the air pollution control equipment under the provisions of this section. A copy of the written plan and schedule must be maintained at the plant site.

Subpart PP—National Emission Standards for Containers

23. Section 63.921 is amended by revising the definitions of "Empty container" and "Safety device" to read as follows:

§ 63.921 Definitions.

* * * *

Empty container means a container for which either of the following conditions exists: the container meets the conditions for an empty container specified in 40 CFR 261.7(b); or all regulated-material has been removed from the container except for any regulated-material that remains on the interior surfaces of the container as clingage or in pools on the container bottom due to irregularities in the container.

* * * * *

Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions to prevent physical damage or permanent deformation to equipment by venting gases or vapors during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this subpart, a safety device is not used for routine venting of gases

or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.

24. Section 63.925 is amended by revising paragraph (a) to read as follows:

§ 63.925 Test methods and procedures.

(a) Procedures for determining no detectable organic emissions for the purpose of complying with this subpart.

- (1) The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.
- (2) The test shall be performed when the unit contains a material having a total organic concentration representative of the range of concentrations for the materials expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position.
- (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 3.1.2(a) of Method 21 shall be for the average composition of the organic constituents in the material placed in the unit, not for each individual organic constituent.
- (4) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A
- (5) Calibration gases shall be as follows:

- (i) Zero air (less than 10 ppmv hydrocarbon in air); and
- (ii) A mixture of methane or n-hexane in air at a concentration of approximately, but less than 10,000 ppmv.
- (6) An owner or operator may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If an owner or operator chooses to adjust the instrument readings for the background level, the background level value must be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.
- (7) Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.
- (8) An owner or operator must determine if a potential leak interface operates with no detectable emissions using the applicable procedure specified in paragraph (a)(8)(i) or (a)(8)(ii) of this section.
- (i) If an owner or operator chooses not to adjust the detection instrument readings for the background organic concentration level, then the maximum organic concentration value measured by the detection instrument is compared directly to the applicable value for the potential leak interface as specified in paragraph (a)(9) of this section.
- (ii) If an owner or operator chooses to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (a)(6) of this section is compared with the applicable value for the potential leak interface as specified in paragraph (a)(9) of this section.
- (9) A potential leak interface is determined to operate with no detectable emissions using the applicable criteria specified in paragraphs (a)(9)(i) and (a)(9)(ii) of this section.

(i) For a potential leak interface other than a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(8) is less than 500 ppmv.

(ii) For a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(8) is less than 10,000 ppmv.

* * * * *

25. Section 63.926 is amended by revising paragraph (a) to read as follows:

§ 63.926 Inspection and monitoring requirements.

(a) Owners and operators of containers using either Container Level 1 or Container Level 2 controls in accordance with the provisions of § 63.922 and § 63.923 of this subpart, respectively, shall inspect the container and its cover and closure devices as follows:

In the case when a regulatedmaterial already is in the container at the time the owner or operator first accepts possession of the container at the facility site and the container is not emptied (i.e., does not meet the conditions for an empty container as defined in § 63.921 of this subpart) within 24 hours after the container has been accepted at the facility site, the container and its cover and closure devices shall be visually inspected by the owner or operator to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. This inspection of the container must be conducted on or before the date that the container is accepted at the facility (i.e., the date that the container becomes subject to the standards under this subpart). For the purpose of this requirement, the date of acceptance is the date of signature of the facility owner or operator on the manifest or shipping papers accompanying the container. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (a)(3) of this section.

(2) In the case when a container filled or partially filled with regulated-material remains unopened at the facility site for a period of 1 year or more, the container and its cover and closure devices shall be visually inspected by the owner or operator initially and thereafter, at least once every calendar year, to check for visible

cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (a)(3) of this section.

(3) When a defect is detected for the container, cover, or closure devices, the owner or operator must either empty the regulated-material from the defective container in accordance with paragraph (a)(3)(i) of this section or repair the defective container in accordance with paragraph (a)(3)(ii) of this section.

(i) If the owner or operator elects to empty the regulated-material from the defective container, the owner or operator must remove the regulatedmaterial from the defective container to meet the conditions for an empty container (as defined in § 63.921 of this subpart) and transfer the removed regulated-material to either a container that meets the applicable standards under this subpart or to a tank, process, or treatment unit that meets the applicable standards under the subpart referencing this subpart. Transfer of the regulated-material must be completed no later than 5 calendar days after detection of the defect. The emptied defective container must be either repaired, destroyed, or used for purposes other than management of regulated-material.

