U.S. ENVIRONMENTAL PROTECTION AGENCY

40 CFR parts 262, 264, 265, 270, and 271

[IL-64-2-5807; FRL-_____]

RIN 2060-AG44

Hazardous Waste Treatment, Storage, and Disposal Facilities and Hazardous Waste Generators; Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: Under the authority of the Resource Conservation and Recovery Act (RCRA), as amended, the EPA has published standards (59 FR 62896, December 6, 1994) to reduce organic air emissions from certain hazardous waste management activities to levels that are protective of human health and the environment. (The standards are known colloquially as the "subpart CC" standards due to their inclusion in subpart CC of Parts 264 and 265 of the RCRA subtitle C regulations). These air standards apply to certain tanks, containers, and surface impoundments (including tanks and containers at generators' facilities) used to manage hazardous waste capable of releasing organic waste constituents at levels which can harm human health and the environment.

The EPA previously has stayed the effective date of those rules administratively in order to receive and evaluate comments and ultimately to revise the rules in an appropriate manner. Today's action amends and clarifies the regulatory text of the final standards, clarifies certain language in the preamble to the final rule, and in doing so

provides additional options for compliance that give owners and operators increased flexibility in meeting the requirements of the rules while still providing sufficient controls to be protective of human health and the environment. In addition, today's action postpones the effective date of the subpart CC requirements until December 6, 1996.

EFFECTIVE DATE: These amendments are effective October 4, 1996. However, the rule provisions (originally published December 6, 1994, with technical amendments published February 9, 1996) that are amended by this action are effective as of December 6, 1996. (December 6, 1996 also is the effective date for those portions of the rule that are not affected by today's amendments.)

ADDRESSES: This notice is available on the EPA's Clean-up Information Bulletin Board (CLU-IN). To access CLU-IN with a modem of up to 28,800 baud, dial (301) 589-8366. First time users will be asked to input some initial registration information. Next, select "D" (download) from the main menu. Input the file name "RCRAAMEN.ZIP" to download this notice. Follow the on-line instructions to complete the download. More information about the download procedure is located in Bulletin 104; to read this type "B 104" from the main menu. For additional help with these instructions, telephone the CLU-IN help line at (301) 589-8368.

Docket. The supporting information used for this rulemaking is available for public inspection and copying in the RCRA docket. The RCRA docket numbers pertaining to this rulemaking are F-91-CESP-FFFFF, F-92-CESA-FFFFF, F-94-CESF-FFFFF, F-94-CE2A-FFFFF, F-95-CE3A-FFFFF, and F-96-CE4A-FFFFF. The RCRA docket is located at Crystal Gateway, 1235 Jefferson Davis Highway, First Floor, Arlington, Virginia. Hand delivery of items and review of docket materials are made at the Virginia address. The public must have an appointment to review docket materials. Appointments can be scheduled by calling the Docket Office at (703) 603-9230. The mailing address for the RCRA docket office is RCRA Information Center (5305W), U. S. Environmental Protection Agency, 401 M Street SW, Washington, DC 20460.

FOR FURTHER INFORMATION CONTACT: For information concerning applicability, permitting, enforcement and rule determinations, contact the appropriate regional representative:

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For general information about the RCRA Air Rules, or specific rule requirements of RCRA rules, please contact the RCRA Hotline, toll-free at (800) 424-9346. For questions about testing or analytical methods mentioned in this notice, please contact the Emission Measurement Center (MD-19), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone (919) 541-5374. For information concerning the analyses performed in developing this rule, contact Ms. Michele Aston, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711.

SUPPLEMENTARY INFORMATION:

Regulated Entities: The entities potentially affected by this action include:

Category	Examples of regulated entities
Industry............	Businesses that treat, store, or dispose of hazardous waste and are subject to RCRA subtitle C permitting requirements, or that accumulate hazardous waste on-site in RCRA permit-exempt tanks or containers pursuant to 40 CFR 262.34(a).
Federal Government..	Federal agencies that treat, store, or dispose of hazardous waste and are subject to RCRA subtitle C permitting requirements, or that accumulate hazardous waste on-site in RCRA permit-exempt tanks or containers pursuant to 40 CFR 262.34(a).

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be interested in the amendments to the regulation affected by this action. To determine whether your facility is regulated by this action, you should carefully examine the applicability criteria in §264.1080 and §265.1080 of the RCRA subpart CC air rules. 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.

Background: Section 3004(n) of RCRA requires EPA to develop standards to control air emissions from hazardous waste treatment, storage, and disposal facilities as may be necessary to protect human health and the environment. This requirement echoes the general requirement in section 3004(a) and section 3002(a)(3) to develop standards to control hazardous waste management activities as may be necessary to protect human health and the environment. The Agency has issued a series of regulations to implement the section 3004(n) mandate; these regulations control air emissions from certain process vents and equipment leaks (part 264 and part 265 subparts AA and BB), and emissions from certain tanks, containers, and surface impoundments (the subpart CC standards, which are the primary subject of today's action).

The EPA is today amending the final subpart AA, BB, and CC standards. Since the publication of the final subpart CC rule (59 FR 69826, December 4, 1994), the EPA has published three Federal Register documents to delay the effective date of that rule. The first (60 FR 26828, May 19, 1995) revised the effective date of the standards to be December 6, 1995. The second (60 FR 56952, November 13, 1995) revised the effective date of the standards to be June 6, 1996. The third (61 FR 28508, June 5, 1996) further postponed the effective date for the rule requirements until October 6, 1996. The EPA has also issued an indefinite stay of the standards specific to units managing wastes produced by certain organic peroxide manufacturing processes (60 FR 50426, September 29, 1995).

On August 14, 1995, the EPA published a Federal Register document entitled, "Proposed rule; data availability" (60 FR 41870) and opened RCRA docket F-95-CE3A-FFFFF to accept comments on revisions that the EPA was considering for the final subpart CC standards. The EPA accepted public comments on the appropriateness of these revisions through October 13, 1995. Throughout 1995 and into the present year, the EPA also engaged in repeated discussions with representatives of the groups filing petitions for review challenging the subpart CC standards.

Sixty-four comment letters were received by the EPA in response to the August 14, 1995 notice of "Proposed rule; data availability;" the commenters included companies affected by the rules, trade associations, consulting companies, and one State environmental agency. Most comment letters contained multiple comments. Comments generally supported the proposed amendments although many offered specific criticisms and suggested changes. The EPA considered all comments on the proposed rule amendments in developing the final amendments published today.

In the August 14, 1995 notice of "Proposed rule; data availability," the EPA requested comment on specific revisions to the final subpart CC tank, surface impoundment, and container standards that the EPA was considering. The notice identified those provisions of the final rule that the revisions would potentially affect which included the waste determination procedures, the standards (or technical requirements) for tanks and containers, and the applicability of the final standards to units that operate with air emission controls in accordance with certain Clean Air Act standards. In addition, it was noted that the revisions would reduce the monitoring, inspection, recordkeeping, and reporting requirements for affected tanks, surface impoundments, and containers.

To further inform the affected public of the major clarifications, compliance options, and technical amendments being considered, the EPA conducted a series of seminars during August and September of 1995. A total of six seminars were held nationally. (Refer to EPA RCRA Docket No. F-95-CE3A-FFFFF, Item No. F-95-CE3A-S0017.) During these seminars, additional comments were received on the RCRA air rules for tanks, surface impoundments, and containers. These comments were also considered by the EPA in developing these amendments.

On February 9, 1996, the EPA published a Federal Register notice (61 FR 4903), "Final rule; technical amendment," which made clarifying amendments in the regulatory text of the final standards, corrected typographical and grammatical errors, and clarified certain language in the preamble to the final rule to better convey the EPA's original intent.

Today's action amends provisions of the final subparts AA, BB, CC rules to better convey the EPA's original intent, to provide additional flexibility to owners and operators who must comply with the rules, and to change the effective date of the requirements contained in the subpart CC rules. The amendments to subparts AA, BB, and CC that are being promulgated today are discussed below in various sections of this preamble. Comments received on the proposed amendments and the EPA's responses to those comments are also discussed together with the changes being made by today's action. Some commenters submitted comments on aspects of the original rule that were unaffected by, and not reopened by the proposed amendments. These comments are outside the scope of the rulemaking for the proposed amendments and, therefore, these comments, although perhaps mentioned, are not addressed in this rulemaking.

In today's amendments, certain sections of the subpart CC rules are reprinted in total; this accounts, in large part, for the lengthy amendatory language contained in today's amendments. Reprinting of entire sections of the rule is being done for two reasons. First, some sections of the rule have been entirely redrafted to improve organizational structure and drafting clarity and to avoid ambiguity while only making minor revisions to the basic control requirements of the rule. Second, in other sections of the rule, the technical requirements have been changed significantly or options added to increase flexibility for the source owner or operator. Therefore, to ensure the rule is implemented as intended and for the convenience of the public, the EPA decided to reprint these entire sections. In doing so it was not intended to completely reopen these entire sections of the rule for judicial review or legal challenge. As provided by § 7006(a), judicial review is not newly available for aspects of the subparts AA, BB, and CC rules that were already finalized more than 90 days ago, and which are not substantively addressed by today's amendments.

The information presented in this preamble is organized as follows:

I. Subpart I - Use and Management of Containers, and Subpart J - Tank Systems

II. Subpart AA - Air Emission Standards for Process Vents

III. Subpart BB - Air Emission Standards for Equipment Leaks

IV. Subpart CC - Air Emission Standards for Tanks, Surface Impoundments, and Containers

A. Postponement of Effective Date

B. Retention of Final Compliance Date

C. Applicability.

D. Definitions.

E. Standards: General.

F. Waste determination procedures.

I. Subpart I - Use and Management of Containers and Subpart J-Tank Systems

Under the existing RCRA regulations, hazardous waste generators who accumulate waste on-site for up to 90 days in tanks and containers ("90-day tanks and containers" or "90-day units") may permissibly do so without obtaining a storage permit provided the generator complies with certain conditions specified in 40 CFR 262.34(a). The conditions include compliance with the requirements of 40 CFR part 265, subpart I when the waste is accumulated in a container and 40 CFR part 265, subpart J when the waste is accumulated in a tank.

The subpart CC regulations proposed by the EPA on

July 22, 1991 (56 FR 33491) contained provisions to amend the conditions with which a hazardous waste generator must comply to exempt 90-day tanks and containers from RCRA subtitle C permitting requirements, namely to comply with standards set out in subparts AA, BB, CC applicable to tanks and containers. The EPA took comments on this proposed action and responded to those comments in (among other places) the preamble to the 1994 final subpart CC regulations. The 1994 final rules regarding 90-day tanks and containers were the same as those proposed.

As noted in Section VI.D of the preamble to the 1994 final subpart CC RCRA air rules (59 FR 62910, December 6, 1994), the organic air emissions from 90-day tanks and containers are sufficient to have an adverse and significant effect upon human health and the environment and therefore "led the EPA to require that these units comply with the appropriate air emission control requirements of the subpart AA, BB, and CC standards to maintain an exemption from permitting."

Commenters requested that EPA clarify precisely when 90-day units are subject to the subpart AA, BB, and CC standards, and, in a related question, requested clarification as to when these rules would apply to units that are engaged in recycling. With respect to when the subpart AA, BB, and CC rules apply to 90-day units that are not recycling units (for example, tanks or containers that store hazardous waste before recycling), the EPA intends that the subpart AA, BB, or CC standards apply so long as the substantive applicability provisions of one or more of these subparts is satisfied. This means, for example, that if the 90-day units are receiving hazardous waste with organic concentrations of at least 10 per cent by weight, the subpart BB standards would apply to the associated equipment components; on the other hand, if the units only receive hazardous waste below this applicability threshold, the subpart BB requirements would not apply (see §265.1050(b)). Similarly, the subpart CC air emission control requirements would apply to a 90-day tank or container if the owner or operator does not demonstrate that the hazardous waste stored in the unit contains average volatile organic concentrations below 500 ppmw. It should be noted that the fact that one of these subparts applies does not automatically mean that the others apply as well. Thus, for example, if a generator manages hazardous waste with organic concentration of 10 ppmw in a steam stripper, the unit would be subject to the subpart AA standards (See §265.1032(a)). This does not mean that the steam stripper is also automatically subject to the subpart BB and CC standards. The respective applicability section of those provisions would have to be satisfied before they would apply.

The EPA notes further, however, that the applicability of the subpart AA and BB standards, prior to publication of the final subpart CC rule in December 1994, was conditioned on there being another unit at the facility otherwise requiring a RCRA permit -- the notion being that the subpart AA and BB rules by themselves would not require a facility to obtain a RCRA permit (see Section V of the preamble in 55 FR 25449, June 21, 1990, and §§265.1030(b)(2) and 265.1050(b)(2)).[1] This consideration does not apply to 90-day units, since these units are not subject to RCRA permitting requirements in any case. In addition, the risks posed by these units is the same whether or not another unit at the plant has received a RCRA permit; the EPA evaluated and discussed these risks when promulgating the December 1994 final rule and found that substantive controls were necessary to protect human health and the environment. See 59 FR at 62910 and also Appendix L, 90-Day Tanks and Container Impacts, in "Hazardous Waste TSDF - Background Information for Proposed RCRA Air Emission Standards" (EPA-450/3-89-023c), June 1991. Consequently, subparts AA and BB may apply to 90-day tanks and containers whether or not another unit at the facility has to obtain a RCRA permit (assuming the other applicability criteria in the rule are satisfied, as explained above). The EPA is adding clarifying language as a part of today's rule amendments to make clear that applicability of subparts AA and BB to 90-

[1] The subpart CC rules are not so conditioned.

day units is not conditioned on another unit at the generator's facility obtaining a RCRA permit.

With respect to the commenters' questions regarding applicability of the subpart AA, BB, CC rules to recycling units (i.e., units actually performing the recycling function, such as a solvent distillation column), EPA notes the following principles. First, subparts AA and BB already apply to recycling units (see §261.6(d)). Second, by extending the applicability of subparts AA and BB to 90-day generator tanks and containers (as set out in the promulgated rule and further explained in the above paragraphs), these subparts apply to generators' 90-day tanks and containers that are engaged in the process of recycling. Thus, for example, process vents on a generator's solvent distillation column would be subject to the subpart AA standards.

Subpart CC, however, does not apply to recycling units. Section 261.6(d), Requirements for recyclable materials, for example, does not indicate that recycling units must comply with the subpart CC provisions. The reason these provisions do not apply is that the standards are not normally appropriate for recycling units handling volatile hazardous wastes; rather, the subpart AA standards are the appropriate standards. The emission mechanisms for traditional hazardous waste storage tanks (e.g. circular above-ground units with open tops or covered open tops) differ significantly from the emission mechanism of the distillation-type unit used for recycling and certain treatment operations (e.g. air strippers and thin-film evaporators) regulated under subpart AA. Recycling units typically emit air pollutants through some type of process vent, and consequently are controlled under the subpart AA process vent standards. The suppression-type controls (e.g. covers) prescribed for traditional storage and treatment tanks in subpart CC simply are not suitable for most distillation-type units.

Finally, EPA is slightly amending the applicability sections of subparts AA and BB to make clear that these standards can apply to both recycling and non-recycling units that are located at either TSDF sites or generator accumulation sites, assuming that the units otherwise satisfy the subpart AA or BB applicability requirements. Thus, for example, a steam stripper engaged in conventional hazardous waste treatment at a permitted TSDF could be subject to the subpart AA standards. The risks posed by recycling units of the enumerated types, and non-recycling units of the enumerated types are the same, so any distinction between them is unfounded. In fact, today's language merely clarifies the coverage of the existing subpart AA and BB rules, since those rules already cover all units (i.e. recycling and non-recycling) that are subject to the permitting requirements of Part 270, and thus covers non-recycling units.

The following examples illustrate these principles.

1. Generator A stores volatile spent solvents (F001) in 90-day tanks before recycling them in an on-site distillation column. The facility does not have any other unit requiring a RCRA permit. The volatile organic concentration of the waste exceeds the subpart AA, BB and CC applicability thresholds.

In this case, the 90-day storage tanks and associated equipment components are subject to the subpart BB and subpart CC standards, since the substantive applicability standards of both subparts are satisfied. Subpart AA does not apply to the spent solvent storage tanks (assuming the tanks are not distillation, fractionation, thin-film evaporation or other type of unit set out in §265.1030(b), the subpart AA applicability section). The distillation column (and its associated equipment) is subject to the subpart AA and BB standards, but not the subpart CC standards since subpart CC does not apply to recycling units. The fact that no other unit at the facility is required to obtain a RCRA permit is no longer relevant in determining applicability to 90-day units.

2. Same facts as Example 1 except that the waste contains less than 10 percent total organics and greater than 500 ppmw volatile organics.

In this case, the spent solvent storage tank is subject to the subpart CC standards but the associated equipment components are not subject to the subpart BB standards (since subpart BB does not apply to hazardous wastes with less than 10 percent total organic content). The distillation column is subject to the subpart AA standards for the reasons explained in Example 1. This example illustrates that applicability of one of the subparts (AA, BB, or CC) does not automatically mean that the standards from the other subparts also apply. The substantive applicability provisions of each subpart still must be satisfied.

II. Subpart AA - Air Emission Standards for Process Vents: Standards for Closed-Vent Systems and Control Devices

On the subject of closed-vent systems and control devices, commenters requested a provision for control device downtime to allow for preventive, routine, or non-routine maintenance; an exemption for control devices subject to 95 percent efficiency requirements in other rules from performance test and design analysis requirements; an exemption from monitoring requirements for closed-vent system components that operate under negative pressure; a revision such that only spent carbon removed from a carbon adsorption system that is a hazardous waste must be managed in accordance with subpart CC requirements; and a reduction in the closed-vent system and control device inspection and monitoring requirements.

The EPA has decided to amend certain of the control device and closed-vent system standards of subpart AA in 40 CFR parts 264 and 265 so that these requirements are consistent and up-to-date with the general decisions the EPA has made regarding inspection, monitoring, maintenance, repair, malfunctions, recordkeeping, and reporting requirements for organic air emission control devices and associated closed-vent systems installed and operated to meet requirements of other regulations under the Clean Air Act or RCRA (e.g., National Emission Standards for Hazardous Air Pollutants: Off-Site Waste and Recovery Operations, 61 FR 34140, July 1, 1996). These revisions are both consistent with the integration provisions of RCRA Section 1006(b), which require that RCRA standards be consistent and not duplicative of Clean Air Act standards, and also are a part of the EPA's overall approach of allowing unit-specific Clean Air Act standards to be used in lieu of control requirements under RCRA subpart CC. (See §265.1080(b)(7) in today's amended rule.) The changes to the control device and closed-vent system standards in no way affect the overall performance or emission reductions achieved by the control devices and closed-vent systems. Therefore, the revised standards are considered by the EPA to be equally protective to those already adopted, and thus adequate to protect human health and the environment. The revisions to the standards for closed-vent systems and control devices in subpart AA of 40 CFR parts 265 and 264 include the changes described below.

The monitoring requirement for a condenser in §264.1033(f)(2)(vi)(B) and §265.1033(f)(2)(vi)(B) is being revised such that only the temperature of the exhaust vent stream from the condenser exit must be continuously monitored; the requirement to monitor the coolant fluid temperature exiting the condenser is being dropped. This revision reduces the owner's or operator's monitoring and recordkeeping burden while maintaining the EPA's ability to ensure that the emission control equipment is properly operated and maintained to achieve the required emission reduction.

The closed-vent system requirements in §264.1033 and §265.1033 are being revised such that a closed-vent system that is designed to operate at a pressure below atmospheric pressure is not required to be monitored by Method 21 procedures either initially or annually. For these negative pressure systems, an initial visual inspection and annual follow-on inspection is required; in addition, a pressure gauge or other pressure measurement device is required to verify that negative pressure is maintained in the closed-vent system when the control device is operating. As noted in Section 10 of the preamble to the earlier subpart CC rule clarifications (61 FR 4910, February 9, 1996), "the EPA had intended to not require annual monitoring of closed-vent system components which operate under pressure such that all emissions are routed to a control device even if a leak or hole exists in the component. A component that continuously operates under negative pressure would satisfy this intent ..." In today's action, the EPA is removing the requirement for the initial leak detection monitoring for negative pressure systems; this change reduces owner or operator burden resulting from any redundant or non-productive monitoring.

Unsafe-to-monitor and delay of repair provisions for closed-vent systems are being added. Corresponding recordkeeping requirements also are being added. This common sense change is made to avoid creating any unsafe conditions as a result of the monitoring requirements of subpart AA, §264.1033 and §265.1033. This revision adds the same type of unsafe-to-monitor and delay of repair provisions that are contained for pumps and valves in the subpart BB - Air Emission Standards for Equipment Leaks as well as in other equipment leak standards promulgated under the Clean Air Act.

On April 23, 1996, the EPA published a notice of data availability (61 FR 17863) addressing the narrow issue of whether "Other Thermal Treatment Facilities" subject to regulation under subpart P of part 265 (40 CFR 265.370 through 265.383) are eligible to receive for regeneration spent activated carbon which is a hazardous waste. In the

December 6, 1994 final subpart CC standards (59 FR 62896), the EPA established a requirement that spent activated carbon removed from a control device had to be managed at particular types of facilities, namely regulated boilers or industrial furnaces, or "thermal treatment units that [are] permitted under subpart X of 40 CFR part 264 or subpart P of [part 265]." See 40 CFR 265.1033(l)(1) as promulgated at 59 FR 62935 (December 6, 1994). A parallel requirement was contained in 40 CFR 264.1033(m), but no reference to subpart P was included (59 FR 62927). In the February 9, 1996 technical correction notice, the EPA amended these provisions to clarify that they apply only to activated carbon which is a hazardous waste, and that interim status boilers and industrial furnaces which had certified compliance and interim status incinerators could treat such activated carbon. (See 61 FR 4910, 4911, and 4913.) In doing so, the EPA removed the reference to subpart P facilities in 265.1033(l)(1), thus removing such facilities from eligibility to receive hazardous waste spent activated carbon.

As a part of today's amendments, EPA is restoring the eligibility of subpart P facilities to treat hazardous waste spent activated carbon. So long as the hazardous waste spent activated carbon is managed safely by such facilities, there is no automatic reason to preclude such facilities' eligibility to manage the spent carbon. However, because the subpart P standards do not contain substantive air emission control provisions that assure that any hazardous organic constituents desorbed from the carbon are adequately controlled rather than emitted to the atmosphere during regeneration or other treatment, the EPA is requiring that units receiving such hazardous wastes meet the control requirements of the subpart CC rules or are units which are subject to emission control requirements under 40 CFR part 61 or part 63. With respect to this last point, this means that the actual unit must meet a Part 61 or 63 control standard for hazardous air pollutants. If the standard is no control or if compliance with the standard is determined on a plant-wide (viz. averaging among units) basis, then it could not be used in place of the subpart CC standards.

It should be noted that the EPA is imposing this requirement regardless of the organic content of the carbon being regenerated, so long as the activated carbon is a hazardous waste. This is because the purpose of the carbon is to capture organic emissions, and it is the Agency's judgment that in light of this purpose, the carbon will be saturated with organics which would need to be captured or destroyed and not released indiscriminately during the regeneration process (see 56 FR 7200, February 21, 1991).

Finally, in order to assure maximum flexibility for protective compliance, the EPA is adding that permitted facilities (i.e., Part 264 facilities) complying with either the subpart CC standards, or a Part 61 or 63 Clean Air Act standard, are also eligible to receive spent carbon (which is a hazardous waste) for regeneration. Such facilities certainly would be operating protectively and so should be eligible to receive spent carbon. The EPA notes, however, that this provision may be redundant in light of the provision in the existing rule stating that units which have received a subpart X permit are eligible to receive such activated carbon (§265.1033(m)(1)(i)), but commenters indicated a preference for this clarification of eligibility. In order that there be no confusion, the EPA is adding it to the final rule.