(ii) If the owner or operator elects not to empty the regulated-material from the defective container, the owner or operator must repair the defective container. First efforts at repair of the defect must be made no later than 24 hours after detection and repair must be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the regulated-material must be emptied from the container and the container must not be used to manage regulated-material until the defect is repaired.

Subpart QQ—National Emission Standards for Surface Impoundments

26. Section 63.941 is amended by revising the definitions of "Cover" and "Safety device" to read as follows:

§ 63.941 Definitions.

* * * * *

Cover means a device or system that provides a continuous barrier over the material managed in a surface impoundment to prevent or reduce air pollutant emissions to the atmosphere. A cover may have openings needed for

operation, inspection, sampling, maintenance, and repair of the surface impoundment provided that each opening is closed when not in use (e.g., access hatches, sampling ports). Examples of a cover for a surface impoundment include, but are not limited to, a floating membrane cover placed on the surface of the material in the surface impoundment or an air-supported structure installed over the surface impoundment.

* * * * *

Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions to prevent physical damage or permanent deformation to equipment by venting gases or vapors during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.

27. Section 63.945 is revised to read as follows:

§ 63.945 Test methods and procedures.

- (a) Procedure for determining no detectable organic emissions for the purpose of complying with this subpart.
- (1) The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the

sealing seat interface on a spring-loaded pressure-relief valve.

(2) The test shall be performed when the unit contains a material having a total organic concentration representative of the range of concentrations for the materials expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position

(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 3.1.2(a) of Method 21 shall be for the average composition of the organic constituents in the material placed in the unit, not for each individual organic constituent.

(4) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix Λ

(5) Calibration gases shall be as follows:

(i) Zero air (less than 10 ppmv hydrocarbon in air); and

(ii) A mixture of methane or n-hexane in air at a concentration of approximately, but less than 10,000 ppmv.

(6) An owner or operator may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If an owner or operator chooses to adjust the instrument readings for the background level, the background level value must be determined according to the procedures in Method 21 of 40 CFR

part 60, appendix A.

(7) Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.

(8) An owner or operator must determine if a potential leak interface operates with no detectable emissions using the applicable procedure specified in paragraph (a)(8)(i) or (a)(8)(ii) of this

section.

(i) If an owner or operator chooses not to adjust the detection instrument

readings for the background organic concentration level, then the maximum organic concentration value measured by the detection instrument is compared directly to the applicable value for the potential leak interface as specified in paragraph (a)(9) of this section.

(ii) If an owner or operator chooses to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (a)(6) of this section is compared with the applicable value for the potential leak interface as specified in paragraph (a)(9) of this section.

(9) A potential leak interface is determined to operate with no detectable emissions using the applicable criteria specified in paragraphs (a)(9)(i) and (a)(9)(ii) of this section.

(i) For a potential leak interface other than a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(8) is less than 500 ppmv.

(ii) For a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(8) is less than 10,000 ppmv.

(b) [Reserved]

28. Section 63.946 is amended by adding paragraph (d) and by revising paragraphs (a)(2) and (b)(1)(ii) to read as follows:

§ 63.946 Inspection and monitoring requirements.

(a) * * *

(2) The owner or operator must perform an initial inspection following installation of the floating membrane cover. Thereafter, the owner or operator must perform the inspections at least once per calendar year except as provided for in paragraph (d) of this section.

(b) * * * (1) * * *

(ii) The owner or operator must perform an initial inspection following installation of the cover. Thereafter, the owner or operator must perform the inspections at least once per calendar year except as provide for in paragraph (d) of this section.