III. Subpart BB-Air Emission Standards for Equipment Leaks

Commenters requested that the EPA incorporate into the subpart BB standards recent changes that have been made to other national standards that require equipment leak detection and repair programs. In response, revisions to the emission standards for equipment leaks consist of incorporating changes to the requirements so that the subpart BB requirements in parts 264 and 265 are consistent and up-to-date with the general decisions the EPA has made regarding leak detection and repair program requirements for organic air emission control in other regulations under the Clean Air Act (e.g., National Emission Standards for Hazardous Air Pollutants (NESHAP): Off-Site Waste and Recovery Operations, 61 FR 34140, July 1, 1996, or the

National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks, 40 CFR part 63, subpart H, 59 FR 19402, April 22, 1994, i.e., the HON). These revisions are consistent with the integration provisions of RCRA Section 1006(b) which require that RCRA standards be consistent and not duplicative of Clean Air Act Standards and are a part of the EPA's overall approach of allowing Clean Air Act standards to be used in lieu of control requirements under RCRA TSDF air rules. The changes to the subpart BB equipment leak standards in no way affect the overall performance or emission reductions achieved. Therefore, the revised standards are considered by the EPA to be equally protective as those being replaced. The revisions to the standards for equipment leaks in subpart BB of 40 CFR parts 265 and 264 include the changes described below.

The applicability provisions of subpart BB (§264.1050 and §265.1050) are revised to exclude equipment that contains or contacts affected hazardous waste for a period of less than 300 hours per calendar year from the equipment leak control requirements. This change parallels the applicability provisions in the Hazardous Organic National Emission Standard for Hazardous Air Pollutants ("HON"). (Supporting information for this decision is contained in the CAA docket A-90-20, item II-B-5.)

The sampling connection system requirements of subpart

BB are being revised consistent with the HON such that gases displaced during filling of the sample container are not required to be collected or captured. In the context of the HON, EPA explained that it was not necessary to require control of those vapors. Also, the requirement for no detectable emissions to the atmosphere during return of the purged hazardous waste stream to the hazardous waste management process line, or during collection and recycling of the purged hazardous waste, is being eliminated. Upon further review, the EPA has determined that the emissions from these extremely small amounts of hazardous waste can be adequately controlled if the owner or operator stores the sample waste in a covered container, and ensures it is treated or disposed in a manner consistent with the requirements for the waste stream from which it was extracted.

Under today's amendments, any connector that is inaccessible or is ceramic or ceramic-lined is exempt from the monitoring and recordkeeping requirements of subpart BB as is the case in recent EPA rules such as the HON. (See Section VI.C of the HON preamble for further discussion regarding the rationale for these changes to EPA's equipment leak standards, 59 FR 19445, April 22, 1994)

IV. Subpart CC-Air Emission Standards for Tanks, Surface Impoundments, and Containers

A. Postponement of Effective Date for Rule Requirements

The EPA has decided to have one further brief postponement of the effective date of the requirements in the final CC rule until December 6, 1996. The requirements of the 1994 final standards were scheduled to become effective as of October 6, 1996 (see the Background section above). The EPA specified in the 1994 final rule a schedule that established the compliance dates by which different requirements of the final rule must be met. These compliance dates and requirements are explained further in the final rule (59 FR 62896, December 6, 1994) under SUPPLEMENTARY INFORMATION. Today's amendment changes only the effective date of the rule requirements; it does not change the later dates by which compliance with all the requirements must be achieved. The effective date will be December 6, 1996, for all provisions of the standards including the applicability of 40 CFR part 265 subparts AA, BB, and CC to 90-day accumulation units at hazardous waste generators, the applicability of 40 CFR part 265 subparts AA, BB, and CC to RCRA permitted units, and the applicability of the final standards to tanks in which waste stabilization activities are performed. All other compliance dates for the final rule, as amended today, remain as published in the 1994 final rule (59 FR 62896).

Given that the EPA is amending the rule in ways that would increase compliance flexibility and reduce certain regulatory requirements (and in no cases would increase the stringency of the standards or eliminate a previously-existing compliance option), the EPA considers it appropriate to delay the October 6, 1996 effective date of the rule requirements for two months. (See 5 U.S.C. 705, "when an agency finds that justice so requires, it may postpone the effective date of action taken by it, pending judicial review.") By December 6, 1996 affected sources will have had ample time to make any necessary alterations to their compliance plans in response to today's amendments. Affected sources have been on notice of the final regulations since they were published in December of 1994. The EPA expects that by early 1995, most facilities had begun preparing their implementation strategies and planning for any necessary equipment modifications, in anticipation of the originally scheduled implementation date of June 6, 1995. Thus, the EPA considers today's two-month extension to be sufficient time for affected facilities to become familiar with the revised requirements contained in the amended standards, and to make any necessary revisions to their implementation strategies.

B. Retention of Final Compliance Date

The December 6, 1994 published rule set a final compliance date of December 8, 1997, by which time all required air emission control equipment must be operating (59 FR 62897). The EPA does not believe that postponing the effective date of the rule requirements necessitates any postponement of the December 8, 1997 compliance date. The final compliance date was chosen to allow time for facility modifications that may be involved in the compliance approach of certain facilities. The EPA believes that, for many air emission control applications, the required control devices can be installed and in operation within several months. However, the EPA agrees that under some circumstances, the owner's or operator's approach to complying with the air emission control requirements under the subpart CC standards may involve a major design and construction project which requires a longer time to complete. In recognition of these cases, the EPA decided that it is reasonable to allow up to December 8, 1997 for affected facilities to install and begin operation of air emission controls required by the subpart CC standards (See Hazardous Waste TSDF Background Information Document for Promulgated Organic Air Emission Standards, EPA-453/R-94-076b, page 9-7).

The final rule requirements that may necessitate a major modification, as described above, for tanks are paragraphs (b) through (d) of 40 CFR parts 264.1084 and 265.1085. These paragraphs specify air emission control equipment that must be operated on tanks receiving affected hazardous waste. Similarly, the requirements that may necessitate such a major modification for surface impoundments are paragraphs (b) through (e) of 40 CFR parts

264.1085 and 265.1086. These paragraphs specify air emission control equipment that must be operated on surface impoundments receiving affected hazardous waste. To comply with these requirements for tanks and surface impoundments, facilities may choose to construct new hazardous waste management units to replace existing units, or may choose to modify existing hazardous waste management units. Examples of facility equipment modifications that could require an extended period of compliance would be replacing a large open surface impoundment with a series of covered tanks, or fitting an existing open tank with a fixed roof vented to a control device. The EPA recognizes that such major modifications or new construction can require several months or more, and therefore allows until December 8, 1997, for facilities to comply with the air emission control requirements of the final subpart CC standards.

In addition, certain States may require that a facility obtain a permit modification prior to performing a major modification such as those described above. The EPA recognizes that such a permit modification can be a lengthy process, and therefore felt it was appropriate to afford an extended compliance period to allow such modifications to be obtained (59 FR 62919). The EPA does not expect that such a lengthy period of implementation would be required in circumstances other than those described above, although §264.1082(c) allows that such a period is available if necessary.

The final rule provisions that justified a compliance date of December 8, 1997, are not among those that are affected by the revisions being made under today's action. Specifically, the EPA is not considering either a broader applicability or more stringent control requirements for covers and air emission controls on tanks and surface impoundments. All affected facilities thus have been on notice of the final rule air emission control requirements for these units since the final CC rule publication on December 6, 1994. Therefore, the EPA does not consider it appropriate to postpone the compliance date of December 8, 1997, by which all required air emission control equipment must be operating.

It should be noted that the Regional Administrator may elect to extend the implementation date for control equipment at a facility, on a case by case basis, to a date later than December 8, 1997, when special circumstances that are beyond the facility owner's or operator's control delay installation or operation of control equipment and the owner or operator has made all reasonable and prudent attempts to comply with the requirements of the subpart CC rules (see §265.1082).

C. Applicability

Numerous comments were received concerning overlap between the RCRA subpart CC rules and Clean Air Act NESHAP, particularly the HON. Most commenters argued that subpart CC requirements should not apply to units, either 90-day generators or TSDF, meeting Clean Air Act control requirements, including units meeting standards through emissions averaging.

The EPA fully recognizes that in developing air standards to meet congressional directives established by provisions in the Clean Air Act and Resource Conservation and Recovery Act, the potential exists for regulatory overlap. However, it is the EPA's intention to minimize, if not eliminate, regulatory overlap to the extent that the Agency is allowed under the different legislative acts. Section 1006(b) of RCRA indeed requires that the air standards be consistent with and not duplicative of Clean Air Act standards. Similarly, the Clean Air Act voices a strong preference for consistency of CAA section 112 standards and RCRA standards where practicable (see section 112(n)(7)).

The EPA is aware that at some sites managing hazardous wastes, the owner or operator of the hazardous waste treatment, storage, and disposal facility could be subject to the RCRA air rules under subparts AA, BB, and CC and also subject to a Clean Air Act NESHAP standard such as the Off-Site Waste rule or the HON. At a particular TSDF, some waste management units may be required to use air emission controls under one or the other, but not both, a Clean Air

Act NESHAP and the RCRA air rules. However, some other waste management units could be subject to using air emission controls to comply with both sets of rules. It is unnecessary for owners and operators of those waste management units subject to air standards under both sets of rules to perform duplicative testing and monitoring, keep duplicative sets of records, or perform other duplicative actions.

In Section VI.A, Development of Air Standards Under RCRA, of the preamble to the final rule (59 FR 62906, December 6, 1994), the EPA discussed the potential for duplication between the RCRA air rules and various rules being developed under the Clean Air Act maximum achievable control technology (MACT) program but noted that the air standards developed under RCRA section 3004(n) did not duplicate or contradict existing NESHAP or new source performance standards (NSPS). As the MACT program has matured and additional standards have been developed, the EPA is now aware that the possibility for overlap is greater than was originally thought.

The EPA has decided that the best way to eliminate any regulatory overlap is to amend the RCRA rules to exempt units that are using air emission controls in accordance with the requirements of applicable Clean Air Act NESHAP or NSPS regulations. Therefore, the subpart CC applicability is amended to exempt any hazardous waste management unit that the owner or operator certifies is equipped with and operating air emission controls in accordance with an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63, with the sole exception of tanks being controlled through the use of an enclosure rather than a cover. [The EPA's rationale for placing additional conditions on that control approach is explained in detail in sections E and G of this preamble.] Providing this exemption eliminates the possibility of duplicative or conflicting requirements for those TSDF tanks, surface impoundments, or containers using organic emission controls in compliance with a NESHAP but also subject to requirements under the RCRA standards. It is important to note that this exemption only applies to those units using organic air emission controls. This seems to EPA to be the best way to assure that air emissions from hazardous waste management units are controlled to the extent necessary to protect human health and the environment. A unit that does not use the required air emission controls but is in compliance with a NESHAP through an "emission averaging" or "bubbling" provision does not qualify for the exemption since EPA lacks assurance that emissions from the unit are controlled to the extent necessary to protect human health and the environment.[2]

[2] EPA believes it is both reasonable and legally permissible to interpret section 3004(n) to apply to specific waste management units. Section 3004(n) addresses specific unit

Similarly, if the Clean Air Act standard for the particular unit is no control (for example, because the MACT floor for the source category is no control and the Agency decided not to apply controls more stringent than the floor), the exemption from the RCRA standards would not apply since the unit would not actually be controlled under provisions of the MACT standard. Again, as stated above, the EPA believes the best way to assure protectiveness in this national rule is to require controls on each particular unit.

Section 3004(n) of RCRA, of course, requires that EPA control emissions from (among other things) tanks, surface impoundments, and containers as may be necessary to protect human health and the environment. Some of the Clean Air Act standards, in contrast, are technology-based controls implementing the provisions of section 112(d) of the Clean

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types ("open tanks, surface impoundments, and landfills"), and the overarching requirement to control air emissions at hazardous waste management "facilities" can reasonably construed as applying to individual units. See Mobil Oil Corp. v. EPA, 871 F. 2d 149, 152-54 (D.C. Cir. 1989). On the other hand, "facilities" might also be construed to apply to an entire plant, id. at 153. Consequently, EPA is not indicating by the discussion in the text that an averaging approach is legally foreclosed. Certain types of site-specific demonstrations, for example, might indicate the appropriateness of an averaging approach to demonstrating that air emissions from hazardous waste management are sufficiently controlled. In such a situation, EPA could interpret the term "facility" as applying to an entire plant. What EPA is finding in this rule is that for this national rule (i.e. in the absence of potential case-specific demonstrations), the best way of assuring that emissions from hazardous waste tanks, containers, and impoundments are sufficiently controlled is to require control of each particular unit.

Air Act. The EPA, however, has found that under some circumstances a technology-based standard may satisfy the RCRA protectiveness requirement by adequately controlling air emissions and thus adequately controlling risk or controlling risk sufficiently that the Clean Air act section 112(f) residual risk process need not be interdicted. See 60 FR at 32593 (June 23, 1995), the preamble for final MACT standards for the secondary lead source category, and 61 FR at 17369-370 (April 19, 1996), the preamble for proposed MACT standards for hazardous waste combustion units.

The EPA is finding here that where there are MACT air emission control requirements for a specific unit otherwise covered by subpart CC, the MACT requires the same technical air emission controls as would be required under subpart CC. Thus, it follows that compliance with the MACT requirements would thus afford equal protectiveness as would be achieved under supbart CC, and therefore can be considered to satisfy the RCRA protectiveness requirements. This is a conscious effort on the Agency's part to provide consistency of requirements where at all possible in its rulemakings.[3]

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[3] For example, EPA, in promulgating the final requirements for the Off-Site Waste and Recovery Operations NESHAP (61 FR 34147, July 1, 1996), added a series of new subparts to 40 CFR part 63. These subparts included 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. These standards are essentially identical to the requirements for tanks, containers, and

The technical requirements for the RCRA air rules in subpart CC as amended are essentially the same as those published by the EPA under the MACT program (e.g., those in subparts OO, PP, and QQ of part 63). A unit controlled under one or the other set of requirements would achieve the same emission reduction and performance level; and the various requirements thus provide the same level of protection.

D. Definitions

Definitions are being added for closure device, continuous seal, enclosure, hard-piping, in light material service, malfunction, metallic shoe seal, no detectable

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impoundments found in the RCRA subpart CC rule under discussion in this notice.

The EPA set out at length in the Off-Site Waste rule preamble (59 FR 62908) the Agency's goal as to integration of these various air standards, "the EPA decided to promulgate the air emission control requirements for selected types of units in individual subparts for ease of reference, administrative convenience, and as a step towards assuring consistency of the air emission control requirements applied to similar types of units under different rules. The EPA believes adopting the format of codifying the air emission control requirements for specific unit types in individual subparts will provide significant advantages to both regulated industries and to the Agency."

"A major advantage for using the unit-specific subpart format for NESHAP and other air rules is for those situations when more than one rule applies to a particular source (e.g., a tank) and each of these rules requires use of air emission controls on that source (e.g., a fixed roof). By establishing unit-specific subparts, all of the rules will reference a common set of design, operating, testing, inspection, monitoring, repair, recordkeeping, and reporting requirements for air emission controls. This eliminates the potential for duplicative or conflicting air emission control requirements being placed on the unit by the different rules, and assures consistency of the air emission control requirements applied to the same types of units."

organic emissions, safety device, and single-seal system and other definitions are being revised consistent with their use in the amended regulation. These amended or added definitions do not directly affect the substance of the subpart CC standards, but rather, serve to clarify the 1994 final provisions, or today's amended provisions, of the final regulations.

E. Standards: General

1. Action Level

Several major changes are being made to the general standards for the final subpart CC rule. First, the average VO concentration action level for hazardous waste required to be managed in the units using air emission controls under the rule is being changed to 500 ppmw (as determined at the point of waste origination). Units managing hazardous wastes determined by the owner or operator to have average VO concentrations that remain less than 500 ppmw are not required to use air emission controls under the rule.

The EPA considered a range of possible values to establish the VO concentration limit for the Subpart CC RCRA air rules. The EPA proposed a VO concentration value of 500 ppmw to be used as the action level for the rule (56 FR 33491, July 22, 1991) and promulgated an action level of 100 ppmw in the 1994 final subpart CC rule (59 FR 62897). However, in promulgating this value, the EPA acknowledged that some hazardous waste management units subject to the subpart CC RCRA air rules could be subject to other Clean Air Act NESHAP and NSPS with differing action levels (59 FR 62903, 62906, and 62907).

The EPA received comments in response to the August 14, 1995 Federal Register notice, stating that the 100 ppmw VO concentration action level promulgated by the EPA for the subpart CC RCRA air rules is inappropriate (e.g., the action level cannot be justified on the basis of risk and the action level is too close to the detection limit of method 25D; this results in numerous waste determination errors such as false positives) and is inconsistent with other applicable Clean Air Act NSPS and NESHAP (i.e, the Off-Site Waste rule, the HON, and the proposed new source performance standard (NSPS) for volatile organic compound emissions from the synthetic organic chemical manufacturing industry wastewater (59 FR 46780, September 12, 1994), all apply to wastes and/or wastewaters and all have higher action levels). The commenters recommended that the EPA select a higher action level of 500 ppmw for the rule, consistent with the above noted Clean Air Act rules.

The EPA considered the comments received regarding the action level, other revisions being considered for the final subpart CC RCRA air rules, and changes that the EPA anticipates making for other waste and wastewater related rules. The EPA concluded that a reexamination of the action level determination was appropriate. Based on consideration of the information available to the Agency regarding emissions from hazardous waste management TSDF operations, the EPA has concluded that an average VO concentration value of 500 ppmw is reasonable and accomplishes an adequate general level of protection, as compared with the 100 ppmw action level of the 1994 published rule. As was discussed in Section V.C. of the preamble published on December 6, 1994 (59 FR 62905), all five of the control options considered for the final rule are estimated to achieve similar levels of substantial reductions in nationwide organic emissions from TSDF and in annual cancer incidence. Under the new action level of 500 ppmw, the MIR for most of the 2,300 TSDF nationwide are estimated to be below the target MIR range of between 1×10^{-4} and 1×10^{-6}.

Thus, while the action levels at 100 ppmw and 500 ppmw are not equally protective of human health and the environment to the extent ascertainable by the modeling methodology used, these action levels do achieve the same general range of protection and were in the zone of reasonable values being considered by EPA for selection as the action level for the final rule. After further consideration, the EPA has concluded that the degree of incremental risk reduction at the 500 ppmw action level is so small as to not warrant the inconsistency and attendant disruption with other air rules applicable to hazardous waste TSDF. This incremental risk reduction is made less relevant by the fact that the EPA has already stated in the preamble to the final rule (59 FR 62905) that (even at the 100 ppmw action level), "the EPA is further evaluating the waste management practices and the specific chemical compounds composing the organic emissions from those individual TSDF for which the MIR values are estimated to be greater than the historical RCRA target MIR levels. Following this evaluation, the EPA will determine what other actions, such as the use of section 3005(c)(3) omnibus permitting authority or additional rulemaking, are necessary to attain the health-based goals of RCRA section 3004(n)."

2. Treatment Alternatives

The treatment alternatives in the General Standards (§264.1083 and §265.1083) are being revised where appropriate to reflect the new action level of 500 ppmw. The treatment alternatives contained in the General Standards of the subpart CC RCRA air rules provide owners or operators with a selection of alternative provisions for determining when a treated hazardous waste is no longer required to be managed in units meeting the air emission control requirements of the rule. The alternatives contained in the final CC rules published December 6, 1994 are being revised as a result of the change in the action level. The volatile organic concentration criteria contained in some of the alternatives are being revised upward to reflect the higher action level of 500 ppmw.

Additional alternatives also are being added to the rule to provide greater flexibility to the owner or operator in the treatment of hazardous waste. The changes being made to the General Standards by today's action are described below.

For the treatment option that requires an organic reduction efficiency for the process of at least 95 percent and an average VO concentration of the waste at the point of waste treatment of less than 50 ppmw (§264.1082(c)(2)(ii)), the criteria for the average VO concentration of the treated waste is raised to 100 ppmw in direct response to the change in the action level. The value of 50 ppmw was chosen for the 1994 final rule to provide some added level of demonstration that co-mingled wastes streams had achieved a level of organic reduction through treatment, rather than through dilution (see 59 FR 62915, December 6, 1994). The selection of 50 ppmw in the 1994 final rule guaranteed that hazardous waste streams with VO concentrations of 2,000 ppmw or less at their point of waste origination were being reduced by 95% organics through treatment, as opposed to dilution. For today's final rule, EPA considers it appropriate to modify that 50 ppmw value to be 100 ppmw. In part, EPA is making this modification is response to comments that the value of 50 ppmw was too close to the level of detection for the test method 25D, and was therefore a very difficult and costly demonstration for the facility. After further consideration, the EPA feels that an exit concentration value of 100 ppmw is much less difficult and costly for a facility to make. Further, when combined with the revised action level of 500 ppmw for the overall rule, an exit value of 100 ppmw will ensure that the majority of hazardous waste streams are achieving the 95% reduction through treatment, as opposed to dilution that may occur through commingling.

For the treatment option that allows mixed hazardous waste to be treated by an organic destruction or removal process that reduces the VO concentration of the hazardous waste to meet a site-specific treatment process exit concentration limit (264.1082(c)(2)(v)); the requirement that only hazardous waste enter the process is being removed. The exit concentration limit is being revised to be the lowest average VO concentration at the point of waste origination for each individual waste stream entering the process or 500 ppmw, whichever value is lower (this latter change is consistent with the revised action level for the standards also contained today's action). Upon evaluation of this option, the EPA agreed with commenters that making these revision will allow operators to use this option with a greater number of waste management systems, while still ensuring that reductions in VO concentrations are achieved through organic treatment or removal, as opposed to dilution.

A treatment option (§264.1082(c)(2)(vi)) is being added that requires an organic reduction efficiency for the process equal to or greater than 95 percent, and the average VO concentration of each individual waste stream entering the process is certified by the owner or operator to be less than 10,000 ppmw at the point of waste origination. This option is being added in response to commenters' concerns that many waste treatment operations have a multitude of waste streams being co-mingled early in the treatment process, and it would be infeasible for an operator to evaluate each waste stream. Further, the commenters stated that for these same treatment systems, the concentration of the hazardous waste streams at their point of waste origination is relatively low (e.g. 600 ppmw), and the exit concentration that would be required to demonstrate a 95% removal efficiency (in this example 30 ppmw) is below the level of detection of many organic test methods. Therefore, the EPA considered it reasonable to allow the owner or operator to document the 95% organic removal efficiency of the control device, and certify that no waste streams greater than 10,000 ppmw at their point of origination were entering the centralized treatment process. The EPA chose the upper value of 10,000 ppmw because any waste stream with less than 10,000 volatile organic concentration, when treated with a 95% efficient organic control device, would be reduced to below 500 ppmw (and thus would not require further control under the supbart CC regulations. The EPA considers the combination of these two criteria (95% efficient organic control device, and waste streams below 10,000 ppmw VO concentration at their point of waste origination) to be adequate to ensure that any waste stream entering the treatment process is adequately treated for the purpose of the subpart CC standards.

3. Exemptions

An exemption from subpart CC control requirements is added to the General Standards to further clarify that a tank or surface impoundment used for biological treatment of hazardous waste in accordance with provisions in the subpart CC General Standards (§265.1082(c)(2)(vi) or §264.1082(c)(2)(vi)) is exempt from the control device requirements under the rule. This was the Agency's intent in the 1994 promulgated rule, but several commenters advised the EPA that this intent was not evident. Therefore, the EPA is making this addition to the General Standards to more clearly describe this intent.

The following two exemptions are being added to the subpart CC General Standards in order to avoid the potential overlap of the subpart CC rules with RCRA standards established as part of the Land Disposal Restrictions (LDR) and to avoid overlap with the recently promulgated Benzene Waste Operations NESHAP.

In response to commenters' requests that compliance with applicable LDR treatment standards be reinstated as a subpart CC treatment alternative, an exemption from the subpart CC control requirements is being added for a tank, surface impoundment, or container if the material placed in the unit is a hazardous waste that meets the numerical concentration limits for organics applicable to the hazardous waste, as specified in 40 CFR part 268 (Land Disposal Restrictions) under Table - "Treatment Standards for Hazardous Waste" in 40 CFR 268.40, or has been treated by the treatment technology established by EPA for the waste in 40 CFR 268.42(a), or treated by an equivalent method of treatment approved by EPA pursuant to 40 CFR 268.42(b).

The EPA in fact originally proposed such a provision (see 56 FR 33491, July 22, 1991), and commenters stressed again that wastes meeting LDR requirements for organics would have reduced organic concentrations sufficiently so that there need not be air emission controls on the units receiving the wastes. Upon reflection, EPA now agrees with these comments. The LDR treatment standards are based on the performance of Best Demonstrated Available Technology and are deemed sufficient to minimize threats to human health and the environment posed by land disposal of the waste. See 51 FR 40572, November 7, 1986 and RCRA section 3004(m)(1). In fact, the standards for most organics reflect the performance of combustion technology, which destroys organics to non-detectable levels, so that the treatment standard is actually the analytic detection limit for the organic times a factor which reflects technological variability. Consequently, it is EPA's finding here that units receiving wastes that satisfy these standards for organics need not be controlled further, since the organics in the wastes are already reduced to levels where threats posed by release of the organics have been minimized.

The EPA notes that, to be exempt from the subpart CC standards, the waste must meet the LDR treatment standards for that waste whether or not the waste actually is prohibited (or restricted) from land disposal, i.e., whether or not the waste is going to be ultimately land disposed. Thus, for example, if an organic ignitable waste is going to be managed in tanks and ultimately disposed of in a manner not involving land disposal, in order for the tanks to be exempt from subpart CC (assuming the subpart CC rules otherwise apply), the waste would have to meet the treatment standards for D001 wastes. It should be clear from this example that the treatment standards are being used here as a means of demonstrating that further control of air emissions from the waste is not necessary to protect human health and the environment. This determination does not hinge on whether the waste is being land disposed (i.e., on whether the waste would otherwise have to be treated to meet the standard as a precondition to land disposal).

The EPA is amending the 1994 final rule to address certain of the commenters' concerns regarding applicability of the subpart CC rules to incinerator bulk feed tanks (that is, tanks used for bulk feed of hazardous waste to an incinerator). A standard industry practice is to control the air emissions from these tanks by enclosing the tank and feed operation, and venting emissions for the enclosure through a closed-vent system to an organic emission control device. The EPA has received comments stating that some industry members have alternate designs which allow them to effectively operate bulk incinerator feed systems using a tight-fitting cover on the tank and enclosing the feed line, with all emissions vented to a control device.

The EPA is addressing two issues with respect to those former bulk feed operations. The first is the efficiency of the organic control device, and whether existing facilities must replace those devices previously installed to comply with the Benzene Waste Operations NESHAP. The second issue is whether an enclosure can provide adequate capture and control of organic emissions from an open tank, when compared with a tight-fitting cover on that tank.

The subpart CC rules require 95% reduction of total organics in vapor streams, by weight. The Benzene Waste Operations NESHAP (40 CFR 61, subpart FF) requires 98% reduction of benzene in vapor streams. This distinction is appropriate, given the Benzene Waste Operations NESHAP's purpose to control benzene specifically, and the subpart CC rule's purpose to control total organics (including benzene). However, incinerator bulk feed operators have installed non-combustion control devices (such as activated carbon systems and condensers) which achieve 98% reduction of benzene, but do not effectively achieve 95% reduction of total organics. (This is because benzene is more amenable to certain reduction technologies than other organic compounds.)

The EPA has decided that it is not justified to require owners and operators to replace these relatively new control devices, which were installed pursuant to EPA regulation, and is therefore adding an exemption for control devices installed on such systems.[4] The EPA is making this decision chiefly due to the high replacement cost, action in reliance on EPA's Benzene Waste Operations NESHAP, and the desire for consistency among the various standards controlling organic constituents.

With respect to enclosures used in lieu of a discreet tank cover, the issue is the same as that which EPA is addressing for all tank systems (see Section G of this Preamble.)

F. Waste Determination Procedures

[4] Although there is probably some degree of decrease in protectiveness between these control devices and the proscribed 95% total organic control device requirements, EPA considers that difference to be not significant enough to warrant the substantial dislocations noted above. With respect to newly constructed control devices, there would be obviously, no such dislocations, and EPA therefore, does not believe there is any reason to forego the full protection provided by the 95% total organic control device efficiency requirements.

Under the subpart CC RCRA air rules, air emission controls are not required for a hazardous waste management unit when the unit manages hazardous waste having an average VO concentration less than the action level (i.e., 500 ppmw at the point of waste origination). As part of the procedure for determining the VO concentration of the hazardous waste, the EPA allowed that an owner or operator could use either: (1) direct measurement using Method 25D for preparation and analysis of samples of the waste collected in accordance with the procedures specified in the rule; or (2) the owner's or operator's knowledge of the VO concentration in the waste based on information, as specified in the rule.

In response to comments received concerning Method 25D relating to aggressiveness, expense, and repeatability of the method, the EPA decided to add other appropriate test methods that an owner or operator can choose to use for direct measurement of the VO concentration of a hazardous waste (see discussion below). In addition, the EPA is making certain other changes to facilitate the use of organic concentration data obtained using other test methods not specifically listed in the rule. The EPA believes that the changes being incorporated into the waste determination requirements in conjunction with changes to the applicability and action level for the subpart CC RCRA air rules for tanks, surface impoundments, and containers provide a range of options for determining the VO concentration of a hazardous waste such that every owner and operator of a facility subject to the final rule has available practical and inexpensive waste determination alternatives.

The EPA developed Method 25D to provide a relative measure of the potential for specific volatile organic compounds to be emitted from waste materials. When using Method 25D, the waste is analyzed to determine the total concentration, by weight, of all organics purged from the waste sample. However, some commenters stated that measuring all organics resulted in an overly aggressive method. Commenters suggested that there is some universe of organic compounds which usually do not volatilize, but which some test methods would measure. In a practical sense, the EPA does not consider it equitable to require air emission controls for wastes that do not contain organic compounds which are likely to volatilize. In response to these comments, the EPA is amending the waste determination procedures to allow the owner or operator to discount any contribution to the total volatile organic concentration that is a result of including a compound with a Henry's law constant of less than 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) [which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3] at 25 degrees Celsius. The Henry's law constant of a compound is one indication that is commonly used to predict the potential of a compound to volatilize.

If the waste contains compounds with Henry's law constants below the cutoff level, the VO concentration for the waste can be adjusted to exclude the VO concentration of these compounds from the total VO concentration for the waste stream. The contribution to the measured total VO concentration for the waste that is made by a specific compound can be determined by multiplying the actual concentration of the compound in the waste times the appropriate compound-specific adjustment "f_m factor" to obtain the Method 25D VO concentration. The VO concentration for the compound, with a Henry's law constant of less than 0.1 Y/X, can then be subtracted from the total VO concentration measured for the waste. In order to identify those compounds with a Henry's law constant below the cutoff level, the EPA has published a table listing the known compounds as part of today's amendments. The Henry's law constant value used as the cutoff in determining the VO concentration of a waste has been used in other EPA regulations (e.g., the Off-Site Waste and Recovery Operations NESHAP and the HON) and was selected based on modeling studies to identify and classify compounds with a significant potential for air emissions when present in a waste/wastewater system. With this amendment to the waste determination procedures, the EPA considers Method 25D to be an appropriate method for determining the VO concentration of hazardous wastes subject to the subpart CC RCRA air rules. Therefore, Method 25D continues to be an approved test method for determining the VO concentration of a waste, although other methods are allowed as direct measurement under today's amendment. This is discussed in greater detail below.

Other test methods have been developed by the EPA for use in rulemakings under the Clean Water Act that measure the concentration of organic pollutants in municipal and industrial wastewaters (see Appendix A to 40 CFR part 136). Commenters suggested that certain of these test methods are applicable to EPA air rulemakings affecting hazardous waste and wastewater management units. After extensive review, the EPA decided that as alternatives to using Method 25D for direct measurement of VO concentration in a hazardous waste for the subpart CC RCRA air rules it is appropriate to add Methods 624, 625, 1624, and 1625 (all contained in 40 CFR 136, Appendix A) and Methods 8260(B) and 8270(C) (both in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" in EPA Publication SW-846) when these methods are used under certain specified conditions. It is important to note that for each of these methods there is a published list of chemical compounds which the EPA considers the method appropriate to measure. The owner or operator may only use these methods to measure compounds that are contained on the list associated with that method, unless specified validation procedures are also performed. Further, for the purpose of a waste determination, the owner or operator must evaluate the mass of all VO compounds in a waste that have a Henry's Law value above the 0.1 Y/X cutoff. Therefore, the owner or operator is responsible for determining that the analytical method being used for a waste determination is sufficient to evaluate all of the applicable organic compounds that are contained in the waste. If an owner or operator chooses to use a method other than Method 25D to analyze a waste that contains unknown compounds or many different compounds, it may be necessary to perform screening analyses to verify that the alternate analytical method chosen is, in fact, appropriate to evaluate all the necessary compounds.

Because these methods measure the total concentration of various constituents, owners and operators may choose to "correct" these measured values to equate to the values that would be measured using Method 25D. This is accomplished by multiplying the total concentration measured values times the appropriate compound-specific adjustment "f_m factor" to obtain the Method 25D VO concentration. The EPA has published lists of the compound-specific adjustment factors in other rulemakings; see Table 1 in the Off-Site Waste and Recovery Operations NESHAP (40 CFR 63, subpart DD) and Table 34 in the HON (40 CFR 63, subpart G). Compound specific adjustment factors (f_m factors) for additional compounds can be obtained by contacting the Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711.

Sufficient recovery study results are available for Methods 1624 and 1625 to correct for possible bias, and therefore, these methods are considered adequate by the EPA to characterize the concentration of a hazardous waste sample. In addition, Methods 624 and 625 are appropriate provided the initial calibration of the analytical system is performed with the target compounds to be measured. Methods 8260(B) and 8270(C) are also considered appropriate provided that formal quality assurance procedures are established, followed, and records are maintained to cover those elements of the methods considered relevant to 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.

Sample collection procedures and sample recovery conditions are established by Method 25D (40 CFR part 60, Appendix A). For the hazardous wastes typically managed in the operations subject to the RCRA air rules, the EPA has concluded that using Method 25D sample collection procedures and sample recovery conditions for other analysis methods is reasonable for the purpose of this rulemaking. However, none of the other methods discussed above specifies a sample collection and handling procedure that the EPA considers adequate to minimize the volatilization of organics from the sample prior to analysis. Therefore, to ensure that an adequately representative sample of a hazardous waste is analyzed by the method, an owner or operator that chooses to use either Method 624, 625, 1624, 1625, 8260(B) or 8270(C) for the subpart CC RCRA air rules is required to develop and follow a written sampling plan. Similarly, such a plan is required for alternative methods validated by EPA Method 301 in Appendix A of 40 CFR part 63, or the "Alternative Validation Procedure for EPA Waste and Wastewater Methods" in Appendix D of 40 CFR part 63. This plan must describe a step-by-step procedure for collecting representative samples of the hazardous waste 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.

It should be noted that as long as one of the allowable test methods is being used for direct measurement of the VO concentration of a hazardous waste, the EPA would only enforce against the facility on that basis (i.e., using the same test method), unless the method used is not appropriate for the hazardous waste managed in the unit. For example, if the method is not suitable for use on semi-volatile organic compounds and the waste is known to contain organic compounds that are classified as semi-volatile, then the method is not appropriate.

In the published rule, the EPA allows use of knowledge-of-the-waste as the basis for a waste determination (§265.1084(a)(2)). Among the waste determination techniques that would have been considered knowledge, was analysis by methods other than 25D, if the alternate method had been validated using Test Method 301, from appendix A of part 63. Certain commenters indicated that it was not clear in the 1994 final rule that data from non-validated methods could be used to make a waste determination, with those results being again, considered knowledge-of-the-waste (as opposed to direct measurement). Today EPA is clarifying that, and, also in response to comments, the EPA has decided to allow organic concentration test data that are validated in accordance specifically with Sections 5.1 and 5.3 and the corresponding calculations in Section 6.1 or 6.3 of Method 301 to be used as direct measurement data. This makes validation of the alternative test method a self-check of the method being validated. Also, if appropriate, owners and operators may choose to "correct" values measured by the alternative test method to equate to the values that would be measured using Method 25D by multiplying the measured values times the appropriate compound-specific adjustment "f_m factor."

In addition, as discussed in Section II.G of the preamble to the final Off-Site Waste and Recovery Operations NESHAP (61 FR 34140, July 1, 1996), the EPA promulgated a less rigorous validation procedure, "Alternative Validation Procedure for EPA Waste and Wastewater Methods," in Appendix D to 40 CFR part 63 as an alternative to Method 301 for the validation of a test method established by the EPA Office of Water (OW) or the EPA Office of Solid Waste (OSW) when this EPA test method is used for air emission standards. The EPA decided it is appropriate to allow organic concentration test data that are validated in accordance with this method to be used as direct measurement data because it is considered to produce equally reliable validation results. Other test methods not previously mentioned that are used to measure organic concentrations in the waste shall be validated according to section 5.1 or 5.3, and the corresponding calculations in section 6.1 or 6.3, or Method 301 of Appendix A of 40 CFR part 63.

The main point that must be reemphasized regarding direct measurement of VO concentration is that, although the EPA is amending the rule to allow various test methods other than Method 25D to be used in a waste determination, the owner or operator must use a test method(s) that is appropriate for the compounds contained in the waste. The method(s) used for the waste determination must be suitable for and must reflect or account for all compounds in the waste with a Henry's Law constant equal to or greater than 0.1 Y/X at 25 degrees Celsius.

In a further clarification, today's action is revising the waste determination procedures such that for both point of waste origination and point of waste treatment, no distinction is made for batch or continuous processes or for whether the owner or operator is the generator or receives the waste from off-site. The owner or operator chooses an averaging period appropriate for the hazardous waste stream of not more than 1 year. As has been noted previously, a site sampling plan is required that describes the procedure for collecting representative samples of the hazardous waste stream such that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained.

As was originally promulgated in the 1994 final rule, in the event that the Regional Administrator and the owner or operator disagree on a determination of the average VO concentration of a hazardous waste stream at the point of waste origination using knowledge, then direct measurement shall be used to establish compliance. As noted above, because of the expansion of analysis methods in today's amendments, direct measurement to establish compliance is not limited to Method 25D, but can be performed using any of the methods specified in the rule or any test method validated as specified in the rule, as appropriate for the waste managed in the unit. Because of the expansion of analysis methods, the rule has been revised such that, if the Regional Administrator determines that the method used by the owner or operator for a waste determination using direct measurement was not appropriate for the waste managed in the unit, then the Regional Administrator may choose an appropriate method to verify the waste determination.

G. Standards: Tanks

The subpart CC tank standards have been revised to address comments on the proposed technical amendments, to be consistent with tank standards established for related Clean Air Act NESHAP, and to reduce the inspection, monitoring, recordkeeping, and reporting requirements. In general, the amendments published today establish two levels of air emission control (referred to as Level 1 and Level 2 controls) for tanks managing hazardous waste having a maximum organic vapor pressure less than 76.6 kilopascals (kPa). The control level applicable to a tank required to use controls is determined by the tank design capacity and the maximum organic vapor pressure of the material in the tank. Ranges of capacity and vapor pressure limits or criteria have been established for tanks. However, tanks used for waste stabilization processes are required to use specific air emission controls.

For a tank to meet Level 1 controls, the revised final rule specifies that the hazardous waste be managed in a tank using a fixed-roof. For the Level 2 controls, the revised final rule requires that hazardous waste be managed in one of the following: (1) a fixed-roof tank equipped with an internal floating roof; (2) a tank equipped with an external floating roof; (3) a tank vented through a closed-vent system to a control device; (4) a pressure tank; or (5) a tank located inside an enclosure that is vented through a closed-vent system to an enclosed combustion control device.

A tank is allowed to use the Level 1 controls if it meets the conditions that were in the 1994 final subpart CC rule to qualify for control by only a fixed roof, with several revisions to the conditions. In response to comments, the condition that the waste is neither mixed, stirred, agitated, nor circulated within the tank is being dropped; the condition on heating the waste is being revised to require that the hazardous waste in the tank not be heated to a temperature that is greater than the temperature at which the maximum organic vapor pressure of the waste was determined; and the condition that the hazardous waste not be treated by a process that produces an exothermic reaction is being dropped. The EPA agrees with commenters that these conditions are redundant given the criteria based on determination of a maximum organic vapor pressure. The conditions that are being dropped from the rule thus are adequately accounted for in the maximum organic vapor pressure criteria.

The owner of operator of a tank that qualifies for the Level 1 controls may choose to use Level 2 controls. A tank that does not qualify for the Level 1 controls is subject to the Level 2 controls.

Tank Level 1 control requirements consist of a fixed roof meeting the design, operation, inspection, and recordkeeping requirements specified in the rule. Because of commenters' concerns with the safety of workers during tank cleaning, the operating requirements are being clarified to explicitly include the removal of accumulated sludge or other residues from the bottom of the tank as a time when the opening of closure devices or removal of the fixed roof is allowed. In response to commenters' concerns that the subpart 1994 CC rules (inadvertently) required that a conservation vent must discharge through a closed-vent system to a control device, the revised rule states that a pressure relief device, such as a conservation vent which vents to the atmosphere, is allowed for the purpose of maintaining the tank internal pressure in accordance with the tank design specifications. Normal operating conditions that might require a pressure relief device to open include internal pressure buildup as a result of loading operations or diurnal ambient temperature fluctuations.

To reduce the inspection, monitoring, and recordkeeping burden of the rule, a number of rule revisions are being made in response to comments. The semiannual inspection requirement for the fixed roof and closure devices is being changed to an annual inspection requirement. The EPA considers this change to greatly reduce the requirements placed on the tank operators, while not affecting the protectiveness of the rules. The regulations still require tanks to be operated with covers that do not have visible openings or gaps; therefore, any openings or gaps will still need to be immediately repaired. The instrument monitoring requirements are being dropped, EPA's rationale being that the fixed roofs are allowed to operate with a conservation vent, and thus, leaks detectable only by an instrument are relatively insignificant. The time during which repair of a defect must be completed is being extended from 15 to 45 calendar days. The delay of repair provisions are being clarified to indicate that repair of a defect on a fixed roof or closure device may be delayed beyond 45 calendar days if repair would require the tank to be emptied or removed from service and no alternative capacity is available at the facility to accept the hazardous waste normally managed in the tank. The recordkeeping requirements are being clarified to explicitly define the information required for the annual inspection.

The revised Tank Level 2 air emission control requirements include options that were available in the 1994 final subpart CC rule, i.e., a tank equipped with a fixed roof and internal floating roof, a tank equipped with an external floating roof, a fixed roof vented through a closed-vent system to a control device, and a pressure tank. In addition, an option is being provided allowing the use of an enclosure vented through a closed-vent system to an enclosed combustion device or a control device designed and operated to reduce the total organic content of the inlet vapor stream by at least 95 percent by weight.

For a tank equipped with a fixed roof and internal floating roof, an operating requirement is being revised, such that, when the floating roof is resting on the leg supports, the process of filling, emptying, or refilling must be accomplished as soon as practical rather than as rapidly as possible. The rationale for this is explained in the preamble of the February 9, 1996 technical amendments (see 61 FR 4910).

Internal floating roof and external floating roof design, operating, inspection, and monitoring requirements are revised to reflect current technology and to be consistent with requirements of Clean Air Act standards for the same equipment (e.g. the off-site waste and recovery operations NESHAP, promulgated July 1, 1996). Again, this is part of the EPA's effort to promote consistency between requirements for similar types of units. Overall performance and emission reductions are effectively unchanged.

For a tank with a fixed roof that is vented through a closed-vent system to a control device, the operating, monitoring, and inspection requirements are being revised consistent with the Tank Level 1 control requirements described previously. In summary, the times when opening of closure devices or removal of the fixed roof are allowed are being clarified, the rule is being clarified to allow the opening of a safety device, the semiannual inspection required for the fixed-roof and closure devices is changed to an annual inspection requirement, monitoring requirements are dropped, the time during which repair of a defect must be completed is extended from 15 to 45 calendar days, the delay of repair provisions are being clarified to indicate that repair of a defect on a fixed roof or closure device may be delayed beyond 45 calendar days, and the recordkeeping requirements are being clarified to explicitly define the information required for the annual inspection.

In response to the numerous comments regarding establishment of criteria to identify or define a pressure tank, the pressure tank requirements are being clarified to state that the tank shall be designed to operate with no detectable organic emissions during filling to the tank design capacity and the subsequent compression of the vapor headspace in the tank.

For the control option being added as a part of these amendments that allows the use of an enclosure vented through a closed-vent system to an enclosed combustion device or alternative control device, the enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure as specified in 40 CFR 52.741, Appendix B, Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure. The EPA is adding this control option in response to comments from, among others, members of the hazardous waste stabilization industry and the incineration industry, who maintain that certain waste handling or treatment operations (e.g. incinerator bulk feed systems and stabilization) can not feasibly be conducted in covered tanks.

The EPA has made a number of revisions to the regulations that address this concern. As noted earlier, the increased VO concentration action level (from 100 ppmw to 500 ppmw) plus the inapplicability of the rule to hazardous wastes that meet the LDR standard for organic hazardous constituents should sharply reduce the number of situations where a metal-bearing waste undergoing stabilization would also be subject to the subpart CC standards.

In addition, the EPA reexamined the data in the record for those wastes that may undergo stabilization and still be subject to the Subpart CC requirements; this includes data supplied by waste management companies after promulgation of the 1994 final CC rule, in response to EPA's solicitation (see 59 FR 62912, December 6, 1994). However, the data currently available to the EPA do not support the commenters' assertions that no controls at all are needed for these wastes undergoing stabilization. All currently available data indicate that a significant fraction, by mass, of organics in waste are volatilized during stabilization processes.[5]

The EPA recognizes that certain stabilization and waste handling operations can only be feasibly conducted in open tanks (and containers). For such operations, where a cover is impractical, the most practical alternative is a

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[5] Recent data supplied to EPA (including information contained in docket F-94-CE3A-FFFFF, and information submitted by subpart CC rule commenters to the EPA's Office of Solid Waste and Emergency Response) do not lead the Agency to conclude otherwise. Rather, the data submitted indicate that numerical quantification methods, or test methods, used to measure the mass of organics emitted during stabilization do not yield consistent or precise results when waste streams below 500 ppmw VO concentration are evaluated. These data, among other factors, prompted the Agency to raise the action level to 500 ppmw. However, the data submitted did not support any revision to the Agency's policy of requiring stabilization of organics to be performed in units with air emission controls. The Agency maintains that stabilization, and other operations that raise the temperature of the waste or agitate the waste, increase the rate of volatilization or organics in the waste. Therefore, it follows that a regulation that considers it appropriate to control the organic emissions from storage of hazardous waste would consider it at least as important to control the organic emissions during treatment of hazardous waste.

permanent total enclosure that achieves high capture efficiency of the organic compounds emitted from the open tank (or container) and routes them through a closed-vent system to an organic control device. The EPA defines a permanent total enclosure as a "permanently installed enclosure that completely surrounds a source of emissions such that all (VOC) emissions are captured and contained for discharge through a control device." The EPA has developed a set of criteria (in 40 CFR 52.741, Appendix B) to ensure high capture efficiencies through proper design and operation of an enclosure and to eliminate the need for expensive and disruptive capture efficiency performance tests. The EPA method states that if a facility meets the criteria for a permanent total enclosure and all emissions are directed to a control device, the capture efficiency may be assumed to be 100 percent and measurement requirements are waived. The EPA has concluded that these enclosure criteria are appropriate for application to waste stabilization operations, bulk feed tank operations, and other waste handling situations where an owner or operator may deem a covered tank impractical; the design and operational criteria allow for necessary worker access to perform necessary operations, while assuring a high capture efficiency. Therefore, in this limited situation, use of an enclosure and control device that meets the criteria specified in the rule, for both the enclosure and the control device, is considered to provide the same level of emission reduction performance as does the other control options provided in the rule for tanks and thus achieves the same level of protection.

One commenter argued that the permanent enclosure criteria are inappropriate because they were originally developed for use in another industry (the paint and coating industry). However, the EPA considers these criteria appropriate for ensuring adequate design and operation of any enclosure used to capture organic emissions. The criteria are not prescriptive, that is, they do not specified detailed design and operation conditions. Rather, the criteria are just that: parameters that must be evaluated, and minimum or maximum values that must be met for each parameter. These criteria are the only description known to the Agency that ensure an enclosure is effective in: (1) preventing significant volumes of organics from escaping to the atmosphere, (2) capturing the organics from within the enclosure, and (3) routing the organics from within the enclosure to a control device.

The permanent total enclosure criteria specifies: (1) maximum total area for natural draft openings, or NDO (which are holes in the enclosure that allow passage of organics through to the atmosphere), (2) minimum distance from emission points to NDO, (3) minimum face velocity to ensure sufficient negative pressure, (4) closure of any accesses that were not open for the purpose of performing the criteria calculations, and (5) routing of all emissions to a control device. All of these are parameters that would require consideration in the evaluation of any enclosure's effectiveness. Further, the minimum and maximum values specified in the permanent total enclosure criteria were chosen by EPA specifically for the purposes of ensuring adequate capture of organic emissions from industrial operations, such as paint and coating operations. The paint and coating industry operations are similar enough to other industrial operations, including waste treatment, that it is appropriate to use the permanent total enclosure criteria for specifying enclosure integrity elsewhere.