* * * * *

- (d) Alternative inspection and monitoring interval. Following the initial inspection and monitoring of a piece of air pollution control equipment in accordance with the applicable provisions of this section, subsequent inspection and monitoring of the equipment may be performed at intervals longer than 1 year when an owner or operator determines that performing the required inspection or monitoring procedures would expose a worker to dangerous, hazardous, or otherwise unsafe conditions and the owner or operator complies with the requirements specified in paragraphs (d)(1) and (d)(2) of this section.
- (1) The owner or operator must prepare and maintain at the plant site written documentation identifying the specific air pollution control equipment designated as "unsafe to inspect and monitor." The documentation must include for each piece of air pollution control equipment designated as such a written explanation of the reasons why the equipment is unsafe to inspect or monitor using the applicable procedures under this section.
- (2) The owner or operator must develop and implement a written plan and schedule to inspect and monitor the air pollution control equipment using the applicable procedures specified in this section during times when a worker can safely access the air pollution control equipment. The required inspections and monitoring must be performed as frequently as practicable but do not need to be performed more frequently than the periodic schedule that would be otherwise applicable to the air pollution control equipment under the provisions of this section. A copy of the written plan and schedule must be maintained at the plant site.

Subpart RR—National Emission Standards for Individual Drain Systems

29. Section 63.961 is amended by adding in alphabetical order the definition of "Regulated-material" and by revising the definitions of "Individual drain system," "Sewer line" and "Waste management unit" to read as follows:

§ 63.961 Definitions.

* * * *

Individual drain system means a stationary system used to convey regulated-material to a waste management unit or to discharge or disposal. The term includes hard-piping, all drains and junction boxes, together with their associated sewer lines and other junction boxes (e.g., manholes, sumps, and lift stations)

conveying regulated-material. For the purpose of this subpart, an individual drain system is not a drain and collection system that is designed and operated for the sole purpose of collecting rainfall runoff (e.g., stormwater sewer system) and is segregated from all other individual drain systems.

Regulated-material means the wastewater streams, residuals, and any other materials specified by the referencing subpart to be managed in accordance with the standards under this subpart.

Sewer line means a lateral, trunk line, branch line, or other conduit used to convey regulated-material to a downstream waste management unit. Sewer lines include pipes, grates, and trenches.

Waste management unit means the equipment, structure, or device used to convey, store, treat, or dispose of regulated-material. Examples of waste management units include: wastewater tanks, surface impoundments, individual drain systems, and biological wastewater treatment units. Examples of equipment that may be waste management units include containers, air flotation units, oil-water separators or organic-water separators, or organic removal devices such as decanters, strippers, or thin-film evaporation units. * * *

30. Section 63.962 is amended by revising paragraph (b) to read as follows:

§ 63.962 Standards.

(b) Owners and operators controlling air emissions from an individual drain system in accordance with paragraph (a)(1) of this section shall meet the following requirements:

- (1) The individual drain system shall be designed to segregate the organic vapors from regulated material managed in the controlled individual drain system from entering any other individual drain system that is not controlled for air emissions in accordance with the standards specified in this subpart.
- (2) Drain control requirements. Each drain shall be equipped with either a water seal or a closure device in accordance with the following requirements:
- (i) When a water seal is used, the water seal shall be designed such that either:
- (A) The outlet to the pipe discharging the regulated-material extends below the liquid surface in the water seal of the drain; or

- (B) A flexible shield or other device is installed which restricts wind motion across the open space between the outlet of the pipe discharging the regulated material and the drain.
- (ii) When a closure device is used (e.g., securing a cap or plug on a drain that is not receiving regulated-material), the closure device shall be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the drain opening and the closure device.

(3) Junction box control requirements. Each junction box shall be equipped with controls as follows:

- (i) The junction box shall be equipped with a closure device (e.g., manhole cover, access hatch) that is designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the junction box opening and the closure
- (ii) If the junction box is vented, the junction box shall be vented in accordance with the following requirements:
- (A) The junction box shall be vented through a closed vent system to a control device except as provided for in paragraph (b)(3)(ii)(B) of this section. The closed vent system and control device shall be designed and operated in accordance in accordance with the standards specified in § 63.693 in subpart DD—National Emission Standards for Hazardous Air Pollutant Standards from Off-Site Waste and Recovery Operations.