One commenter remarked that the costs to retrofit two particular existing enclosures to the permanent total enclosure criteria would be prohibitive. The EPA does not agree with that remark. After reviewing that data, the EPA estimates that it would be less costly for that facility to upgrade those enclosures than it would be for any facility to retrofit an existing tank with an air-tight cover, which is the requirement for other tanks subject to the subpart CC standards.[6]

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[6] The EPA further notes that one of the two enclosures described in this commenter's submission would require only the sealing of a natural draft opening which is too close to an emission point. The other enclosure would require an increase is the face velocity, which could possibly be achieved by closing some of the natural draft openings in the enclosure. The cost to close a natural draft opening is not at all prohibitive; in many

Safety devices, as defined in the rule, may be installed on the enclosure, as needed. The closed-vent system and enclosed combustion device or alternative control device must be designed and operated in accordance with standards in subpart CC. The enclosure is required to be inspected initially and annually thereafter. When defects are detected, the owner or operator must make first attempts at repair no later than 5 calendar days after detection and complete repair within 45 days.

Finally, in response to commenters' concerns with the feasibility of transferring solids and sludges between containers and tanks in a "closed system" as required by the final rules, the closed system transfer requirements for hazardous wastes transferred to or from a tank and another

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instances it can be accomplished with a patch and some air-tight caulk or foam. However, it is conceivable that the facility may need to increase the capacity of the control device for this second enclosure, in order to be able to effectively handle the resulting increased air flow. However, the EPA considers it highly relevant to note that the commenter states that his permitting authority has confirmed the tank inside this enclosure is not subject to the subpart CC standards; therefore, the enclosure would not be required to meet the permanent total enclosure criteria referenced by the subpart CC standards. It should be noted that costs associated with achieving a level of protectiveness required under RCRA 3004(n) are not a consideration in the selection of standards.

The EPA considers it also noteworthy to mention that a hazardous waste treatment industry group polled its members that operate incinerator bulk feed tanks, and was informed that all the member companies polled either: (1) currently perform the bulk feed operations using covered tanks, (2) currently perform the bulk feed operations inside enclosures which already meet all of the permanent total enclosure criteria, or (3) would consider it reasonable to (and are willing to) upgrade or modify their existing enclosures to meet the permanent total enclosure criteria.

waste management unit subject to subpart CC control requirements are being revised such that transfer of hazardous waste between a tank and container is not required to be done in a closed system.

H. Standards: Surface Impoundments

Revisions are being made to the subpart CC surface impoundment standards so that, where relevant and appropriate, the inspection, monitoring, recordkeeping, and reporting requirements for surface impoundments are consistent with the requirements established for tanks in subpart CC and for surface impoundments under the Clean Air Act NESHAP. A discussion of these revisions is presented below.

More design and installation information is being included for rigid covers. A provision is being added that clarifies the intent of the 1994 final subpart CC rule, that venting to a control device is not required and that opening of closure devices or removal of the cover is allowed to remove accumulated sludge or other residues from the bottom of the surface impoundment. A provision is being added that explicitly allows opening of a safety device installed on the cover, closed-vent system, or control device at any time conditions require it to do so to avoid an unsafe condition. Also under the technical amendments published today, visual inspection of the rigid cover and closure devices is required initially and annually thereafter, rather than semiannually; leak detection monitoring is only required initially; and there are no requirements for periodic monitoring (as discussed above, the EPA does not consider it warranted to survey for non-visible leaks, while allowing conservation vents to route emissions to the atmosphere). The repair period for a defect also is being extended from 15 to 45 days to be consistent with other CAA regulations (e.g. the HON).

The floating membrane cover design and installation requirements are being clarified, e.g., language is being added to clarify that the "floating membrane cover shall be designed to float during normal operations on the surface of the liquid contained in the surface impoundment." A provision is being added that allows the floating membrane cover to be equipped with emergency cover drains for removal of storm water. Opening of a safety device installed on the cover is allowed at any time conditions require it to do so to avoid an unsafe condition. Visual inspection of the floating membrane cover and closure devices is required initially and annually, rather than semiannually. The leak detection monitoring requirements for floating membrane covers are being dropped. The repair period for a defect is being extended from 15 to 45 days.

The closed system transfer requirements for hazardous wastes transferred to or from a surface impoundment and another waste management unit subject to subpart CC control requirements are being revised such that transfer of hazardous waste between a surface impoundment and container is not required to be done in a closed system. This change is being made to provide consistency within the subpart CC rules; containers are not subject to transfer requirements among other containers; therefore, the EPA does not consider it necessary to require closed transfer between containers and surface impoundments.

I. Standards: Containers

The subpart CC container standards are being significantly revised under today's amendments to address comments on the proposed changes to the container requirements, to make this rule compatible with the existing U.S. Department of Transportation (DOT) regulations for transporting hazardous materials, and to reduce any unnecessary inspection, monitoring, recordkeeping, and reporting requirements.

1. Control requirements

Commenters stated that promulgated air emission control requirements for containers are impractical to implement or require equipment that is commercially unavailable. Also, commenters stated that the requirements should be consistent with the container air emission control requirements under the Clean Air Act rules.

Since promulgation in December 1994, the EPA has obtained more information on the practices and equipment currently used to manage hazardous waste in containers. Based on consideration of this information, the EPA decided to revise the air emission control requirements for containers to better reflect the container organic emission potential, the various container types, and the common container management practices used for hazardous waste operations. The EPA believes that these revised requirements are technically feasible and practical to implement on all types of containers that the Agency expects to be subject to the rule. These revisions are described in detail later in this section of today's notice.

The EPA is addressing consistency between the air emission control requirements for containers (as well as the other affected waste management units) in the RCRA rules and those contained in Clean Air Act NESHAP or NSPS by amending the RCRA rules to include an exemption for those affected units using organic emission controls in accordance with the requirements of any applicable NESHAP or NSPS. Because the Clean Air Act controls for containers are essentially the same as those required under the RCRA air rules, they are considered to provide the same level of protection. In addition, allowing the use of DOT containers is also consistent with the EPA's general objective of avoiding duplication and promoting consistency. The EPA has thoroughly evaluated the control requirements for DOT containers and has worked with DOT in developing these revisions. The EPA concluded that containers that meet applicable DOT requirements under 49 CFR Parts 173, 178, 179, and 180 are equivalent in their overall emission reduction performance and therefore provide the same level of protection as do the initial requirements of the final subpart CC rules.

The revised container standards for the subpart CC RCRA air rules establish three levels of air emission control. The control level applicable to a container is determined by the container design capacity, the total organic content of the hazardous waste material in the container, and use of the container. For example, containers with a design capacity less than or equal to 0.1 m^3 (approximately 26 gallons) are not subject to any requirements under the rule, as was the case in the 1994 promulgated CC rule.

Under today's the revised subpart CC rule, Level 1 controls are allowed for the following container categories (except when the container remains uncovered for waste stabilization or certain other treatment processes): (1) containers having a design capacity greater than 0.1 m^3 and less than or equal to 0.46 m^3 (approximately 119 gallons); and (2) containers with a design capacity greater than 0.46 m^3 and used to manage hazardous wastes that do not meet the definition of "in light material service" (i.e., used to manage a hazardous waste where the vapor pressure of one or more of the components in the material is greater than 0.3 kPa at 20 °C, and the total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 °C is equal to or greater than 20 percent by weight). Level 2 controls are required for containers with a design capacity greater than 0.46 m^3 and used "in light material service," except when the container remains uncovered for waste stabilization or certain other treatment processes. Level 3 controls are required for containers having a design capacity greater than 0.1 m^3 that must remain uncovered for waste stabilization processes.

For the containers allowed to use Level 1 controls, the amended rule requires that the hazardous waste be managed either: (1) in a container that meets the relevant DOT regulations on packaging hazardous materials for transportation under 49 CFR parts 173, 178, 179, and 180; or (2) a covered container that meets the requirements specified in the 1994 final CC rule (40 CFR part 264 and 265). No additional requirements are specified by today's revised final rule for containers complying with the applicable DOT regulations. In the case when an owner or operator elects to comply with the covered container requirements (i.e., non-DOT containers), the container must be equipped with a tight-fitting cover that has no visible gaps, spaces, holes, or other openings. The rule does require a visual inspection when the cover is applied and annually thereafter, if the container remains in on-site storage for a period longer than 1 year. No testing for detectable organic emissions using Method 21 is required. No recordkeeping and reporting are required under the revised final rule for containers using Level 1 controls. The EPA has agreed with commenters' suggestions that any increases in enforceability of the subpart CC standards does not justify the expense and time required by an owner or operator to make and maintain records for the subpart CC regulations for hazardous waste in containers. The vast majority of containers subject to the subpart CC standards are not at a given site for more than 90 days; therefore, the burden associated with maintaining additional records (that is, in addition to existing records required under other applicable regulations, such as the RCRA subpart I, or DOT container requirements) for all containers used to store hazardous waste was deemed to be considerably greater than the recordkeeping requirements for tanks or surface impoundments (particularly when compared with the relatively low volume of hazardous waste, nationwide, that is managed in containers versus tanks and surface impoundments).

For the containers required to use Level 2 controls, today's revised final rule requires that the hazardous waste be managed in one of the following: (1) a container that meets the relevant DOT regulations on packaging hazardous materials for transportation under 49 CFR parts 173, 178, 179, and 180; or (2) a container that operates with "no detectable organic emissions"; or (3) a container that has been demonstrated within the preceding 12 months to be vapor-tight by using Method 27. Specific design, operating, inspection and monitoring, repair, recordkeeping, and reporting requirements for containers tested using either Method 21 or 27 are specified in the rule.

No additional requirements are specified in the final rule for containers complying with the applicable DOT regulations. However, for compliance with the subpart CC rules, no exceptions under the 40 CFR Parts 178 or 179 regulations are allowed for DOT containers except for lab packs meeting the exceptions for combination packaging specified in 40 CFR 173.12(b). In addition, the EPA based its decision to allow use of DOT containers for compliance with the subpart CC rules on the specifications, testing, maintenance, and other requirements for containers that can be reused or refilled under DOT regulations (the typical practice at hazardous waste TSDF). For the purpose of complying with the subpart CC rules, the EPA does not consider it appropriate that a container which is a "non-reusable container (NRC)" or "single-trip container (STC)" according to DOT requirements, be repeatedly used while at the facility site (i.e., emptied and refilled) for the handling of hazardous waste subject to subpart CC rules. Before a DOT container can be reused, even within the boundaries of a facility site, it must comply with the DOT reconditioning and reuse provisions of the hazardous materials regulations in 49 CFR 173.28.

For the containers required to use Level 3 controls, the revised final rule requires that an open container be placed in an enclosure vented through a closed-vent system to a control device or a covered container be vented directly to a control device. If an enclosure is used, the enclosure is to be designed in accordance with the criteria for a permanent total enclosure as specified in 40 CFR 52.741, Appendix B, Procedure T -- Criteria for and Verification of a Permanent or Temporary Total Enclosure. The use of a permanent total enclosure and the design and operating criteria for these enclosures are discussed further in Section G of this preamble.

2. Loading operations

Requirements for loading hazardous waste into a container are also being revised by today's action in response to the numerous comments received by EPA on this topic. Under the revised final rule there are no requirements for loading hazardous waste into containers using Level 1 controls. The rationale for this is explained in the preamble to the February 9, 1996 technical amendments (see 61 FR 4909). For containers using Level 2 controls, the loading requirements have been revised to allow the owner or operator the flexibility to use any appropriate loading method that will minimize exposure of the hazardous waste to the atmosphere and thereby reduce organic air emissions, to the extent practical considering the physical properties of the hazardous waste and good engineering and safety practices. Examples of container loading procedures that the EPA considers to meet these requirements include, but are not limited to, using a submerged-fill pipe or other submerged-fill method to load liquids into the container; or using a vapor-balancing or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations.

3. Inspection, monitoring, recordkeeping, and reporting

After consideration of the comments regarding the burden associated with certain aspects of the inspection, monitoring, recordkeeping, and reporting requirements for containers, and review of the effect of these requirements on the emission reduction achieved by these standards, the EPA has determined that it is appropriate to simplify these requirements in today's amendments. Owners and operators of containers using either Container Level 1 or Container Level 2 controls in accordance with the provisions of the rule are required to visually inspect the container and its cover and closure devices to check for defects at the time the owner or operator first manages a hazardous waste in the container or accepts possession of the container at the facility with the exception of those containers emptied within 24 hours of being received. Also, in the case when a container used for managing hazardous waste remains at the facility for a period of 1 year or more, the container and its cover and closure devices are to be visually inspected to check for defects at least once every 12 months.

Under the revisions published here, there are no requirements for periodic Method 21 leak monitoring of containers. The EPA considers this revision appropriate, in light of the relatively low volume of hazardous waste managed in containers (as compared to that volume managed in tanks and surface impoundments) and the transitory nature of containers (i.e. the vast majority of containers, nationwide, do not remain on a given site longer than 90 days). The time and expense required by operators to perform periodic Method 21 monitoring on containers does not seem to be warranted by any anticipated increase in emission reductions or enforceability of the subpart CC standards.

There is only one recordkeeping requirement and no reporting requirements under this rulemaking for containers using either Container Level 1 or Container Level 2 controls. The recordkeeping requirement is to maintain in the facility record a copy of the procedure used to determine that containers with capacities equal to or greater than 0.46 m^3 and do not meet the applicable DOT regulations are not managing hazardous waste in "light material service."

Information is also being added to the rule concerning the duration of time that the cover or closure devices can be open for the purpose of adding hazardous waste to or removing hazardous waste from the container or performing other routine activities, such as sampling the hazardous waste in the container. Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure-relief device that vents to the atmosphere is allowed to maintain container internal pressure within design specifications during normal operating conditions, e.g., to release pressure resulting from loading operations or diurnal temperature changes. Opening of a safety device, as defined in the rule, is allowed at any time conditions require it to do so to avoid an unsafe condition.

J. Standards: Closed-Vent Systems and Control Devices

As previously discussed in this preamble under the revisions to the subpart AA provisions for control devices and closed-vent systems, the subpart CC control device and closed-vent system standards are being revised by today's technical amendments to incorporate changes so that these requirements are consistent and up-to-date with the general decisions the EPA has made regarding the inspection, monitoring, maintenance, repair, malfunctions, recordkeeping, and reporting requirements for organic emission control devices and which have been published in other related standards.

In the subpart CC standards for control devices and closed vent systems, provisions are being added to allow up to 240 hours per year for periods of planned routine maintenance of a control device during which time the control device is not required to meet the performance requirements for emission reductions specified in the rule and to exempt control devices from the substantive requirements of this section during a control device system malfunction. Recordkeeping requirements for these provisions are also being added. This change is being made in response to commenters' statements that good engineering and air pollution control practices include maintenance of air pollution control equipment, and that it is reasonable to assume that all such equipment will require either maintenance or repair at some time during the life of the equipment. The EPA is adding this allowance in an attempt to encourage good maintenance of such equipment, and in recognition that if maintenance periods are not allowed, repair periods will be unavoidable; it seems more reasonable to encourage the former, while accepting that both are realities. The value of 240 hours has been selected to be consistent with other air regulations developed under the CAA, such as the HON.

K. Inspection and Monitoring Requirements

The EPA is making revisions to the inspection and monitoring requirements for the final subpart CC RCRA air rules to reflect the revisions to the rule applicability and technical requirements and reduce the burden of these requirements on owners and operators. These revisions are explained in more detail throughout the preamble, above.

L. Recordkeeping and Reporting Requirements

The EPA is changing the recordkeeping and reporting requirements for the final subpart CC RCRA air rules to reflect the revisions to the rule applicability and technical requirements and reduce the burden of these requirements on owners and operators. These revisions are explained in more detail throughout the preamble, above.

V. Administrative Requirements

A. Docket

Six RCRA dockets contain information pertaining to today's rulemaking: (1) RCRA docket number F-91-CESP-FFFFF, which contains copies of all BID references and other information related to the development of the rule up through proposal; (2) RCRA docket number F-92-CESA-FFFFF, which contains copies of the supplemental data made available for public comment prior to promulgation; (3) RCRA docket number F-94-CESF-FFFFF, which contains copies of all BID references and other information related to development of the final rule following proposal; (4) RCRA docket number F-94-CE2A-FFFFF, which contains information pertaining to waste stabilization operations performed in tanks; (5) RCRA docket number F-95-CE3A-FFFFF, which contains information about potential final rule revisions made available for public comment; and (6) RCRA docket number F-96-CE4A-FFFFF, which contains a copy of each of the comment letters submitted in regard to the revisions that the EPA was considering for the final subpart CC standards. The public may review all materials in these dockets at the EPA RCRA Docket Office.

The EPA RCRA Docket Office is located at Crystal Gateway, 1235 Jefferson Davis Highway, First Floor, Arlington, Virginia. Hand delivery of items and review of docket materials are made at the Virginia address. The public must have an appointment to review docket materials. Appointments can be scheduled by calling the Docket Office at (703) 603-9230. The mailing address for the RCRA Docket Office is RCRA Information Center (5305W), 401 M Street SW, Washington, DC 20460. The Docket Office is open from 9 a.m. to 4 p.m., Monday through Friday, except for Federal holidays.

B. Paperwork Reduction Act

The information collection requirements of the previously promulgated RCRA air rules were submitted to and approved by the Office of Management and Budget (OMB). A copy of this Information Collection Request (ICR) document (OMB control number 1593.02) may be obtained from Sandy Farmer, Information Policy Branch (2136); U.S. Environmental Protection Agency; 401 M Street, SW; Washington, DC 20460 or by calling (202) 260-2740.

Today's amendments to the RCRA air rules should have only a minor impact on the information collection burden estimates made previously, and that impact is expected to be a reduction. The changes consist of new definitions, alternative test procedures, clarifications of requirements, and additional compliance options. The changes are not additional requirements, but rather, are reductions in previously published requirements. The overall information-keeping requirements in the rule are being reduced. Consequently, the ICR has not been revised.

C. Executive Order 12866 Review

Under Executive Order 12866, the EPA must determine whether the proposed regulatory action is "significant" and, therefore, subject to the OMB review and the requirements of the Executive Order. The Order defines "significant" regulatory action as one that is likely to lead to 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 in 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 obligations 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.

The RCRA Subpart CC air rules published on December 6, 1994, were considered significant under Executive Order 12866, and a regulatory impact analysis (RIA) was prepared. The amendments published today clarify the rule, provide more compliance alternatives, make certain regulatory provisions more lenient, and correct structural problems with the drafting of some sections. The OMB has evaluated this action, and determined it to be non-significant; thus it did not require their review.

D. Regulatory Flexibility Act

Pursuant to section 605(b) of the Regulatory Flexibility Act, 5 U.S.C. 605(b), as amended, Pub. L. 104-121, 110 Stat. 847, the EPA certifies that this rule will not have a significant economic impact on a substantial number of small entities and therefore no initial regulatory flexibility analysis under section 604(a) of the Act is required. For the reasons discussed in the December 6, 1994 Federal Register (59 FR 62923), this rule does not have a significant impact on a substantial number of small entities. The changes to the rule do not add new control requirements to the December 1994 rule. The amendments in fact reduce the already-existing requirements.

Therefore, the amendments are also not considered significant.

Under 5 U.S.C. 801(a)(1)(A) as added by the Small Business Regulatory Enforcement Fairness Act of 1996, EPA submitted 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 General Accounting Office prior to publication of the rule in today's Federal Register. This rule is not a "major rule" as defined by 5 U.S.C. 804(2) given that it amends the rule published in 1994 to reduce the extent of regulation.

E. Unfunded Mandates

Under section 202 of the Unfunded Mandates Reform Act of 1995 ("Unfunded Mandates Act"), the EPA must prepare a budgetary impact statement to accompany any proposed or final rule that includes a Federal mandate that may result in estimated costs to State, local, or tribal governments in the aggregate, or to the private sector, of $100 million or more. Under section 205, the EPA must select the most cost-effective and least burdensome alternative that achieves the objectives of the rule and is consistent with statutory requirements. Section 203 requires the EPA to establish a plan for informing and advising any small governments that may be significantly or uniquely impacted by the rule.

The EPA has determined that the action promulgated today does not include a Federal mandate that may result in estimated costs of $100 million or more to either State, local, or tribal governments in the aggregate or to the private sector. Therefore, the requirements of the Unfunded Mandates Act do not apply to this action.

VI. Legal Authority

These regulations are amended under the authority of sections 2002, 3001-3007, 3010, and 7004 of the Solid Waste Disposal Act of 1970, as amended by RCRA, as amended (42 U.S.C. 6921-6927, 6930, and 6974).

LIST OF SUBJECTS

40 CFR part 262

Accumulation time, Air pollution control, Container, Tank.

40 CFR parts 264 and 265

Environmental Protection, Air pollution control, Container, Control device, Hazardous waste, Inspection, Monitoring, Reporting and recordkeeping requirements, Surface impoundment, Tank, TSDF, Waste determination.

40 CFR part 270

Administrative practice and procedure, Air pollution, Confidential business information, Hazardous waste, Permit modification, Reporting and recordkeeping requirements.

Dated:____________ ____________________________
CAROL M. BROWNER,
Administrator.

For the reasons set out in the preamble, title 40, chapter I, parts 261, 262, 264, 265, 270, and 271 of the Code of Federal Regulations are amended as follows:

PART 261--IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

1. The authority citation for part 261 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921, 6922, and 6938.

2. Section 261.6 is amended by revising the text within paragraph (c)(1) to replace "and BB" with "BB, and CC" to read as follows:

§261.6 Requirements for recyclable materials.

* * * * *

(c)(1) Owners and operators of facilities that store recyclable materials before they are recycled are regulated under all applicable provisions of subparts A though L, AA, BB, and CC of parts 264 and 265, and under parts 124, 266, 268, and 270 of this chapter and the notification requirements under section 3010 of RCRA, except as provided in paragraph (a) of this section. (The recycling process itself is exempt from regulation except as provided in §261.6(d).)

* * * * *

PART 262--STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE

1. The authority citation for part 262 continues to

read as follows:

Authority: 42 U.S.C. 6906, 6912, 6922, 6923, 6925, 6937 and 6938, unless otherwise noted.

2. Section 262.34 is amended by revising paragraphs (a)(1)(i) and (a)(1)(ii) to read as follows:

§262.34 Accumulation time.

(a) * * *

(1) * * *

(i) In containers and the generator complies with subpart I of 40 CFR part 265; and/or

(ii) In tanks and the generator complies with subpart J of 40 CFR part 265, except §§265.197(c) and 265.200; and/or

* * * * *

PART 264--STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

3. The authority citation for part 264 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6924 and 6925.

Subpart I-Use and Management of Containers

4. Section 264.179 is revised to read as follows:

§264.179 Air emission standards.

The owner or operator shall manage all hazardous waste placed in a container in accordance with the applicable requirements of subparts AA, BB, and CC of this part.

Subpart J-Tank Systems

5. Section 264.200 is revised to read as follows:

§264.200 Air emission standards.

The owner or operator shall manage all hazardous waste placed in a tank in accordance with the applicable requirements of subparts AA, BB, and CC of this part.

Subpart K-Surface Impoundments

6. Section 264.232 is revised to read as follows:

§264.232 Air emission standards.

The owner or operator shall manage all hazardous waste placed in a surface impoundment in accordance with the applicable requirements of subparts BB and CC of this part.

Subpart AA-Air Emission Standards for Process Vents

7. Section 264.1030 is revised by revising paragraph (b) and removing the note at the end of the section to read as follows:

§264.1030 Applicability.

* * * * *

(b) Except for §264.1034, paragraphs (d) and (e), this subpart applies to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10 ppmw, if these operations are conducted in one of the following:

(1) A unit that is subject to the permitting requirements of 40 CFR part 270, or

(2) A unit (including a hazardous waste recycling

unit) that is not exempt from permitting under the provisions of 40 CFR 262.34(a) (i.e., a hazardous waste recycling unit that is not a 90-day tank or container) and that is located at a hazardous waste management facility otherwise subject to the permitting requirements of 40 CFR part 270, or

(3) A unit (including a hazardous waste recycling unit) that is exempt from permitting under the provisions of 40 CFR 262.34(a) (i.e., a 90-day tank or container).

* * * * *

8. Section 264.1033 is amended by revising paragraph (f)(2)(vi)(B); redesignating paragraphs (l) and (m) as paragraphs (m) and (n) and revising the newly designated paragraph (n); by revising paragraph (k); and by adding paragraphs (l) and (o) to read as follows:

<u>§264.1033 Standards: Closed-vent systems and control devices</u>

* * * * *

(f) * * *

(2) * * *

(vi) * * *

(B) A temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature with an accuracy of ±1 percent of the temperature being monitored in degrees Celsius (°C) or ±0.5 °C, whichever is greater. The temperature sensor shall be installed at a location in the exhaust vent stream from the condenser exit (i.e., product side).

* * * * *

(k) A closed-vent system shall meet either of the following design requirements:

(1) A closed-vent system shall be designed to operate with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background as determined by the procedure in §264.1034(b) of this subpart, and by visual inspections; or

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

(l) The owner or operator shall monitor and inspect each closed-vent system required to comply with this section to ensure proper operation and maintenance of the closed-vent system by implementing the following requirements:

(1) Each closed-vent system that is used to comply with paragraph (k)(1) of this section shall be inspected and monitored in accordance with the following requirements:

(i) An initial leak detection monitoring of the closed-vent system shall be conducted by the owner or operator on or before the date that the system becomes subject to this section. The owner or operator shall monitor the closed-vent system components and connections using the procedures specified in §264.1034(b) of this subpart to demonstrate that the closed-vent system operates with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background.

(ii) After initial leak detection monitoring required in paragraph (l)(1)(i) of this section, 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 pollutant emissions. The owner or operator shall monitor a component or connection using the procedures specified in §264.1034(b) of this subpart to demonstrate that it operates with no detectable 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 (l)(1)(ii)(A) of this section shall be monitored annually and at other times as requested by the Regional Administrator, except as provided for in paragraph (o) of this section, using the procedures specified in §264.1034(b) of this subpart to demonstrate that the components or connections operate with no detectable 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 (l)(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 §264.1035 of this subpart.

(2) Each closed-vent system that is used to comply with paragraph (k)(2) of this section 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 pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork or piping or loose connections.

(ii) The owner or operator shall perform an initial inspection of the closed-vent system on or before the date that the system becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year.

(iii) In the event that a defect or leak is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (l)(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 §264.1035 of this subpart.

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

(i) Detectable emissions, as indicated by visual inspection, or by an instrument reading greater than 500 ppmv above background, shall be controlled as soon as practicable, but not later than 15 calendar days after the emission is detected, except as provided for in paragraph (l)(3)(iii) of this section.

(ii) A first attempt at repair shall be made no later than 5 calendar days after the emission is detected.

(iii) Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.

(iv) The owner or operator shall maintain a record of the defect repair in accordance with the requirements specified in §264.1035 of this subpart.

(m) Closed-vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

(n) The owner or operator using a carbon adsorption system to control air pollutant emissions shall document that all carbon that is a hazardous waste and that is removed from the control device is managed in one of the following manners, regardless of the average volatile organic concentration of the carbon:

(1) Regenerated or reactivated in a thermal treatment unit that meets one of the following:

(i) The owner or operator of the unit has been issued a final permit under 40 CFR part 270 which implements the requirements of subpart X of this part; or

(ii) The unit is equipped with and operating air emission controls in accordance with the applicable requirements of subparts AA and CC of either this part or of 40 CFR part 265; or

(iii) The unit is equipped with and operating air emission controls in accordance with a national emission standard for hazardous air pollutants under 40 CFR part 61 or 40 CFR part 63.

(2) Incinerated in a hazardous waste incinerator for which the owner or operator either:

(i) Has been issued a final permit under 40 CFR part 270 which implements the requirements of subpart O of this part; or

(ii) Has designed and operates the incinerator in accordance with the interim status requirements of 40 CFR part 265, subpart O.

(3) Burned in a boiler or industrial furnace for which the owner or operator either:

(i) Has been issued a final permit under 40 CFR part 270 which implements the requirements of 40 CFR part 266, subpart H; or

(ii) Has designed and operates the boiler or industrial furnace in accordance with the interim status requirements of 40 CFR part 266, subpart H.

(o) Any components of a closed-vent system that are designated, as described in §264.1035(c)(9) of this subpart, as unsafe to monitor are exempt from the requirements of paragraph (l)(1)(ii)(B) of this section if:

(1) The owner or operator of the closed-vent system determines that the components of the closed-vent system are unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (l)(1)(ii)(B) of this section; and

(2) The owner or operator of the closed-vent system adheres to a written plan that requires monitoring the closed-vent system components using the procedure specified in paragraph (l)(1)(ii)(B) of this section as frequently as practicable during safe-to-monitor times.

9. Section 264.1034 is amended by revising paragraph (b) introductory text to read as follows:

§264.1034 Test methods and procedures

* * * * *

(b) When a closed-vent system is tested for compliance with no detectable emissions, as required in §264.1033(l) of this subpart, the test shall comply with the following requirements:

* * * * *

10. Section 264.1035 is amended by adding paragraphs (c)(9) and (c)(10) and revising paragraph (d) to read as follows:

§264.1035 Recordkeeping Requirements

* * * * *

(c) * * *

(9) An owner or operator designating any components of a closed-vent system as unsafe to monitor pursuant to §264.1033(o) of this subpart shall record in a log that is kept in the facility operating record the identification of closed-vent system components that are designated as unsafe to monitor in accordance with the requirements of §264.1033(o) of this subpart, an explanation for each closed-vent system component stating why the closed-vent system component is unsafe to monitor, and the plan for monitoring each closed-vent system component.

(10) When each leak is detected as specified in

§264.1033(l) of this subpart, the following information shall be recorded:

(i) The instrument identification number, the closed-vent system component identification number, and the operator name, initials, or identification number.

(ii) The date the leak was detected and the date of first attempt to repair the leak.

(iii) The date of successful repair of the leak.

(iv) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonrepairable.

(v) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(A) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

(B) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.

(d) Records of the monitoring, operating, and inspection information required by paragraphs (c)(3) through (c)(10) of this section shall be maintained by the owner or operator for at least 3 years following the date of each occurrence, measurement, maintenance, corrective action, or record.

* * * * *

Subpart BB-Air Emission Standards for Equipment Leaks

11. Section 264.1050 is amended by revising paragraph (b), adding paragraph (f) and removing the note at the end of the section to read as follows:

§264.1050 Applicability.

* * * * *

(b) Except as provided in §264.1064(k), this subpart applies to equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight that are managed in one of the following:

(1) A unit that is subject to the permitting requirements of 40 CFR part 270, or

(2) A unit (including a hazardous waste recycling unit) that is not exempt from permitting under the provisions of 40 CFR 262.34(a) (i.e., a hazardous waste recycling unit that is not a "90-day" tank or container) and that is located at a hazardous waste management facility otherwise subject to the permitting requirements of 40 CFR part 270, or

(3) A unit (including a hazardous waste recycling unit) that is exempt from permitting under the provisions of 40 CFR 262.34(a) (i.e., a "90-day" tank or container).

* * * * *

(f) Equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for a period of less than 300 hours per calendar year is excluded from the requirements of §§264.1052 through 264.1060 of this subpart if it is identified as required in §264.1064(g)(6) of this subpart.

12. Section 264.1055 is revised by replacing the entire section with the new section to read as follows:

§264.1055 Standards: Sampling connection systems.

(a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system. This system shall collect the sample purge for return to the process or for routing to the appropriate treatment system. Gases displaced during filling of the sample container are not required to be collected or captured.

(b) Each closed-purge, closed-loop, or closed-vent system as required in paragraph (a) of this section shall meet one of the following requirements:

(1) Return the purged process fluid directly to the process line;

(2) Collect and recycle the purged process fluid; or

(3) Be designed and operated to capture and transport all the purged process fluid to a waste management unit that complies with the applicable requirements of §264.1084 through §264.1086 of this subpart or a control device that

complies with the requirements of §264.1060 of this subpart.

(c) In-situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of this section.

13. Section 264.1058 is amended by adding paragraph (e) to read as follows:

§264.1058 Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors.

* * * * *

(e) Any connector that is inaccessible or is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined) is exempt from the monitoring requirements of paragraph (a) of this section and from the recordkeeping requirements of §264.1064 of this subpart.

14. Section 264.1064 is amended by adding paragraph (g)(6) to read as follows:

§264.1064 Recordkeeping requirements.

* * * * *

(g) * * *

(6) Identification, either by list or location (area or group) of equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for a period of less than 300 hours per year.

* * * * *

Subpart CC-Air Emission Standards for Tanks, Surface

Impoundments, and Containers

15. Section 264.1080 is amended by adding paragraphs (b)(7) and (b)(8) to read as follows:

§264.1080 Applicability.

* * * * *

(b) * * *

(7) A hazardous waste management unit that the owner or operator certifies is equipped with and operating air emission controls in accordance with the requirements of an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63. For the purpose of complying with this paragraph, a tank for which the air emission control includes an enclosure, as opposed to a cover, must be in compliance with the enclosure and control device requirements of §264.1084(i), except as provided in §264.1082(c)(5).

(8) A tank that has a process vent as defined in 40 CFR 264.1031.

16. Section 264.1082 is revised by replacing the entire section with the new section to read as follows:

§264.1082 Standards: General.

(a) This section applies to the management of hazardous waste in tanks, surface impoundments, and containers subject to this subpart.

(b) The owner or operator shall control air pollutant emissions from each waste management unit in accordance with standards specified in §264.1084 through §264.1087 of this subpart, as applicable to the waste management unit, except as provided for in paragraph (c) of this section.

(c) A tank, surface impoundment, or container is exempt from standards specified in §264.1084 through §264.1087 of this subpart, as applicable, provided that the waste management unit is one of the following:

(1) A tank, surface impoundment, or container for which all hazardous waste entering the unit has an average VO concentration at the point of waste origination of less than 500 parts per million by weight (ppmw). The average VO concentration shall be determined using the procedures specified in §264.1083(a) of this subpart. The owner or operator shall review and update, as necessary, this determination at least once every 12 months following the date of the initial determination for the hazardous waste streams entering the unit.

(2) A tank, surface impoundment, or container for which the organic content of all the hazardous waste entering the waste management unit has been reduced by an organic destruction or removal process that achieves any one of the following conditions:

(i) A process that removes or destroys the organics contained in the hazardous waste to a level such that the average VO concentration of the hazardous waste at the point of waste treatment is less than the exit concentration limit

(C_t) established for the process. The average VO concentration of the hazardous waste at the point of waste treatment and the exit concentration limit for the process shall be determined using the procedures specified in §264.1083(b) of this subpart.

(ii) A process that removes or destroys the organics contained in the hazardous waste to a level such that the organic reduction efficiency (R) for the process is equal to or greater than 95 percent, and the average VO concentration of the hazardous waste at the point of waste treatment is less than 100 ppmw. The organic reduction efficiency for the process and the average VO concentration of the hazardous waste at the point of waste treatment shall be determined using the procedures specified in §264.1083(b) of this subpart.

(iii) A process that removes or destroys the organics contained in the hazardous waste to a level such that the actual organic mass removal rate (MR) for the process is equal to or greater than the required organic mass removal rate (RMR) established for the process. The required organic mass removal rate and the actual organic mass removal rate for the process shall be determined using the procedures specified in §264.1083(b) of this subpart.

(iv) A biological process that destroys or degrades the organics contained in the hazardous waste, such that either of the following conditions is met:

(A) The organic reduction efficiency (R) for the process is equal to or greater than 95 percent, and the organic biodegradation efficiency (R_{bio}) for the process is equal to or greater than 95 percent. The organic reduction efficiency and the organic biodegradation efficiency for the process shall be determined using the procedures specified in §264.1083(b) of this subpart.

(B) The total actual organic mass biodegradation rate (MR_{bio}) for all hazardous waste treated by the process is equal to or greater than the required organic mass removal rate (RMR). The required organic mass removal rate and the actual organic mass biodegradation rate for the process shall be determined using the procedures specified in §264.1083(b) of this subpart.

(v) A process that removes or destroys the organics contained in the hazardous waste and meets all of the following conditions:

(A) From the point of waste origination through the point where the hazardous waste enters the treatment process, the hazardous waste is managed continuously in waste management units which use air emission controls in accordance with the standards specified in §264.1084 through §264.1087 of this subpart, as applicable to the waste management unit.

(B) From the point of waste origination through the point where the hazardous waste enters the treatment process, any transfer of the hazardous waste is accomplished through continuous hard-piping or other closed system transfer that does not allow exposure of the waste to the atmosphere. The EPA considers a drain system that meets the requirements of 40 CFR part 63, subpart RR - National Emission Standards for Individual Drain Systems to be a closed system.

(C) The average VO concentration of the hazardous waste at the point of waste treatment is less than the lowest average VO concentration at the point of waste origination determined for each of the individual waste streams entering the process or 500 ppmw, whichever value is lower. The average VO concentration of each individual waste stream at the point of waste origination shall be determined using the procedures specified in §264.1083(a) of this subpart. The average VO concentration of the hazardous waste at the point of waste treatment shall be determined using the procedures specified in §264.1083(b) of this subpart.

(vi) A process that removes or destroys the organics contained in the hazardous waste to a level such that the organic reduction efficiency (R) for the process is equal to or greater than 95 percent and the owner or operator certifies that the average VO concentration at the point of waste origination for each of the individual waste streams entering the process is less than 10,000 ppmw. The organic reduction efficiency for the process and the average VO concentration of the hazardous waste at the point of waste origination shall be determined using the procedures specified in §264.1083(b) and §264.1083(a) of this subpart, respectively.

(vii) A hazardous waste incinerator for which the owner or operator has either:

(A) Been issued a final permit under 40 CFR part 270 which implements the requirements of subpart O of this part; or

(B) Has designed and operates the incinerator in accordance with the interim status requirements of 40 CFR part 265, subpart O.

(viii) A boiler or industrial furnace for which the owner or operator has either:

(A) Been issued a final permit under 40 CFR part 270 which implements the requirements of 40 CFR part 266, subpart H, or

(B) Has designed and operates the boiler or industrial furnace in accordance with the interim status requirements of 40 CFR part 266, subpart H.

(ix) For the purpose of determining the performance of an organic destruction or removal process in accordance with the conditions in each of paragraphs (c)(2)(i) through (c)(2)(vi) of this section, the owner or operator shall account for VO concentrations determined to be below the limit of detection of the analytical method by using the following VO concentration:

(A) If Method 25D in 40 CFR part 60, appendix A is used for the analysis, one-half the blank value determined in the method.

(B) If any other analytical method is used, one-half the limit of detection established for the method.

(3) A tank used for biological treatment of hazardous waste in accordance with the requirements of paragraph (c)(2)(iv) of this section.

(4) A tank, surface impoundment, or container for which all hazardous waste placed in the unit either:

(i) Meets the numerical concentration limits for organic hazardous constituents, applicable to the hazardous waste, as specified in 40 CFR part 268 - Land Disposal Restrictions under Table "Treatment Standards for Hazardous Waste" in 40 CFR 268.40; or

(ii) Has been treated by the treatment technology established by EPA for the waste in 40 CFR 268.42(a), or treated by an equivalent method of treatment approved by EPA pursuant to 40 CFR 268.42(b).

(5) A tank used for bulk feed of hazardous waste to a waste incinerator and all of the following conditions are met:

(i) 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 RR - 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;

(ii) The enclosure and control device serving the tank were installed and began operation prior to [insert date of publication in Federal Register] and

(iii) 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 shall 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" annually.

(d) The Regional Administrator may at any time perform or request that the owner or operator perform a waste determination for a hazardous waste managed in a tank, surface impoundment, or container exempted from using air emission controls under the provisions of this section as follows:

(1) The waste determination for average VO concentration of a hazardous waste at the point of waste origination shall be performed using direct measurement in accordance with the applicable requirements of §264.1083(a) of this subpart. The waste determination for a hazardous waste at the point of waste treatment shall be performed in accordance with the applicable requirements of §264.1083(b) of this subpart.

(2) In performing a waste determination pursuant to paragraph (d)(1) of this section, the sample preparation and analysis shall be conducted as follows:

(i) In accordance with the method used by the owner or operator to perform the waste analysis, except in the case specified in paragraph (d)(2)(ii) of this section.

(ii) If the Regional Administrator determines that the method used by the owner or operator was not appropriate for the hazardous waste managed in the tank, surface impoundment, or container, then the Regional Administrator may choose an appropriate method.

(3) In a case when the owner or operator is requested to perform the waste determination, the Regional Administrator may elect to have an authorized representative observe the collection of the hazardous waste samples used for the analysis.

(4) In a case when the results of the waste determination performed or requested by the Regional

Administrator do not agree with the results of a waste determination performed by the owner or operator using knowledge of the waste, then the results of the waste determination performed in accordance with the requirements of paragraph (d)(1) of this section shall be used to establish compliance with the requirements of this subpart.

(5) In a case when the owner or operator has used an averaging period greater than 1 hour for determining the average VO concentration of a hazardous waste at the point of waste origination, the Regional Administrator may elect to establish compliance with this subpart by performing or requesting that the owner or operator perform a waste determination using direct measurement based on waste samples collected within a 1-hour period as follows:

(i) The average VO concentration of the hazardous waste at the point of waste origination shall be determined by direct measurement in accordance with the requirements of §264.1083(a) of this subpart.

(ii) Results of the waste determination performed or requested by the Regional Administrator showing that the average VO concentration of the hazardous waste at the point of waste origination is equal to or greater than 500 ppmw shall constitute noncompliance with this subpart except in a case as provided for in paragraph (d)(5)(iii) of this section.

(iii) For the case when the average VO concentration of the hazardous waste at the point of waste origination previously has been determined by the owner or operator using an averaging period greater than 1 hour to be less than 500 ppmw but because of normal operating process variations the VO concentration of the hazardous waste determined by direct measurement for any given 1-hour period may be equal to or greater than 500 ppmw, information that was used by the owner or operator to determine the average VO concentration of the hazardous waste (e.g., test results, measurements, calculations, and other documentation) and recorded in the facility records in accordance with the requirements of §264.1083(a) and §264.1089 of this subpart shall be considered by the Regional Administrator together with the results of the waste determination performed or requested by the Regional Administrator in establishing compliance with this subpart.

17. Section 264.1083 is revised by replacing the entire section with the new section to read as follows:

§264.1083 Waste determination procedures.

(a) Waste determination procedure to determine average volatile organic (VO) concentration of a hazardous waste at the point of waste origination.

(1) An owner or operator shall determine the average VO concentration at the point of waste origination for each hazardous waste placed in a waste management unit exempted under the provisions of §264.1082(c)(1) of this subpart from

using air emission controls in accordance with standards specified in §264.1084 through §264.1087 of this subpart, as applicable to the waste management unit.

(2) The average VO concentration of a hazardous waste at the point of waste origination may be determined in accordance with the procedures specified in 40 CFR 265.1084(a)(2) through (a)(4).

(b) Waste determination procedures for treated hazardous waste.

(1) An owner or operator shall perform the applicable waste determination for each treated hazardous waste placed in a waste management unit exempted under the provisions of §264.1082(c)(2) of this subpart from using air emission controls in accordance with standards specified in §264.1084 through §264.1087 of this subpart, as applicable to the waste management unit.

(2) The waste determination for a treated hazardous waste shall be performed in accordance with the procedures specified in 40 CFR 265.1084(b)(2) through (b)(9), as applicable to the treated hazardous waste.

(c) Procedure to determine the maximum organic vapor pressure of a hazardous waste in a tank.

(1) An owner or operator shall determine the maximum organic vapor pressure for each hazardous waste placed in a tank using Tank Level 1 controls in accordance with standards specified in §264.1084(c) of this subpart.

(2) The maximum organic vapor pressure of the hazardous waste may be determined in accordance with the procedures specified in 40 CFR 265.1084(c)(2) through (c)(4).

(d) The procedure for determining no detectable organic emissions for the purpose of complying with this subpart shall be conducted in accordance with the procedures specified in 40 CFR 265.1084(d).

18. Section 264.1084 is revised by replacing the entire section with the new section to read as follows:

§ 264.1084 Standards: Tanks

(a) The provisions of this section apply to the control of air pollutant emissions from tanks for which §264.1082(b) of this subpart references the use of this section for such air emission control.

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

(1) For a tank that manages hazardous waste that meets all of the conditions specified in paragraphs (b)(1)(i) through (b)(1)(iii) of this section, the owner or operator shall control air pollutant emissions from the tank in accordance with the Tank Level 1 controls specified in paragraph (c) of this section or the Tank Level 2 controls specified in paragraph (d) of this section.

(i) The hazardous waste in the tank has a maximum organic vapor pressure which is less than the maximum organic vapor pressure limit for the tank's design capacity category as follows:

(A) For a tank design capacity equal to or greater than 151 m^3, the maximum organic vapor pressure limit for the tank is 5.2 kPa.

(B) For a tank design capacity equal to or greater than 75 m^3 but less than 151 m^3, the maximum organic vapor pressure limit for the tank is 27.6 kPa.

(C) For a tank design capacity less than 75 m^3, the maximum organic vapor pressure limit for the tank is 76.6 kPa.

(ii) The hazardous waste in the tank is not heated by the owner or operator to a temperature that is greater than the temperature at which the maximum organic vapor pressure of the hazardous waste is determined for the purpose of complying with paragraph (b)(1)(i) of this section.

(iii) The hazardous waste in the tank is not treated by the owner or operator using a waste stabilization process, as defined in 40 CFR 265.1081.

(2) For a tank that manages hazardous waste that does not meet all of the conditions specified in paragraphs (b)(1)(i) through (b)(1)(iii) of this section, the owner or operator shall control air pollutant emissions from the tank by using Tank Level 2 controls in accordance with the requirements of paragraph (d) of this section.

Examples of tanks required to use Tank Level 2 controls include: a tank used for a waste stabilization process; and a tank for which the hazardous waste in the tank has a maximum organic vapor pressure that is equal to or greater than the maximum organic vapor pressure limit for the tank's design capacity category as specified in paragraph (b)(1)(i) of this section.

(c) Owners and operators controlling air pollutant emissions from a tank using Tank Level 1 controls shall meet the requirements specified in paragraphs (c)(1) through (c)(4) of this section:

(1) The owner or operator shall determine the maximum organic vapor pressure for a hazardous waste to be managed in the tank using Tank Level 1 controls before the first time the hazardous waste is placed in the tank. The maximum organic vapor pressure shall be determined using the procedures specified in §264.1083(c) of this subpart. Thereafter, the owner or operator shall perform a new determination whenever changes to the hazardous waste managed in the tank could potentially cause the maximum organic vapor pressure to increase to a level that is equal to or greater than the maximum organic vapor pressure limit for the tank design capacity category specified in paragraph (b)(1)(i) of this section, as applicable to the tank.

(2) The tank shall be equipped with a fixed roof

designed to meet the following specifications:

(i) The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the hazardous waste in the tank. The fixed roof may be a separate cover installed on the tank (e.g., a removable cover mounted on an open-top tank) or may be an integral part of the tank structural design (e.g., a horizontal cylindrical tank equipped with a hatch).

(ii) The fixed roof shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between roof section joints or between the interface of the roof edge and the tank wall.

(iii) Each opening in the fixed roof shall be either:

(A) Equipped with a closure device 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 opening and the closure device; or

(B) Connected by a closed-vent system that is vented to a control device. The control device shall remove or destroy organics in the vent stream, and it shall be operating whenever hazardous waste is managed in the tank.

(iv) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: organic vapor permeability, the effects of any contact with the hazardous waste or its vapors managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

(3) Whenever a hazardous waste is in the tank, the fixed roof shall be installed with each closure device secured in the closed position except as follows:

(i) Opening of closure devices or removal of the fixed roof is allowed at the following times:

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

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

(ii) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the tank internal pressure in accordance with the tank design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the tank internal pressure is within the internal pressure operating range determined by the owner or operator based on the tank manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the tank internal pressure exceeds the internal pressure operating range for the tank as a result of loading operations or diurnal ambient temperature fluctuations.

(iii) Opening of a safety device, as defined in 40 CFR 265.1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

(4) The owner or operator shall inspect the air emission control equipment in accordance with 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 pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(ii) The owner or operator shall perform an initial inspection of the fixed roof and its closure devices on or before the date that the tank becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year except under the special conditions provided for in paragraph (l) 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 (k) of this section.

(iv) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §264.1089(b) of this subpart.