(B) As an alternative to paragraph (b)(3)(ii)(A) of this section, the owner or operator may vent the junction box directly to the atmosphere when all of the following conditions are met:

- (1) The junction box is filled and emptied by gravity flow (i.e., there is no pump) or is operated with no more than slight fluctuations in the liquid level. Large changes in the size of the junction box vapor headspace created by using a pump to repeatedly empty and then refill the junction box do not meet this condition.
- (2) The vent pipe installed on the junction box shall be at least 90 centimeters in length and no greater than 10 centimeters in nominal inside diameter.
- (3) Water seals are installed at the liquid entrance(s) to or exit from the junction box to restrict ventilation in the individual drain system and between components in the individual drain system. The owner or operator shall

- demonstrate (e.g., by visual inspection or smoke test) upon request by the Administrator that the junction box water seal is properly designed and restricts ventilation.
- (4) Sewer line control requirements. Each sewer line shall not be open to the atmosphere and shall be covered or closed in a manner such that there are no visible cracks, holes, gaps, or other open spaces in the sewer line joints, seals, or other emission interfaces.
- (5) Operating requirements. The owner or operator shall operate the air emission controls required by paragraphs (b)(2) through (b)(4) of this section in accordance with the following requirements:
- (i) Each closure device shall be maintained in a closed position whenever regulated-material is in the individual drain system except when it is necessary to remove or open the closure device for sampling or removing material in the individual drain system, or for equipment inspection, maintenance, or repair.
- (ii) Each drain equipped with a water seal and open to the atmosphere shall be operated to ensure that the liquid in the water seal is maintained at the appropriate level. Examples of acceptable means for complying with this provision include but are not limited to using a flow-monitoring device indicating positive flow from a main to a branch water line supplying a trap; continuously dripping water into the trap using a hose; or regular visual observations.
- (iii) Each closed-vent system and the control device used to comply with paragraph (b)(3)(ii)(A) of this section shall be operated in accordance with the standards specified in 40 CFR 63.693.
- 31. Section 63.964 is amended by revising paragraph (b)(2) to read as follows:

§ 63.964 Inspection and monitoring requirements.

* (b) * * *

(2) Repair of a defect may be delayed beyond 15 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the individual drain system and no alternative capacity is available at the facility site to accept the regulated-material normally managed in the individual drain system. In this case, the owner or operator shall repair the defect the next time the process or unit that is generating the regulated-material managed in the individual drain system stops operation. Repair of the defect shall be completed

before the process or unit resumes operation.

* * * * * *

32. Section 63.965 is amended by revising paragraph (b) to read as follows:

§ 63.965 Recordkeeping requirements.

* * * * *

(b) Owners and operators that use a closed-vent system and a control device in accordance with the provisions of § 63.962 of this subpart shall prepare and maintain the records required for the closed-vent system and control device in accordance with the requirements of § 63.693 in subpart DD—National Emission Standards for Hazardous Air Pollutant Standards from Off-Site Waste and Recovery Operations.

33. Section 63.966 is revised to read as follows:

§ 63.966 Reporting requirements.

Owners and operators that use a closed-vent system and a control device in accordance with the provisions of § 63.962 of this subpart shall prepare and submit to the Administrator the reports required for closed-vent systems and control devices in accordance with the requirements of § 63.693 in subpart DD—National Emission Standards for Hazardous Air Pollutant Standards from Off-Site Waste and Recovery Operations.

Subpart VV—National Emission Standards for Oil-Water Separators and Organic-Water Separators

34. Section 63.1041 is amended by revising the definition of "Safety device" to read as follows:

§ 63.1041 Definitions.

* * * * *

Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions to prevent physical damage or permanent deformation to equipment by venting gases or vapors during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the equipment as

determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.

35. Section 63.1045 is added to read as follows:

§ 63.1045 Standards—Pressurized separator.

- (a) This section applies to owners and operators controlling air emissions from an oil-water or organic-water separator that is pressurized and is operated as a closed-system.
- (b) The pressurized separator must meet the following requirements.
- (1) The separator must be designed not to vent to the atmosphere as a result of compression of the vapor headspace in the separator during operation of the separator at its design capacity.
- (2) All separator openings must be equipped with closure devices designed to operate with no detectable organic emissions as determined using the procedure specified in § 63.1046(a) of this subpart.
- (3) Whenever a regulated-material is in the separator, the separator must be operated as a closed system that does not vent to the atmosphere except under either of the following conditions as specified in paragraph (b)(3)(i) or (b)(3)(ii) of this section.
- (i) At those times when opening of a safety device, as defined in § 63.1041 of this subpart, is required to avoid an unsafe condition.
- (ii) At those times when purging of inerts from the separator is required and the purge stream is routed to a closed-vent system and control device designed and operated in accordance with the applicable requirements of § 63.693 in subpart DD—National Emission Standards for Hazardous Air Pollutant Standards from Off-Site Waste and Recovery Operations.
- 36. Section 63.1046 is amended by revising paragraphs (a) and (b)(3) to read as follows:

§ 63.1046 Test methods and procedures.