(d) Owners and operators controlling air pollutant emissions from a tank using Tank Level 2 controls shall use one of the following tanks:

(1) A fixed-roof tank equipped with an internal floating roof in accordance with the requirements specified in paragraph (e) of this section;

(2) A tank equipped with an external floating roof in accordance with the requirements specified in paragraph (f) of this section;

(3) A tank vented through a closed-vent system to a control device in accordance with the requirements specified in paragraph (g) of this section;

(4) A pressure tank designed and operated in accordance with the requirements specified in paragraph (h) of this section; or

(5) 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.

(e) The owner or operator who controls air pollutant emissions from a tank using a fixed-roof with an internal floating roof shall meet the requirements specified in paragraphs (e)(1) through (e)(3) of this section.

(1) The tank shall be equipped with a fixed roof and an internal floating roof in accordance with the following requirements:

(i) The internal floating roof shall be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.

(ii) The internal floating roof shall be equipped with a continuous seal between the wall of the tank and the floating roof edge that meets either of the following requirements:

(A) A single continuous seal that is either a liquid-mounted seal or a metallic shoe seal, as defined in 40 CFR 265.1081; or

(B) Two continuous seals mounted one above the other. The lower seal may be a vapor-mounted seal.

(iii) The internal floating roof shall meet the following specifications:

(A) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

(B) Each opening in the internal floating roof shall be equipped with a gasketed cover or a gasketed lid except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains.

(C) Each penetration of the internal floating roof for the purpose of sampling shall have a slit fabric cover that covers at least 90 percent of the opening.

(D) Each automatic bleeder vent and rim space vent shall be gasketed.

(E) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

(F) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

(2) The owner or operator shall operate the tank in accordance with the following requirements:

(i) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be completed as soon as practical.

(ii) Automatic bleeder vents are to be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

(iii) Prior to filling the tank, each cover, access hatch, gauge float well or lid on any opening in the internal floating roof shall be bolted or fastened closed (i.e., no visible gaps). Rim space vents are to be set to open only when the internal floating roof is not floating or when the pressure beneath the rim exceeds the manufacturer's recommended setting.

(3) The owner or operator shall inspect the internal floating roof in accordance with the procedures specified as follows:

(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 pollutant 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 hazardous waste surface 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 in paragraph (e)(3)(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 12 months 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.

(iii) As an alternative to performing the inspections specified in paragraph (e)(3)(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.

(iv) Prior to each inspection required by paragraph (e)(3)(ii) or (e)(3)(iii) of this section, the owner or operator shall notify the Regional Administrator in advance of each inspection to provide the Regional Administrator with the opportunity to have an observer present during the inspection. The owner or operator shall notify the Regional Administrator of the date and location of the inspection as follows:

(A) Prior to each visual inspection of an internal floating roof in a tank that has been emptied and degassed, written notification shall be prepared and sent by the owner or operator so that it is received by the Regional Administrator at least 30 calendar days before refilling the tank except when an inspection is not planned as provided for in paragraph (e)(3)(iv)(B) of this section.

(B) When a visual inspection is not planned and the owner or operator could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator shall notify the Regional Administrator as soon as possible, but no later than 7 calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Regional Administrator at least 7 calendar days before refilling the tank.

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

(vi) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §264.1089(b) of this subpart.

(f) The owner or operator who controls air pollutant emissions from a tank using an external floating roof shall meet the requirements specified in paragraphs (f)(1) through (f)(3) of this section.

(1) The owner or operator shall design the external floating roof in accordance with the following requirements:

(i) The external floating roof shall be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.

(ii) The floating roof shall be equipped with two continuous seals, one above the other, between the wall of the tank and the roof edge. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

(A) The primary seal shall be a liquid-mounted seal or a metallic shoe seal, as defined in 40 CFR 265.1081. The total area of the gaps between the tank wall and the primary seal shall not exceed 212 square centimeters (cm^2) 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 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 above the liquid surface.

(B) The secondary seal shall be mounted above the primary seal and cover the annular space between the floating roof and the wall of the tank. The total area of the gaps between the tank wall and the secondary seal shall not exceed 21.2 square centimeters (cm^2) per meter of tank diameter, and the width of any portion of these gaps shall not exceed 1.3 centimeters (cm).

(iii) The external floating roof shall meet the following specifications:

(A) Except for automatic bleeder vents (vacuum breaker vents) and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface.

(B) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid.

(C) Each access hatch and each gauge float well shall be equipped with a cover designed to be bolted or fastened when the cover is secured in the closed position.

(D) Each automatic bleeder vent and each rim space vent shall be equipped with a gasket.

(E) Each roof drain that empties into the liquid managed in the tank shall be equipped with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

(F) Each unslotted and slotted guide pole well shall be equipped with a gasketed sliding cover or a flexible fabric sleeve seal.

(G) Each unslotted guide pole shall be equipped with a gasketed cap on the end of the pole.

(H) Each slotted guide pole shall be equipped with a gasketed float or other device which closes off the liquid surface from the atmosphere.

(I) Each gauge hatch and each sample well shall be equipped with a gasketed cover.

(2) The owner or operator shall operate the tank in accordance with the following requirements:

(i) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be completed as soon as practical.

(ii) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be secured and maintained in a closed position at all times except when the closure device must be open for access.

(iii) Covers on each access hatch and each gauge float well shall be bolted or fastened when secured in the closed position.

(iv) Automatic bleeder vents shall be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

(v) Rim space vents shall be set to open only at those times that the roof is being floated off the roof leg supports or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

(vi) The cap on the end of each unslotted guide pole shall be secured in the closed position at all times except when measuring the level or collecting samples of the liquid in the tank.

(vii) The cover on each gauge hatch or sample well shall be secured in the closed position at all times except when the hatch or well must be opened for access.

(viii) Both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the tank in a continuous fashion except during inspections.

(3) The owner or operator shall inspect the external floating roof in accordance with the procedures specified as follows:

(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 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every 5 years.

(B) The owner or operator shall perform measurements of gaps between the tank wall and the secondary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every year.

(C) If a tank ceases to hold hazardous waste for a period of 1 year or more, subsequent introduction of hazardous waste into the tank shall be considered an initial operation for the purposes of paragraphs (f)(3)(i)(A) and (f)(3)(i)(B) of this section.

(D) The owner or operator 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) 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 (f)(3) 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 perimeter of the tank. These total gap areas for the primary seal and secondary seal are then are compared to the respective standards for the seal type as specified in paragraph (f)(1)(ii) of this section.

(E) In the event that the seal gap measurements do not conform to the specifications in paragraph (f)(1)(ii) of this section, the owner or operator shall repair the defect in accordance with the requirements of paragraph (k) of this section.

(F) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §264.1089(b) 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 pollutant 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 an initial inspection of the external floating roof and its closure devices on or before the date that the tank becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in paragraph (l) of this section.

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

(D) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §264.1089(b) of this subpart.

(iii) Prior to each inspection required by paragraph (f)(3)(i) or (f)(3)(ii) of this subpart, the owner or operator shall notify the Regional Administrator in advance of each inspection to provide the Regional Administrator with the opportunity to have an observer present during the inspection. The owner or operator shall notify the Regional Administrator of the date and location of the inspection as follows:

(A) Prior to each inspection to measure external floating roof seal gaps as required under paragraph (f)(3)(i) of this section, written notification shall be prepared and sent by the owner or operator so that it is received by the Regional Administrator at least 30 calendar days before the date the measurements are scheduled to be performed.

(B) Prior to each visual inspection of an external floating roof in a tank that has been emptied and degassed, written notification shall be prepared and sent by the owner or operator so that it is received by the Regional Administrator at least 30 calendar days before refilling the tank except when an inspection is not planned as provided for in paragraph (f)(3)(iii)(C) of this section.

(C) When a visual inspection is not planned and the owner or operator could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator shall notify the Regional Administrator as soon as possible, but no later than 7 calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Regional Administrator at least 7 calendar days before refilling the tank.

(g) The owner or operator who controls air pollutant emissions from a tank by venting the tank to a control device shall meet the requirements specified in paragraphs (g)(1) through (g)(3) of this section.

(1) The tank shall be covered by a fixed roof and vented directly through a closed-vent system to a control device in accordance with the following requirements:

(i) The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the tank.

(ii) Each opening in the fixed roof not vented to the control device shall be equipped with a closure device. If the pressure in the vapor headspace underneath the fixed roof is less than atmospheric pressure when the control device is operating, the closure devices 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 cover opening and the closure device. If the pressure in the vapor headspace underneath the fixed roof is equal to or greater than atmospheric pressure when the control device is operating, the closure device shall be designed to operate with no detectable organic emissions.

(iii) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: organic vapor permeability, the effects of any contact with the liquid and its vapor managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

(iv) The closed-vent system and control device shall be designed and operated in accordance with the requirements of §264.1087 of this subpart.

(2) Whenever a hazardous waste is in the tank, the fixed roof shall be installed with each closure device secured in the closed position and the vapor headspace underneath the fixed roof vented to the control device except as follows:

(i) Venting to the control device is not required, and opening of closure devices or removal of the fixed roof is allowed at the following times:

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

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

(ii) Opening of a safety device, as defined in 40 CFR 265.1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

(3) The owner or operator shall inspect and monitor the air emission control equipment in accordance with the following procedures:

(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 pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(ii) The closed-vent system and control device shall be inspected and monitored by the owner or operator in accordance with the procedures specified in §264.1087 of this subpart.

(iii) The owner or operator shall perform an initial inspection of the air emission control equipment on or before the date that the tank becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in paragraph (l) of this section.

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

(v) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §264.1089(b) of this subpart.

(h) The owner or operator who controls air pollutant emissions by using a pressure tank shall meet the following requirements.

(1) The tank shall be designed not to vent to the atmosphere as a result of compression of the vapor headspace in the tank during filling of the tank to its design capacity.

(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

§264.1083(d) of this subpart.

(3) Whenever a hazardous waste is in the tank, the tank shall be operated as a closed system that does not vent to the atmosphere except in the event that a safety device, as defined in 40 CFR 265.1081, is required to open to avoid an unsafe condition.

(i) The owner or operator who controls air pollutant 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)(4) of this section.

(1) The tank shall be located inside an enclosure. The enclosure shall be 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 means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The owner or operator shall 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" initially when the enclosure is first installed and, thereafter, annually.

(2) The enclosure shall be vented through a closed-vent system to an enclosed combustion control device that is designed and operated in accordance with the standards for either a vapor incinerator, boiler, or process heater specified in §264.1087 of this subpart.

(3) Safety devices, as defined in 40 CFR 265.1081, may be installed and operated as necessary on any enclosure, closed-vent system, or control device used to comply with the requirements of paragraphs (i)(1) and (i)(2) of this section.

(4) The owner or operator shall inspect and monitor the closed-vent system and control device as specified in §264.1087 of this subpart.

(j) The owner or operator shall transfer hazardous waste to a tank subject to this section in accordance with the following requirements:

(1) Transfer of hazardous waste, except as provided in paragraph (j)(2) of this section, to the tank from another tank subject to this section or from a surface impoundment subject to §264.1085 of this subpart shall be conducted using continuous hard-piping or another closed system that does not allow exposure of the hazardous waste to the atmosphere. For the purpose of complying with this provision, an individual drain system is considered to be a closed system when it meets the requirements of 40 CFR part 63, subpart RR - National Emission Standards for

Individual Drain Systems.

(2) The requirements of paragraph (j)(1) do not apply when transferring a hazardous waste to the tank under any of the following conditions:

(i) The hazardous waste meets the average VO concentration conditions specified in §264.1082(c)(1) of this subpart at the point of waste origination.

(ii) The hazardous waste has been treated by an organic destruction or removal process to meet the requirements in §264.1082(c)(2) of this subpart.

(k) The owner or operator shall repair each defect detected during an inspection performed in accordance with the requirements of paragraphs (c)(4), (e)(3), (f)(3), or (g)(3) of this section as follows:

(1) 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 (k)(2) of this section.

(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 hazardous waste normally managed in the tank. In this case, the owner or operator shall repair the defect the next time the process or unit

that is generating the hazardous waste managed in the tank stops operation. Repair of the defect shall be completed before the process or unit resumes operation.

(l) Following the initial inspection and monitoring of the cover as required by the applicable provisions of this subpart, subsequent inspection and monitoring may be performed at intervals longer than 1 year under the following special conditions:

(1) In the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions, then the owner or operator may designate a cover as an "unsafe to inspect and monitor cover" and comply with all of the following requirements:

(i) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required.

(ii) Develop and implement a written plan and schedule to inspect and monitor the cover, using the procedures specified in the applicable section of this subpart, as frequently as practicable during those times when a worker can safely access the cover.

(2) In the case when a tank is buried partially or entirely underground, an owner or operator is required to inspect and monitor, as required by the applicable provisions of this section, only those portions of the tank cover and those connections to the tank (e.g., fill ports,

access hatches, gauge wells, etc.) that are located on or above the ground surface.

19. Section 264.1085 is revised by replacing the entire section with the new section to read as follows:

§264.1085 Standards: surface impoundments.

(a) The provisions of this section apply to the control of air pollutant emissions from surface impoundments for which §264.1082(b) of this subpart references the use of this section for such air emission control.

(b) The owner or operator shall control air pollutant emissions from the surface impoundment by installing and operating either of the following:

(1) A floating membrane cover in accordance with the provisions specified in paragraph (c) of this section; or

(2) A cover that is vented through a closed-vent system to a control device in accordance with the provisions specified in paragraph (d) of this sections.

(c) The owner or operator who controls air pollutant emissions from a surface impoundment using a floating membrane cover shall meet the requirements specified in paragraphs (c)(1) through (c)(3) of this section.

(1) The surface impoundment shall be equipped with a floating membrane cover designed to meet the following specifications:

(i) The floating membrane cover shall be designed to float on the liquid surface during normal operations and form a continuous barrier over the entire surface area of the liquid.

(ii) The cover shall be fabricated from a synthetic membrane material that is either:

(A) High density polyethylene (HDPE) with a thickness no less than 2.5 millimeters (mm); or

(B) A material or a composite of different materials determined to have both organic permeability properties that are equivalent to those of the material listed in paragraph (c)(1)(ii)(A) of this section and chemical and physical properties that maintain the material integrity for the intended service life of the material.

(iii) The cover shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between cover section seams or between the interface of the cover edge and its foundation mountings.

(iv) Except as provided for in paragraph (c)(1)(v) of this section, each opening in the floating membrane cover shall be equipped with a closure device 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 cover opening and the closure device.

(v) The floating membrane cover may be equipped with one or more emergency cover drains for removal of stormwater. Each emergency cover drain shall be equipped with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening or a flexible fabric sleeve seal.

(vi) The closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the closure devices throughout their intended service life. Factors to be considered when selecting the materials of construction and designing the cover and closure devices shall include: organic vapor permeability; the effects of any contact with the liquid and its vapor managed in the surface impoundment; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the surface impoundment on which the floating membrane cover is installed.

(2) Whenever a hazardous waste is in the surface impoundment, the floating membrane cover shall float on the liquid and each closure device shall be secured in the closed position except as follows:

(i) Opening of closure devices or removal of the cover is allowed at the following times:

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

(B) To remove accumulated sludge or other residues from the bottom of surface impoundment.

(ii) Opening of a safety device, as defined in 40 CFR 265.1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

(3) The owner or operator shall inspect the floating membrane cover in accordance with the following procedures:

(i) The floating membrane cover and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover section seams or between the interface of the cover edge and its foundation mountings; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(ii) The owner or operator shall perform an initial inspection of the floating membrane cover and its closure devices on or before the date that the surface impoundment becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in paragraph (g) 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 (f) of this section.

(iv) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §264.1089(c) of this subpart.

(d) The owner or operator who controls air pollutant emissions from a surface impoundment using a cover vented to a control device shall meet the requirements specified in paragraphs (d)(1) through (d)(3) of this section.

(1) The surface impoundment shall be covered by a cover and vented directly through a closed-vent system to a control device in accordance with the following requirements:

(i) The cover and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the surface impoundment.

(ii) Each opening in the cover not vented to the control device shall be equipped with a closure device. If the pressure in the vapor headspace underneath the cover is less than atmospheric pressure when the control device is operating, the closure devices 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 cover opening and the closure device. If the pressure in the vapor headspace underneath the cover is equal to or greater than atmospheric pressure when the control device is operating, the closure device shall be designed to operate with no detectable organic emissions using the procedure specified in §264.1083(d) of this subpart.

(iii) The cover and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the cover and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the cover and closure devices shall include: organic vapor permeability; the effects of any contact with the liquid or its vapors managed in the surface impoundment; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the surface impoundment on which the cover is installed.

(iv) The closed-vent system and control device shall be designed and operated in accordance with the requirements of §264.1087 of this subpart.

(2) Whenever a hazardous waste is in the surface impoundment, the cover shall be installed with each closure device secured in the closed position and the vapor headspace underneath the cover vented to the control device

except as follows:

(i) Venting to the control device is not required, and opening of closure devices or removal of the cover is allowed at the following times:

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

(B) To remove accumulated sludge or other residues from the bottom of surface impoundment.

(ii) Opening of a safety device, as defined in 40 CFR 265.1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

(3) The owner or operator shall inspect and monitor the air emission control equipment in accordance with the following procedures:

(i) The surface impoundment cover and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover section seams or between the interface of the cover edge and its foundation mountings; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(ii) The closed-vent system and control device shall be inspected and monitored by the owner or operator in accordance with the procedures specified in §264.1087 of this subpart.

(iii) The owner or operator shall perform an initial inspection of the air emission control equipment on or before the date that the surface impoundment becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in paragraph (g) of this section.

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

(v) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §264.1089(c) of this subpart.

(e) The owner or operator shall transfer hazardous waste to a surface impoundment subject to this section in accordance with the following requirements:

(1) Transfer of hazardous waste, except as provided in

paragraph (e)(2) of this section, to the surface impoundment from another surface impoundment subject to this section or from a tank subject to §264.1084 of this subpart shall be conducted using continuous hard-piping or another closed system that does not allow exposure of the waste to the atmosphere. For the purpose of complying with this provision, an individual drain system is considered to be a closed system when it meets the requirements of 40 CFR part 63, subpart RR - National Emission Standards for Individual Drain Systems.

(2) The requirements of paragraph (e)(1) of this section do not apply when transferring a hazardous waste to the surface impoundment under either of the following conditions:

(i) The hazardous waste meets the average VO concentration conditions specified in §264.1082(c)(1) of this subpart at the point of waste origination.

(ii) The hazardous waste has been treated by an organic destruction or removal process to meet the requirements in §264.1082(c)(2) of this subpart.

(f) The owner or operator shall repair each defect detected during an inspection performed in accordance with the requirements of paragraph (c)(3) or (d)(3) of this section as follows:

(1) 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 (f)(2) of this section.

(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 surface impoundment and no alternative capacity is available at the site to accept the hazardous waste normally managed in the surface impoundment. In this case, the owner or operator shall repair the defect the next time the process or unit that is generating the hazardous waste managed in the surface impoundment stops operation. Repair of the defect shall be completed before the process or unit resumes operation.

(g) Following the initial inspection and monitoring of the cover as required by the applicable provisions of this subpart, subsequent inspection and monitoring may be performed at intervals longer than 1 year in the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions. In this case, the owner or operator may designate the cover as an "unsafe to inspect and monitor cover" and comply with all of the following requirements:

(1) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required.

(2) Develop and implement a written plan and schedule to inspect and monitor the cover using the procedures specified in the applicable section of this subpart as frequently as practicable during those times when a worker can safely access the cover.

20. Section 264.1086 is revised by replacing the entire section with the new section to read as follows:

§ 264.1086 Standards: Containers

(a) The provisions of this section apply to the control of air pollutant emissions from containers for which §264.1082(b) of this subpart references the use of this section for such air emission control.

(b) General requirements.

(1) The owner or operator shall control air pollutant 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 (b)(2) of this section apply to the container.

(i) For a container having a design capacity greater than 0.1 m^3 and less than or equal to 0.46 m^3, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in paragraph (c) of this section.

(ii) For a container having a design capacity greater than 0.46 m^3 that is not in light material service, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in paragraph (c) of this section.

(iii) For a container having a design capacity greater than 0.46 m^3 that is in light material service, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 2 standards specified in paragraph (d) of this section.

(2) When a container having a design capacity greater than 0.1 m^3 is used for treatment of a hazardous waste by a waste stabilization process, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 3 standards specified in paragraph (e) of this section at those times during the waste stabilization process when the hazardous waste in the container is exposed to the atmosphere.

(c) Container Level 1 standards.

(1) A container using Container Level 1 controls is one of the following:

(i) A container that meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as specified in paragraph (f) of this section.

(ii) A container equipped with a cover and closure devices that form a continuous barrier over the container openings such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps, or other open spaces into the interior of the container. The cover may be a separate cover installed on the container (e.g., a lid on a drum or a suitably secured tarp on a roll-off box) or may be an integral part of the container structural design (e.g., a "portable tank" or bulk cargo container equipped with a screw-type cap).

(iii) An open-top container in which an organic-vapor suppressing barrier is placed on or over the hazardous waste in the container such that no hazardous waste is exposed to the atmosphere. One example of such a barrier is application of a suitable organic-vapor suppressing foam.

(2) A container used to meet the requirements of paragraph (c)(1)(ii) or (c)(1)(iii) of this section shall be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the hazardous waste to the atmosphere and to maintain the equipment integrity for as long as it is in service. Factors to be considered in selecting the materials of construction and designing the cover and closure devices shall include: organic vapor permeability, the effects of contact with the hazardous waste or its vapor managed in the container; the effects of outdoor exposure of the closure device or cover material to wind, moisture, and sunlight; and the operating practices for which the container is intended to be used.

(3) Whenever a hazardous waste is in a container using Container Level 1 controls, the owner or operator shall install all covers and closure devices for the container, as applicable to the container, and secure and maintain each closure device in the closed position except as follows:

(i) Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container as follows:

(A) In the case when the container is filled to the intended final level in one continuous operation, the owner or operator shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

(B) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

(ii) Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:

(A) For the purpose of meeting the requirements of this section, an empty container as defined in 40 CFR 261.7(b) may be open to the atmosphere at any time (i.e., covers and closure devices are not required to be secured in the closed position on an empty container).

(B) In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in 40 CFR 261.7(b), the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

(iii) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

(iv) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the owner or operator based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.

(v) Opening of a safety device, as defined in 40 CFR

265.1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

(4) The owner or operator of containers using Container Level 1 controls shall inspect the containers and their covers and closure devices as follows:

(i) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied (i.e., does not meet the conditions for an empty container as specified in 40 CFR 261.7(b)) within 24 hours after the container is accepted at the facility, the owner or operator shall visually inspect the container and its cover and closure devices 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 (c)(4)(iii) of this section.

(ii) In the case when a container used for managing hazardous waste remains at the facility for a period of 1 year or more, the owner or operator shall visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, 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 (c)(4)(iii) of this section.

(iii) When a defect is detected for the container, cover, or closure devices, the owner or operator shall make first efforts at repair of the defect no later than 24 hours after detection and repair shall 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 hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired.

(5) The owner or operator shall maintain at the facility a copy of the procedure used to determine that containers with capacity of 0.46 m^3 or greater, which do not meet applicable DOT regulations as specified in paragraph (f) of this section, are not managing hazardous waste in light material service.

(d) Container Level 2 standards.

(1) A container using Container Level 2 controls is one of the following:

(i) A container that meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as specified in paragraph (f) of this section.

(ii) A container that operates with no detectable organic emissions as defined in 40 CFR 265.1081 and determined in accordance with the procedure specified in paragraph (g) of this section.

(iii) A container that has been demonstrated within the preceding 12 months to be vapor-tight by using 40 CFR part 60, appendix A, Method 27 in accordance the procedure specified in paragraph (h) of this section.

(2) Transfer of hazardous waste in or out of a container using Container Level 2 controls shall be conducted in such a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that the EPA considers to meet the requirements of this paragraph include using any one of the following: a submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the hazardous waste is filled and subsequently purging the transfer line before removing it from the container opening.

(3) Whenever a hazardous waste is in a container using

Container Level 2 controls, the owner or operator shall install all covers and closure devices for the container, and secure and maintain each closure device in the closed position except as follows:

(i) Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container as follows:

(A) In the case when the container is filled to the intended final level in one continuous operation, the owner or operator shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

(B) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

(ii) Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:

(A) For the purpose of meeting the requirements of this section, an empty container as defined in 40 CFR 261.7(b) may be open to the atmosphere at any time (i.e., covers and closure devices are not required to be secured in the closed position on an empty container).

(B) In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in 40 CFR 261.7(b), the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

(iii) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

(iv) Opening of a spring-loaded, pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emission when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the owner or operator based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.

(v) Opening of a safety device, as defined in 40 CFR 265.1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

(4) The owner or operator of containers using Container Level 2 controls shall inspect the containers and their covers and closure devices as follows:

(i) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied (i.e., does not meet the conditions for an empty container as specified in 40 CFR 261.7(b)) within 24 hours after the container arrives at the facility, the owner or operator shall visually inspect the container and its cover and closure devices 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 (d)(4)(iii) of this section.

(ii) In the case when a container used for managing hazardous waste remains at the facility for a period of 1 year or more, the owner or operator shall visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, 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 (d)(4)(iii) of this section.

(iii) When a defect is detected for the container, cover, or closure devices, the owner or operator shall make first efforts at repair of the defect no later than 24 hours after detection, and repair shall 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 hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired.

(e) Container Level 3 standards.

(1) A container using Container Level 3 controls is one of the following:

(i) A container that is vented directly through a closed-vent system to a control device in accordance with the requirements of paragraph (e)(2)(ii) of this section.

(ii) A container that is vented inside an enclosure which is exhausted through a closed-vent system to a control device in accordance with the requirements of paragraphs (e)(2)(i) and (e)(2)(ii) of this section.

(2) The owner or operator shall meet the following requirements, as applicable to the type of air emission control equipment selected by the owner or operator:

(i) The container enclosure shall be 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 containers through the enclosure by conveyor or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The owner or operator shall 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" initially when the enclosure is first installed and, thereafter, annually.

(ii) The closed-vent system and control device shall be designed and operated in accordance with the requirements of §264.1087 of this subpart.

(3) Safety devices, as defined in 40 CFR 265.1081, may be installed and operated as necessary on any container, enclosure, closed-vent system, or control device used to comply with the requirements of paragraph(e)(1) of this section.

(4) Owners and operators using Container Level 3 controls in accordance with the provisions of this subpart shall inspect and monitor the closed-vent systems and control devices as specified in §264.1087 of this subpart.

(5) Owners and operators that use Container Level 3

controls in accordance with the provisions of this subpart shall prepare and maintain the records specified in §264.1089(d) of this subpart.

(f) For the purpose of compliance with paragraph (c)(1)(i) or (d)(1)(i) of this section, containers shall be used that meet the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as follows:

(1) The container meets the applicable requirements specified in 49 CFR part 178 - Specifications for Packaging or 49 CFR part 179 - Specifications for Tank Cars.

(2) Hazardous waste is managed in the container in accordance with the applicable requirements specified in 49 CFR part 107, subpart B - Exemptions; 49 CFR part 172 - Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements; 49 CFR part 173 - Shippers - General Requirements for Shipments and Packages; and 49 CFR part 180 - Continuing Qualification and Maintenance of Packagings.

(3) For the purpose of complying with this subpart, no exceptions to the 49 CFR part 178 or part 179 regulations are allowed except as provided for in paragraph (f)(4) of this section.

(4) For a lab pack that is managed in accordance with the requirements of 49 CFR part 178 for the purpose of

complying with this subpart, an owner or operator may comply with the exceptions for combination packagings specified in 49 CFR 173.12(b).

(g) The owner or operator shall use the procedure specified in §264.1083(d) of this subpart for determining a container operates with no detectable organic emissions for the purpose of complying with paragraph (d)(1)(ii) of this section.

(1) Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the container, its cover, and associated closure devices, as applicable to the container, shall be checked. Potential leak interfaces that are associated with containers include, but are not limited to: the interface of the cover rim and the container wall; the periphery of any opening on the container or container 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 container is filled with a material having a volatile organic concentration representative of the range of volatile organic concentrations for the hazardous wastes expected to be managed in this type of container. During the test, the container cover and closure devices shall be secured in the closed position.

(h) Procedure for determining a container to be vapor-tight using Method 27 of 40 CFR part 60, appendix A for the purpose of complying with paragraph (d)(1)(iii) of this section.

(1) The test shall be performed in accordance with Method 27 of 40 CFR part 60, appendix A of this chapter.

(2) A pressure measurement device shall be used that has a precision of ± 2.5 mm water and that is capable of measuring above the pressure at which the container is to be tested for vapor tightness.

(3) If the test results determined by Method 27 indicate that the container sustains a pressure change less than or equal to 750 Pascals within 5 minutes after it is pressurized to a minimum of 4,500 Pascals, then the container is determined to be vapor-tight.

21. Section 264.1087 is amended by revising paragraph (b)(3), adding paragraph (b)(4), revising paragraphs (c)(2), (c)(3)(ii), and (c)(5)(i)(D)-(E), and adding paragraph (c)(7) to read as follows:

§264.1087 Standards: Closed-vent systems and control devices.

* * * * *

(b) * * *

(3) In the case when the closed-vent system includes bypass devices that could be used to divert the gas or vapor stream to the atmosphere before entering the control device, each bypass device shall be equipped with either a flow

indicator as specified in paragraph (b)(3)(i) of this section or a seal or locking device as specified in paragraph (b)(3)(ii) of this section. For the purpose of complying with this paragraph, low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, spring-loaded pressure relief valves, and other fittings used for safety purposes are not considered to be bypass devices.

(i) If a flow indicator is used to comply with paragraph (b)(3) of this section, the indicator shall be installed at the inlet to the bypass line used to divert gases and vapors from the closed-vent system to the atmosphere at a point upstream of the control device inlet. For this paragraph, a flow indicator means a device which indicates the presence of either gas or vapor flow in the bypass line.

(ii) If a seal or locking device is used to comply with paragraph (b)(3) of this section, the device shall 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 closed position such that the bypass device cannot be opened without breaking the seal or removing the lock. Examples of such devices include, but are not limited to, a car-seal or a lock-and-key configuration valve. The owner or operator shall visually inspect the seal or closure mechanism at least once every month to verify that the bypass mechanism is maintained in the closed position.

(4) The closed-vent system shall be inspected and monitored by the owner or operator in accordance with the procedure specified in §264.1033(l).

(c) * * *

(2) The owner or operator who elects to use a closed-vent system and control device to comply with the requirements of this section shall comply with the requirements specified in paragraphs (c)(2)(i) through (c)(2)(vi) of this section.

(i) Periods of planned routine maintenance of the control device, during which the control device does not meet the specifications of paragraphs (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this section, as applicable, shall not exceed 240 hours per year.

(ii) The specifications and requirements in paragraphs (c)(1)(i), (c)(1)(ii), and (c)(1)(iii) of this section for control devices do not apply during periods of planned routine maintenance.

(iii) The specifications and requirements in paragraphs (c)(1)(i), (c)(1)(ii), and (c)(1)(iii) of this section for control devices do not apply during a control device system malfunction.

(iv) The owner or operator shall demonstrate compliance with the requirements of paragraph (c)(2)(i) of this section (i.e., planned routine maintenance of a control device, during which the control device does not meet the specifications of paragraphs (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this section, as applicable, shall not exceed 240 hours per year) by recording the information specified in §264.1089(e)(1)(v) of this subpart.

(v) The owner or operator shall correct control device system malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of air pollutants.

(vi) The owner or operator shall operate the closed-vent system such that gases, vapors, or fumes are not actively vented to the control device during periods of planned maintenance or control device system malfunction (i.e., periods when the control device is not operating or not operating normally) except in cases when it is necessary to vent the gases, vapors, and/or fumes to avoid an unsafe condition or to implement malfunction corrective actions or planned maintenance actions.

* * * * *

(3) * * *

(i) * * *

(ii) All carbon removed from the control device shall be managed in accordance with the requirements of 40 CFR 264.1033(n).

* * * * *

(5) * * *

(i) * * *

(D) A boiler or industrial furnace burning hazardous waste for which the owner or operator has been issued a final permit under 40 CFR part 270 and has designed and operates the unit in accordance with the requirements of 40 CFR part 266, subpart H; or

(E) A boiler or industrial furnace burning hazardous waste for which the owner or operator has designed and operates in accordance with the interim status requirements of 40 CFR part 266, subpart H.

* * * * *

(7) The control device shall be inspected and monitored by the owner or operator in accordance with the procedures specified in 40 CFR 264.1033(f)(2) and 40 CFR 264.1033(l). The readings from each monitoring device required by 40 CFR 264.1033(f)(2) shall be inspected at least once each operating day to check control device operation. Any necessary corrective measures shall be immediately implemented to ensure the control device is operated in compliance with the requirements of this section.

22. Section 264.1088 is revised by replacing the entire section with the new section to read as follows:

§264.1088 Inspection and monitoring requirements.

(a) The owner or operator shall inspect and monitor air emission control equipment used to comply with this subpart in accordance with the applicable requirements specified in

§264.1084 through §264.1087 of this subpart.

(b) The owner or operator shall develop and implement a written plan and schedule to perform the inspections and monitoring required by paragraph (a) of this section. The owner or operator shall incorporate this plan and schedule into the facility inspection plan required under 40 CFR 264.15.

23. Section 264.1089 is revised by replacing the entire section with the new section to read as follows:

§ 264.1089 Recordkeeping requirements.

(a) Each owner or operator of a facility subject to requirements in this subpart shall record and maintain the information specified in paragraphs (b) through (i) of this section, as applicable to the facility. Except for air emission control equipment design documentation and information required by paragraph (i) of this section, records required by this section shall be maintained in the operating record for a minimum of 3 years. Air emission control equipment design documentation shall be maintained in the operating record until the air emission control equipment is replaced or otherwise no longer in service. Information required by paragraph (i) of this section shall be maintained in the operating record for as long as the tank or container is not using air emission controls specified in §§264.1084 through 264.1087 of this subpart in accordance with the conditions specified in §264.1084(d) of this subpart.

(b) The owner or operator of a tank using air emission controls in accordance with the requirements of §264.1084 of this subpart shall prepare and maintain records for the tank that include the following information:

(1) For each tank using air emission controls in accordance with the requirements of §264.1084 of this subpart, the owner or operator shall record:

(i) A tank identification number (or other unique identification description as selected by the owner or operator).

(ii) A record for each inspection required by §264.1084 of this subpart that includes the following information:

(A) Date inspection was conducted.

(B) For each defect detected during the inspection, the following information: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of §264.1084 of this subpart, the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.

(2) In addition to the information required by paragraph (b)(1) of this section, the owner or operator shall record the following information, as applicable to the tank:

(i) The owner or operator using a fixed roof to comply with the Tank Level 1 control requirements specified in §264.1084(c) of this subpart shall prepare and maintain records for each determination for the maximum organic vapor pressure of the hazardous waste in the tank performed in accordance with the requirements of §264.1084(c) of this subpart. The records shall include the date and time the samples were collected, the analysis method used, and the analysis results.

(ii) The owner or operator using an internal floating roof to comply with the Tank Level 2 control requirements specified in §264.1084(e) of this subpart shall prepare and maintain documentation describing the floating roof design.

(iii) Owners and operators using an external floating roof to comply with the Tank Level 2 control requirements specified in §264.1084(f) of this subpart shall prepare and maintain the following records:

(A) Documentation describing the floating roof design and the dimensions of the tank.

(B) Records for each seal gap inspection required by §264.1084(f)(3) of this subpart describing the results of the seal gap measurements. The records shall include the date that the measurements were performed, the raw data obtained for the measurements, and the calculations of the total gap surface area. In the event that the seal gap measurements do not conform to the specifications in

§264.1084(f)(1) of this subpart, the records shall include a description of the repairs that were made, the date the repairs were made, and the date the tank was emptied, if necessary.

(iv) Each owner or operator using an enclosure to comply with the Tank Level 2 control requirements specified in §264.1084(i) of this subpart shall prepare and maintain the following records:

(A) Records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of 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.

(B) Records required for the closed-vent system and control device in accordance with the requirements of paragraph (e) of this section.

(c) The owner or operator of a surface impoundment using air emission controls in accordance with the requirements of §264.1085 of this subpart shall prepare and maintain records for the surface impoundment that include the following information:

(1) A surface impoundment identification number (or other unique identification description as selected by the owner or operator).

(2) Documentation describing the floating membrane

cover or cover design, as applicable to the surface impoundment, that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the specifications listed in §264.1085(c) of this subpart.

(3) A record for each inspection required by §264.1085 of this subpart that includes the following information:

(A) Date inspection was conducted.

(B) For each defect detected during the inspection the following information: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of §264.1085(f) of this subpart, the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.

(4) For a surface impoundment equipped with a cover and vented through a closed-vent system to a control device, the owner or operator shall prepare and maintain the records specified in paragraph (e) of this section.

(d) The owner or operator of containers using Container Level 3 air emission controls in accordance with the requirements of §264.1086 of this subpart shall prepare and maintain records that include the following information:

(1) Records for the most recent set of calculations and

measurements performed by the owner or operator to verify that the enclosure meets the criteria of 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.

(2) Records required for the closed-vent system and control device in accordance with the requirements of paragraph (e) of this section.

(e) The owner or operator using a closed-vent system and control device in accordance with the requirements of §264.1087 of this subpart shall prepare and maintain records that include the following information:

(1) Documentation for the closed-vent system and control device that includes:

(i) Certification that is signed and dated by the owner or operator stating that the control device is designed to operate at the performance level documented by a design analysis as specified in paragraph (e)(1)(ii) of this section or by performance tests as specified in paragraph (e)(1)(iii) of this section when the tank, surface impoundment, or container is or would be operating at capacity or the highest level reasonably expected to occur.

(ii) If a design analysis is used, then design documentation as specified in 40 CFR 264.1035(b)(4). The documentation shall include information prepared by the owner or operator or provided by the control device manufacturer or vendor that describes the control device design in accordance with 40 CFR 264.1035(b)(4)(iii) and certification by the owner or operator that the control equipment meets the applicable specifications.

(iii) If performance tests are used, then a performance test plan as specified in 40 CFR 264.1035(b)(3) and all test results.

(iv) Information as required by 40 CFR 264.1035(c)(1) and 40 CFR 264.1035(c)(2), as applicable.

(v) An owner or operator shall record, on a semiannual basis, the information specified in paragraphs (e)(1)(v)(A) and (e)(1)(v)(B) of this section for those planned routine maintenance operations that would require the control device not to meet the requirements of §264.1087(c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this subpart, as applicable.

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

(B) A description of the planned routine maintenance that was performed for the control device during the previous 6-month period. This description shall include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of §264.1087(c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this subpart, as applicable, due to planned routine maintenance.

(vi) An owner or operator shall record the information specified in paragraphs (e)(1)(vi)(A) through (e)(1)(vi)(C) of this section for those unexpected control device system malfunctions that would require the control device not to meet the requirements of §264.1087(c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this subpart, as applicable.

(A) The occurrence and duration of each malfunction of the control device system.

(B) The duration of each period during a malfunction when gases, vapors, or fumes are vented from the waste management unit through the closed-vent system to the control device while the control device is not properly functioning.

(C) Actions taken during periods of malfunction to restore a malfunctioning control device to its normal or usual manner of operation.

(vii) Records of the management of carbon removed from a carbon adsorption system conducted in accordance with §264.1087(c)(3)(ii) of this subpart.

(f) The owner or operator of a tank, surface impoundment, or container exempted from standards in accordance with the provisions of §264.1082(c) of this subpart shall prepare and maintain the following records, as applicable:

(1) For tanks, surface impoundments, or containers exempted under the hazardous waste organic concentration conditions specified in §264.1082(c)(1) or (c)(2) of this subpart, the owner or operator shall record the information used for each waste determination (e.g., test results, measurements, calculations, and other documentation) in the facility operating log. If analysis results for waste samples are used for the waste determination, then the owner or operator shall record the date, time, and location that each waste sample is collected in accordance with applicable requirements of §264.1083 of this subpart.

(2) For tanks, surface impoundments, or containers exempted under the provisions of §264.1082(c)(2)(vii) or §264.1082(c)(2)(viii) of this subpart, the owner or operator shall record the identification number for the incinerator, boiler, or industrial furnace in which the hazardous waste is treated.

(g) An owner or operator designating a cover as "unsafe to inspect and monitor" pursuant to §264.1084(l) or §264.1085(g) of this subpart shall record in a log that is kept in the facility operating record the following information: the identification numbers for waste management units with covers that are designated as "unsafe to inspect and monitor," the explanation for each cover stating why the cover is unsafe to inspect and monitor, and the plan and schedule for inspecting and monitoring each cover.

(h) The owner or operator of a facility that is subject to this subpart and to the control device standards in 40 CFR part 60, subpart VV, or 40 CFR part 61, subpart V, may elect to demonstrate compliance with the applicable sections of this subpart by documentation either pursuant to this subpart, or pursuant to the provisions of 40 CFR part 60, subpart VV or 40 CFR part 61, subpart V, to the extent that the documentation required by 40 CFR parts 60 or 61 duplicates the documentation required by this section.

(i) For each tank or container not using air emission controls specified in §§264.1084 through 264.1087 of this subpart in accordance with the conditions specified in §264.1080(d) of this subpart, the owner or operator shall record and maintain the following information:

(1) A list of the individual organic peroxide compounds manufactured at the facility that meet the conditions specified in §264.1080(d)(1).

(2) A description of how the hazardous waste containing the organic peroxide compounds identified in paragraph (i)(1) of this section are managed at the facility in tanks and containers. This description shall include:

(i) For the tanks used at the facility to manage this hazardous waste, sufficient information shall be provided to describe for each tank: a facility identification number for the tank; the purpose and placement of this tank in the management train of this hazardous waste; and the procedures used to ultimately dispose of the hazardous waste managed in the tanks.

(ii) For containers used at the facility to manage these hazardous wastes, sufficient information shall be provided to describe: a facility identification number for the container or group of containers; the purpose and placement of this container, or group of containers, in the management train of this hazardous waste; and the procedures used to ultimately dispose of the hazardous waste handled in the containers.

(3) An explanation of why managing the hazardous waste containing the organic peroxide compounds identified in paragraph (i)(1) of this section in the tanks and containers as described in paragraph (i)(2) of this section would create an undue safety hazard if the air emission controls, as required under §§264.1084 through 264.1087 of this subpart, are installed and operated on these waste management units. This explanation shall include the following information:

(i) For tanks used at the facility to manage these hazardous wastes, sufficient information shall be provided to explain: how use of the required air emission controls on the tanks would affect the tank design features and facility operating procedures currently used to prevent an undue safety hazard during the management of this hazardous waste in the tanks; and why installation of safety devices on the required air emission controls, as allowed under this subpart, will not address those situations in which evacuation of tanks equipped with these air emission controls is necessary and consistent with good engineering and safety practices for handling organic peroxides.

(ii) For containers used at the facility to manage these hazardous wastes, sufficient information shall be provided to explain: how use of the required air emission controls on the containers would affect the container design features and handling procedures currently used to prevent an undue safety hazard during the management of this hazardous waste in the containers; and why installation of safety devices on the required air emission controls, as allowed under this subpart, will not address those situations in which evacuation of containers equipped with these air emission controls is necessary and consistent with good engineering and safety practices for handling organic peroxides.

24. Section 264.1090 is amended by revising paragraphs (a) and (b) to read as follows:

§264.1090 Reporting requirements.

(a) Each owner or operator managing hazardous waste in a tank, surface impoundment, or container exempted from using air emission controls under the provisions of §264.1082(c) of this subpart shall report to the Regional

Administrator each occurrence when hazardous waste is placed in the waste management unit in noncompliance with the conditions specified in §264.1082(c)(1) or (c)(2) of this subpart, as applicable. Examples of such occurrences include placing in the waste management unit a hazardous waste having an average VO concentration equal to or greater than 500 ppmw at the point of waste origination; or placing in the waste management unit a treated hazardous waste of which the organic content has been reduced by an organic destruction or removal process that fails to achieve the applicable conditions specified in §264.1082(c)(2)(i) through (c)(2)(vi) of this subpart. The owner or operator shall submit a written report within 15 calendar days of the time that the owner or operator becomes aware of the occurrence. The written report shall contain the EPA identification number, facility name and address, a description of the noncompliance event and the cause, the dates of the noncompliance, and the actions taken to correct the noncompliance and prevent recurrence of the noncompliance. The report shall be signed and dated by an authorized representative of the owner or operator.

(b) Each owner or operator using air emission controls on a tank in accordance with the requirements §264.1084(c) of this subpart shall report to the Regional Administrator each occurrence when hazardous waste is managed in the tank in noncompliance with the conditions specified in

§264.1084(b) of this subpart. The owner or operator shall submit a written report within 15 calendar days of the time that the owner or operator becomes aware of the occurrence. The written report shall contain the EPA identification number, facility name and address, a description of the noncompliance event and the cause, the dates of the noncompliance, and the actions taken to correct the noncompliance and prevent recurrence of the noncompliance. The report shall be signed and dated by an authorized representative of the owner or operator.

* * * * *

25. Part 264 is amended by removing and reserving Section 264.1091.

PART 265--INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

26. The authority citation for Part 265 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6924, 6925, and 6935.

Subpart I-Use and Management of Containers

27. Section 265.178 is revised to read as follows:

§265.178 Air emission standards.

The owner or operator shall manage all hazardous waste placed in a container in accordance with the applicable requirements of subparts AA, BB, and CC of this part.

Subpart J-Tank Systems

28. Section 265.202 is revised to read as follows:

§265.202 Air emission standards.

The owner or operator shall manage all hazardous waste placed in a tank in accordance with the applicable requirements of subparts AA, BB, and CC of this part.

Subpart K-Surface Impoundments

29. Section 265.231 is revised to read as follows:

§265.231 Air emission standards.

The owner or operator shall manage all hazardous waste placed in a surface impoundment in accordance with the applicable requirements of subparts BB and CC of this part.

Subpart AA-Air Emission Standards for Process Vents

30. Section 265.1030 is amended by revising paragraph (b) and removing the note at the end of the section to read as follows:

§265.1030 Applicability.

* * * * *

(b) Except for §§265.1034, paragraphs (d) and (e), this subpart applies to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10 ppmw, if these operations are conducted in one of the following:

(1) A unit that is subject to the permitting requirements of 40 CFR part 270, or

(2) A unit (including a hazardous waste recycling unit) that is not exempt from permitting under the provisions of 40 CFR 262.34(a) (i.e., a hazardous waste recycling unit that is not a 90-day tank or container) and that is located at a hazardous waste management facility otherwise subject to the permitting requirements of 40 CFR part 270, or

(3) A unit (including a hazardous waste recycling unit) that is exempt from permitting under the provisions of 40 CFR 262.34(a) (i.e., a 90-day tank or container).

31. Section 265.1033 is amended by revising paragraph (f)(2)(vi)(B); redesignating paragraphs (k) and (l) as paragraphs (l) and (m) and revising the newly designated paragraph (m); by revising paragraph (j); and by adding paragraphs (k) and (n) to read as follows:

<u>§265.1033 Standards: Closed-vent systems and control devices</u>

* * * * *

(f) * * *

(2) * * *

(vi) * * *

(B) A temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature with an accuracy of ±1 percent of the temperature being monitored in degrees Celsius (°C) or ±0.5 °C, whichever is greater. The temperature sensor shall be installed at a location in the exhaust vent stream from the condenser exit (i.e., product side).

* * * * *

(j) A closed-vent system shall meet either of the following design requirements:

(1) A closed-vent system shall be designed to operate with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background as determined by the procedure in §265.1034(b) of this subpart, and by visual inspections; or

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

(k) The owner or operator shall monitor and inspect each closed-vent system required to comply with this section to ensure proper operation and maintenance of the closed-vent system by implementing the following requirements:

(1) Each closed-vent system that is used to comply with paragraph (j)(1) of this section shall be inspected and monitored in accordance with the following requirements:

(i) An initial leak detection monitoring of the closed-vent system shall be conducted by the owner or operator on or before the date that the system becomes subject to this section. The owner or operator shall monitor the closed-vent system components and connections using the procedures specified in §265.1034(b) of this subpart to demonstrate that the closed-vent system operates with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background.

(ii) After initial leak detection monitoring required in paragraph (k)1)(i) of this section, 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 pollutant emissions. The owner or operator shall monitor a component or connection using the procedures specified in §265.1034(b) of this subpart to demonstrate that it operates with no detectable 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 (k)(1)(ii)(A) of this section shall be monitored annually and at other times as requested by the Regional Administrator, except as provided for in paragraph (n) of this section, using the procedures specified in §265.1034(b) of this subpart to demonstrate that the components or connections operate with no detectable 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 (k)(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 §265.1035 of this subpart.