(a) Procedure for determining no detectable organic emissions for the purpose of complying with this subpart.

(1) The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be

- checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.
- (2) The test shall be performed when the unit contains a material having a total organic concentration representative of the range of concentrations for the materials expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position.
- (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 3.1.2(a) of Method 21 shall be for the average composition of the organic constituents in the material placed in the unit, not for each individual organic constituent.
- (4) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix $^{\Lambda}$
- (5) Calibration gases shall be as follows:
- (i) Zero air (less than 10 ppmv hydrocarbon in air); and
- (ii) A mixture of methane or n-hexane in air at a concentration of approximately, but less than 10,000 ppmy.
- (6) An owner or operator may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If an owner or operator chooses to adjust the instrument readings for the background level, the background level value must be determined according to the procedures in Method 21 of 40 CFR part 60, appendix A.
- (7) Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.

- (8) An owner or operator must determine if a potential leak interface operates with no detectable emissions using the applicable procedure specified in paragraph (a)(8)(i) or (a)(8)(ii) of this section.
- (i) If an owner or operator chooses not to adjust the detection instrument readings for the background organic concentration level, then the maximum organic concentration value measured by the detection instrument is compared directly to the applicable value for the potential leak interface as specified in paragraph (a)(9) of this section.
- (ii) If an owner or operator chooses to adjust the detection instrument readings for the background organic concentration level, the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (a)(6) of this section is compared with the applicable value for the potential leak interface as specified in paragraph (a)(9) of this section
- (9) A potential leak interface is determined to operate with no detectable emissions using the applicable criteria specified in paragraphs (a)(9)(i) and (a)(9)(ii) of this section.
- (i) For a potential leak interface other than a seal around a shaft that passes through a cover opening, the potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(8) is less than 500 ppmv.
- (ii) For a seal around a shaft that passes through a cover opening, the

- potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (a)(8) is less than 10,000 ppmv.
- (b) * * *

 (3) Seal gaps, if any, shall be measured around the entire perimeter of the floating roof in each place where 0.32-centimeter (cm) (½ inch) diameter uniform probe passes freely (without forcing or binding against the seal)

between the seal and the wall of the separator and measure the circumferential distance of each such location.

* * * * *

37. Section 63.1047 is amended by adding paragraph (e) and by revising paragraphs (a)(2) and (c)(1)(ii) to read as follows:

§ 63.1047 Inspection and monitoring requirements.

- (a) * * *
- (2) The owner or operator must perform an initial inspection following installation of the fixed roof. Thereafter, the owner or operator must perform the inspections at least once every calendar year except as provided for in paragraph (e) of this section.

(c) * * * * * *

- (1) * * *
- (ii) The owner or operator must perform an initial inspection following installation of the fixed roof. Thereafter, the owner or operator must perform the inspections at least once every calendar year except as provided for in paragraph (e) of this section.

* * * * *

- (e) Alternative inspection interval. Following the initial inspection of a fixed roof in accordance with the applicable provisions of this section, subsequent inspection of the fixed roof may be performed at intervals longer than 1 year when an owner or operator determines that performing the required inspection would expose a worker to dangerous, hazardous, or otherwise unsafe conditions and the owner or operator complies with the requirements specified in paragraphs (e)(1) and (e)(2) of this section.
- (1) The owner or operator must prepare and maintain at the plant site written documentation identifying the specific fixed roof designated as "unsafe to inspect." The documentation must include for each fixed roof designated as such a written explanation of the reasons why the fixed roof is unsafe to inspect using the applicable procedures under this section.
- (2) The owner or operator must develop and implement a written plan and schedule to inspect and monitor the fixed roof using the applicable procedures specified in this section during times when a worker can safely access the fixed roof. The required inspections and monitoring must be performed as frequently as practicable but do not need to be performed more frequently than the periodic schedule that would be otherwise applicable to the fixed roof under the provisions of this section. A copy of the written plan and schedule must be maintained at the plant site.

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