(2) Each closed-vent system that is used to comply with paragraph (j)(2) of this section 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 pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork or piping or loose connections.

(ii) The owner or operator shall perform an initial inspection of the closed-vent system on or before the date that the system becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year.

(iii) In the event that a defect or leak is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (k)(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 §265.1035 of this subpart.

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

(i) Detectable emissions, as indicated by visual inspection, or by an instrument reading greater than 500 ppmv above background, shall be controlled as soon as practicable, but not later than 15 calendar days after the emission is detected, except as provided for in paragraph (k)(3)(iii) of this section.

(ii) A first attempt at repair shall be made no later than 5 calendar days after the emission is detected.

(iii) Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.

(iv) The owner or operator shall maintain a record of the defect repair in accordance with the requirements specified in §265.1035 of this subpart.

(l) Closed-vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

(m) The owner or operator using a carbon adsorption system to control air pollutant emissions shall document that all carbon that is a hazardous waste and that is removed from the control device is managed in one of the following manners, regardless of the average volatile organic concentration of the carbon:

(1) Regenerated or reactivated in a thermal treatment unit that meets one of the following:

(i) The owner or operator of the unit has been issued a final permit under 40 CFR part 270 which implements the requirements of 40 CFR part 264 subpart X; or

(ii) The unit is equipped with and operating air emission controls in accordance with the applicable requirements of subparts AA and CC of either this part or of 40 CFR part 264; or

(iii) The unit is equipped with and operating air emission controls in accordance with a national emission standard for hazardous air pollutants under 40 CFR part 61 or 40 CFR part 63.

(2) Incinerated in a hazardous waste incinerator for which the owner or operator either:

(i) Has been issued a final permit under 40 CFR part 270 which implements the requirements of 40 CFR part 264, subpart O; or

(ii) Has designed and operates the incinerator in accordance with the interim status requirements of subpart O of this part.

(3) Burned in a boiler or industrial furnace for which the owner or operator either:

(i) Has been issued a final permit under 40 CFR part 270 which implements the requirements of 40 CFR part 266, subpart H; or

(ii) Has designed and operates the boiler or industrial furnace in accordance with the interim status requirements of 40 CFR part 266, subpart H.

(n) Any components of a closed-vent system that are designated, as described in §265.1035(c)(9) of this subpart, as unsafe to monitor are exempt from the requirements of paragraph (k)(1)(ii)(B) of this section if:

(1) The owner or operator of the closed-vent system determines that the components of the closed-vent system are unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (k)(1)(ii)(B) of this section; and

(2) The owner or operator of the closed-vent system adheres to a written plan that requires monitoring the closed-vent system components using the procedure specified in paragraph (k)(1)(ii)(B) of this section as frequently as practicable during safe-to-monitor times.

32. Section 265.1034 is amended by revising

paragraph (b) introductory text to read as follows:

§265.1034 Test methods and procedures

* * * * *

(b) When a closed-vent system is tested for compliance with no detectable emissions, as required in §265.1033(k) of this subpart, the test shall comply with the following requirements:

* * * * *

33. Section 265.1035 is amended by revising paragraph (c)(3), adding paragraphs (c)(9) and (c)(10) and revising paragraph (d) to read as follows:

§265.1035 Recordkeeping requirements

* * * * *

(c) * * *

(3) Monitoring, operating and inspection information required by paragraphs (f) through (k) of §265.1033 of this subpart.

(4) * * *

(9) An owner or operator designating any components of a closed-vent system as unsafe to monitor pursuant to §265.1033(n) of this subpart shall record in a log that is kept in the facility operating record the identification of closed-vent system components that are designated as unsafe to monitor in accordance with the requirements of §265.1033(n) of this subpart, an explanation for each closed-vent system component stating why the closed-vent

system component is unsafe to monitor, and the plan for monitoring each closed-vent system component.

(10) When each leak is detected as specified in §265.1033(k) of this subpart, the following information shall be recorded:

(i) The instrument identification number, the closed-vent system component identification number, and the operator name, initials, or identification number.

(ii) The date the leak was detected and the date of first attempt to repair the leak.

(iii) The date of successful repair of the leak.

(iv) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonrepairable.

(v) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(A) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

(B) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.

(d) Records of the monitoring, operating, and inspection information required by paragraphs (c)(3) through (c)(10) of this section shall be maintained by the owner or operator for at least 3 years following the date of each occurrence, measurement, maintenance, corrective action, or record.

* * * * *

Subpart BB--Air Emission Standards for Equipment Leaks

34. Section 265.1050 is amended by revising paragraph (b), adding paragraph (e) and removing the note at the end of the section to read as follows:

§ 265.1050 Applicability.

* * * * *

(b) Except as provided in §265.1064(k), this subpart applies to equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight that are managed in one of the following:

(1) A unit that is subject to the permitting requirements of 40 CFR part 270, or

(2) A unit (including a hazardous waste recycling unit) that is not exempt from permitting under the provisions of 40 CFR 262.34(a) (i.e., a hazardous waste recycling unit that is not a 90-day tank or container) and that is located at a hazardous waste management facility otherwise subject to the permitting requirements of 40 CFR part 270, or

(3) A unit (including a hazardous waste recycling unit)

that is exempt from permitting under the provisions of 40 CFR 262.34(a) (i.e., a 90-day tank or container).

* * * * *

(e) Equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for a period of less than 300 hours per calendar year is excluded from the requirements of §265.1052 through §265.1060 of this subpart if it is identified as required in §265.1064(g)(6) of this subpart.

35. Section 265.1055 is revised by replacing the entire section with the new section to read as follows:

§265.1055 Standards: Sampling connection systems.

(a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system. This system shall collect the sample purge for return to the process or for routing to the appropriate treatment system. Gases displaced during filling of the sample container are not required to be collected or captured.

(b) Each closed-purge, closed-loop, or closed-vent system as required in paragraph (a) of this section shall:

(1) Return the purged process fluid directly to the process line; or

(2) Collect and recycle the purged process fluid; or

(3) Be designed and operated to capture and transport all the purged process fluid to a waste management unit that complies with the applicable requirements of §265.1085

through §265.1087 of this subpart or a control device that complies with the requirements of §265.1060 of this subpart.

(c) In-situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of this section.

36. Section 265.1058 is amended by adding paragraph (e) to read as follows:

§265.1058 Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors.

* * * * *

(e) Any connector that is inaccessible or is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined) is exempt from the monitoring requirements of paragraph (a) of this section and from the recordkeeping requirements of §265.1064 of this subpart.

37. Section 265.1064 is amended by adding paragraph (g)(6) to read as follows:

§265.1064 Recordkeeping requirements.

* * * * *

(g) * * *

(6) Identification, either by list or location (area or group) of equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for a period of less than 300 hours per year.

* * * * *

Subpart CC--Air Emission Standards for Tanks, Surface Impoundments, and Containers

38. Section 265.1080 is amended by adding paragraphs (b)(7) and (b)(8) to read as follows:

§265.1080 Applicability.

* * * * *

(b) * * *

(7) A hazardous waste management unit that the owner or operator certifies is equipped with and operating air emission controls in accordance with the requirements of an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63. For the purpose of complying with this paragraph, a tank for which the air emission control includes an enclosure, as opposed to a cover, must be in compliance with the enclosure and control device requirements of §265.1085(i), except as provided in §265.1083(c)(5).

(8) A tank that has a process vent as defined in 40 CFR 264.1031.

39. Section 265.1081 is amended by revising the definitions of cover, external floating roof, fixed roof, floating roof, internal floating roof, maximum organic vapor pressure, point of waste treatment, vapor-mounted seal and volatile organic concentration and by adding definitions in alphabetical order to read as follows:

§265.1081 Definitions.

* * * * *

<u>Closure device</u> means a cap, hatch, lid, plug, seal, valve, or other type of fitting that blocks an opening in a cover such that when the device is secured in the closed position it prevents or reduces air pollutant emissions to the atmosphere. Closure devices include devices that are detachable from the cover (e.g., a sampling port cap), manually operated (e.g., a hinged access lid or hatch), or automatically operated (e.g., a spring-loaded pressure relief valve).

* * * * *

<u>Continuous seal</u> means a seal that forms a continuous closure that completely covers the space between the edge of the floating roof and the wall of a tank. A continuous seal may be a vapor-mounted seal, liquid-mounted seal, or metallic shoe seal. A continuous seal may be constructed of fastened segments so as to form a continuous seal.

* * * * *

<u>Cover</u> means a device that provides a continuous barrier over the hazardous waste managed in a unit to prevent or reduce air pollutant emissions to the atmosphere. A cover may have openings (such as access hatches, sampling ports, gauge wells) that are necessary for operation, inspection, maintenance, and repair of the unit on which the cover is used. A 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.

* * * * *

<u>Enclosure</u> means a structure that surrounds a tank or container, captures organic vapors emitted from the tank or container, and vents the captured vapors through a closed-vent system to a control device.

* * * * *

<u>External floating roof</u> means a pontoon-type or double-deck type cover that rests on the surface of the material managed in a tank with no fixed roof.

* * * * *

<u>Fixed roof</u> means a cover that is mounted on a unit in a stationary position and does not move with fluctuations in the level of the material managed in the unit.

* * * * *

<u>Floating roof</u> means a cover consisting of a double deck, pontoon single deck, or internal floating cover which rests upon and is supported by the material being contained, and is equipped with a continuous seal.

* * * * *

<u>Hard-piping</u> means pipe or tubing that is manufactured and properly installed in accordance with relevant standards and good engineering practices.

* * * * *

<u>In light material service</u> means the container is used

to manage a material for which both of the following conditions apply: the vapor pressure of one or more of the organic constituents in the material is greater than 0.3 kilopascals (kPa) at 20°C; and the total concentration of the pure organic constituents having a vapor pressure greater than 0.3 kPa at 20 °C is equal to or greater than 20 percent by weight.

* * * * *

Internal floating roof means a cover that rests or floats on the material surface (but not necessarily in complete contact with it) inside a tank that has a fixed roof.

* * * * *

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

* * * * *

Maximum organic vapor pressure means the sum of the individual organic constituent partial pressures exerted by the material contained in a tank, at the maximum vapor pressure-causing conditions (i.e., temperature, agitation, pH effects of combining wastes, etc.) reasonably expected to occur in the tank. For the purpose of this subpart, maximum organic vapor pressure is determined using the procedures specified in §265.1084(c) of this subpart.

* * * * *

<u>Metallic shoe seal</u> means a continuous seal that is constructed of metal sheets which are held vertically against the wall of the tank by springs, weighted levers, or other mechanisms and is connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

* * * * *

<u>No detectable organic emissions</u> means no escape of organics to the atmosphere as determined using the procedure specified in §265.1084(d) of this subpart.

* * * * *

<u>Point of waste treatment</u> means the point where a hazardous waste to be treated in accordance with §265.1083(c)(2) of this subpart exits the treatment process. Any waste determination shall be made before the waste is conveyed, handled, or otherwise managed in a manner that allows the waste to volatilize to the atmosphere.

* * * * *

<u>Safety device</u> means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors

directly to the atmosphere 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 air emission control 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, ignitable, explosive, reactive, or hazardous materials.

* * * * *

<u>Single-seal system</u> means a floating roof having one continuous seal. This seal may be vapor-mounted, liquid-mounted, or a metallic shoe seal.

* * * * *

<u>Vapor-mounted seal</u> means a continuous seal that is mounted such that there is a vapor space between the hazardous waste in the unit and the bottom of the seal.

* * * * *

Volatile organic concentration or VO concentration means the fraction by weight of the volatile organic compounds contained in a hazardous waste expressed in terms of parts per million (ppmw) as determined by direct measurement or by knowledge of the waste in accordance with the requirements of §265.1084 of this subpart. For the purpose of determining the VO concentration of a hazardous waste, organic compounds with a Henry's law constant value of at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in the liquid-phase (0.1 Y/X) [which can also be expressed as 1.8 x 10^{-6} atmospheres/gram-mole/m^3] at 25 degrees Celsius must be included. Appendix VI of this subpart presents a list of compounds known to have a Henry's law constant value less than the cutoff level.

* * * * *

40. Section 265.1083 is revised by replacing the entire section with the new section to read as follows:

§265.1083 Standards: General.

(a) This section applies to the management of hazardous waste in tanks, surface impoundments, and containers subject to this subpart.

(b) The owner or operator shall control air pollutant emissions from each waste management unit in accordance with standards specified in §265.1085 through §265.1088 of this subpart, as applicable to the waste management unit, except as provided for in paragraph (c) of this section.

(c) A tank, surface impoundment, or container is exempt from standards specified in §265.1085 through §265.1088 of this subpart, as applicable, provided that the waste management unit is one of the following:

(1) A tank, surface impoundment, or container for which all hazardous waste entering the unit has an average VO concentration at the point of waste origination of less than 500 parts per million by weight (ppmw). The average VO concentration shall be determined using the procedures specified in §265.1084(a) of this subpart. The owner or operator shall review and update, as necessary, this determination at least once every 12 months following the date of the initial determination for the hazardous waste streams entering the unit.

(2) A tank, surface impoundment, or container for which the organic content of all the hazardous waste entering the waste management unit has been reduced by an organic destruction or removal process that achieves any one of the following conditions:

(i) A process that removes or destroys the organics contained in the hazardous waste to a level such that the average VO concentration of the hazardous waste at the point of waste treatment is less than the exit concentration limit (C_t) established for the process. The average VO concentration of the hazardous waste at the point of waste treatment and the exit concentration limit for the process shall be determined using the procedures specified in §265.1084(b) of this subpart.

(ii) A process that removes or destroys the organics contained in the hazardous waste to a level such that the organic reduction efficiency (R) for the process is equal to or greater than 95 percent, and the average VO concentration of the hazardous waste at the point of waste treatment is less than 100 ppmw. The organic reduction efficiency for the process and the average VO concentration of the hazardous waste at the point of waste treatment shall be determined using the procedures specified in §265.1084(b) of this subpart.

(iii) A process that removes or destroys the organics contained in the hazardous waste to a level such that the actual organic mass removal rate (MR) for the process is equal to or greater than the required organic mass removal rate (RMR) established for the process. The required organic mass removal rate and the actual organic mass removal rate for the process shall be determined using the procedures specified in §265.1084(b) of this subpart.

(iv) A biological process that destroys or degrades the organics contained in the hazardous waste, such that either of the following conditions is met:

(A) The organic reduction efficiency (R) for the process is equal to or greater than 95 percent, and the organic biodegradation efficiency (R_{bio}) for the process is equal to or greater than 95 percent. The organic reduction efficiency and the organic biodegradation efficiency for the process shall be determined using the procedures specified in §265.1084(b) of this subpart.

(B) The total actual organic mass biodegradation rate (MR_{bio}) for all hazardous waste treated by the process is equal to or greater than the required organic mass removal rate (RMR). The required organic mass removal rate and the actual organic mass biodegradation rate for the process shall be determined using the procedures specified in §265.1084(b) of this subpart.

(v) A process that removes or destroys the organics contained in the hazardous waste and meets all of the following conditions:

(A) From the point of waste origination through the point where the hazardous waste enters the treatment process, the hazardous waste is managed continuously in waste management units which use air emission controls in accordance with the standards specified in §265.1085 through §265.1088 of this subpart, as applicable to the waste management unit.

(B) From the point of waste origination through the point where the hazardous waste enters the treatment process, any transfer of the hazardous waste is accomplished through continuous hard-piping or other closed system transfer that does not allow exposure of the waste to the atmosphere. The EPA considers a drain system that meets the requirements of 40 CFR part 63, subpart RR - National Emission Standards for Individual Drain Systems to be a closed system.

(C) The average VO concentration of the hazardous waste at the point of waste treatment is less than the lowest average VO concentration at the point of waste origination determined for each of the individual waste streams entering the process or 500 ppmw, whichever value is lower. The average VO concentration of each individual waste stream at the point of waste origination shall be determined using the procedures specified in §265.1084(a) of this subpart. The average VO concentration of the hazardous waste at the point of waste treatment shall be determined using the procedures specified in §265.1084(b) of this subpart.

(vi) A process that removes or destroys the organics contained in the hazardous waste to a level such that the organic reduction efficiency (R) for the process is equal to or greater than 95 percent and the owner or operator certifies that the average VO concentration at the point of waste origination for each of the individual waste streams entering the process is less than 10,000 ppmw. The organic reduction efficiency for the process and the average VO concentration of the hazardous waste at the point of waste origination shall be determined using the procedures specified in §265.1084(b) and §265.1084(a) of this subpart, respectively.

(vii) A hazardous waste incinerator for which the owner or operator has either:

(A) Been issued a final permit under 40 CFR part 270 which implements the requirements of 40 CFR part 264, subpart O; or

(B) Has designed and operates the incinerator in accordance with the interim status requirements of subpart O of this part.

(viii) A boiler or industrial furnace for which the owner or operator has either:

(A) Been issued a final permit under 40 CFR part 270 which implements the requirements of 40 CFR part 266, subpart H, or

(B) Has designed and operates the boiler or industrial furnace in accordance with the interim status requirements of 40 CFR part 266, subpart H.

(ix) For the purpose of determining the performance of an organic destruction or removal process in accordance with the conditions in each of paragraphs (c)(2)(i) through (c)(2)(vi) of this section, the owner or operator shall account for VO concentrations determined to be below the limit of detection of the analytical method by using the following VO concentration:

(A) If Method 25D in 40 CFR part 60, appendix A is used for the analysis, one-half the blank value determined in the method.

(B) If any other analytical method is used, one-half the limit of detection established for the method.

(3) A tank used for biological treatment of hazardous waste in accordance with the requirements of paragraph (c)(2)(iv) of this section.

(4) A tank, surface impoundment, or container for which all hazardous waste placed in the unit either:

(i) Meets the numerical concentration limits for organic hazardous constituents, applicable to the hazardous waste, as specified in 40 CFR part 268 - Land Disposal Restrictions under Table "Treatment Standards for Hazardous Waste" in 40 CFR 268.40; or

(ii) Has been treated by the treatment technology established by EPA for the waste in 40 CFR 268.42(a), or treated by an equivalent method of treatment approved by EPA pursuant to 40 CFR 268.42(b).

(5) A tank used for bulk feed of hazardous waste to a waste incinerator and all of the following conditions are met:

(i) 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 RR - 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;

(ii) The enclosure and control device serving the tank were installed and began operation prior to [insert date of publication in Federal Register]; and

(iii) 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 shall 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" annually.

(d) The Regional Administrator may at any time perform or request that the owner or operator perform a waste determination for a hazardous waste managed in a tank, surface impoundment, or container exempted from using air emission controls under the provisions of this section as follows:

(1) The waste determination for average VO concentration of a hazardous waste at the point of waste origination shall be performed using direct measurement in

accordance with the applicable requirements of §265.1084(a) of this subpart. The waste determination for a hazardous waste at the point of waste treatment shall be performed in accordance with the applicable requirements of §265.1084(b) of this subpart.

(2) In performing a waste determination pursuant to paragraph (d)(1) of this section, the sample preparation and analysis shall be conducted as follows:

(i) In accordance with the method used by the owner or operator to perform the waste analysis, except in the case specified in paragraph (d)(2)(ii) of this section.

(ii) If the Regional Administrator determines that the method used by the owner or operator was not appropriate for the hazardous waste managed in the tank, surface impoundment, or container, then the Regional Administrator may choose an appropriate method.

(3) In a case when the owner or operator is requested to perform the waste determination, the Regional Administrator may elect to have an authorized representative observe the collection of the hazardous waste samples used for the analysis.

(4) In a case when the results of the waste determination performed or requested by the Regional Administrator do not agree with the results of a waste determination performed by the owner or operator using knowledge of the waste, then the results of the waste

determination performed in accordance with the requirements of paragraph (d)(1) of this section shall be used to establish compliance with the requirements of this subpart.

(5) In a case when the owner or operator has used an averaging period greater than 1 hour for determining the average VO concentration of a hazardous waste at the point of waste origination, the Regional Administrator may elect to establish compliance with this subpart by performing or requesting that the owner or operator perform a waste determination using direct measurement based on waste samples collected within a 1-hour period as follows:

(i) The average VO concentration of the hazardous waste at the point of waste origination shall be determined by direct measurement in accordance with the requirements of §265.1084(a) of this subpart.

(ii) Results of the waste determination performed or requested by the Regional Administrator showing that the average VO concentration of the hazardous waste at the point of waste origination is equal to or greater than 500 ppmw shall constitute noncompliance with this subpart except in a case as provided for in paragraph (d)(5)(iii) of this section.

(iii) For the case when the average VO concentration of the hazardous waste at the point of waste origination previously has been determined by the owner or operator using an averaging period greater than 1 hour to be less than 500 ppmw but because of normal operating process variations the VO concentration of the hazardous waste determined by direct measurement for any given 1-hour period may be equal to or greater than 500 ppmw, information that was used by the owner or operator to determine the average VO concentration of the hazardous waste (e.g., test results, measurements, calculations, and other documentation) and recorded in the facility records in accordance with the requirements of §265.1084(a) and §265.1090 of this subpart shall be considered by the Regional Administrator together with the results of the waste determination performed or requested by the Regional Administrator in establishing compliance with this subpart.

41. Section 265.1084 is revised by replacing the entire section with the new section to read as follows:

§265.1084 Waste determination procedures.

(a) Waste determination procedure to determine average volatile organic (VO) concentration of a hazardous waste at the point of waste origination.

(1) An owner or operator shall determine the average VO concentration at the point of waste origination for each hazardous waste placed in a waste management unit exempted under the provisions of §265.1083(c)(1) of this subpart from using air emission controls in accordance with standards specified in §265.1085 through §265.1088 of this subpart, as applicable to the waste management unit.

(2) The average VO concentration of a hazardous waste at the point of waste origination shall be determined using either direct measurement as specified in paragraph (a)(3) of this section or by knowledge as specified in paragraph (a)(4) of this section.

(3) Direct measurement to determine average VO concentration of a hazardous waste at the point of waste origination.

(i) Identification. The owner or operator shall identify and record the point of waste origination for the hazardous waste.

(ii) Sampling. Samples of the hazardous waste stream shall be collected at the point of waste origination in a manner such that volatilization of organics contained in the waste and in the subsequent sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.

(A) The averaging period to be used for determining the average VO concentration for the hazardous waste 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 hazardous waste stream but shall not exceed 1 year.

(B) A sufficient number of samples, but no less than four samples, shall be collected for the hazardous waste stream to represent the complete range of compositions and quantities that occur during the entire averaging period due to normal variations in the operating conditions for the source or process generating the hazardous waste stream. Examples of such normal variations are seasonal variations in waste quantity or fluctuations in ambient temperature.

(C) 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 hazardous waste 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 on-site in the facility 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, Third Edition, September 1986, as amended by Update I, November 15, 1992 (incorporated by reference - refer to §260.11 of this chapter), or Method 25D in 40 CFR part 60, appendix A.

(iii) Analysis. Each collected sample shall be prepared and analyzed in accordance with one or more of the methods listed in paragraphs (a)(3)(iii)(A) through (a)(3)(iii)(I) of this section, including appropriate quality assurance and quality control (QA/QC) checks and use of target compounds for calibration. If Method 25D in 40 CFR part 60, appendix A is not used, then one or more methods should be chosen that are appropriate to ensure that the waste determination accounts for and reflects all organic compounds in the waste with Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) [which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3] at 25 degrees Celsius. Each of the analytical methods listed in paragraphs (a)(3)(iii)(B) through (a)(3)(iii)(G) or this section has an associated list of approved chemical compounds, for which EPA considers the method appropriate for measurement. If an owner or operator uses EPA Method 624, 625, 1624, or 1625 in 40 CFR part 136, appendix A to analyze one or more compounds that are not on that method's published list, the Alternative Test Procedure contained in 40 CFR Part 136.4 and 136.5 must be followed. If an owner or operator uses EPA Method 8260(B) or 8270(C) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846, Third Edition, September 1986, as amended by Update I, November 15, 1992 (incorporated by reference - refer to §260.11 of this chapter) to analyze one or more compounds that are not on that method's published list, the procedures in paragraph (a)(3)(iii)(H) or this section must be followed. At the owner's or operator's discretion, the concentration of each individual chemical constituent measured in the waste by a method other than Method 25D may be corrected to the concentration had it been measured using Method 25D by multiplying the measured concentration by the constituent-specific adjustment factor (f_{m25D}) as specified in paragraph (a)(4)(iii) of this section. Constituent-specific adjustment factors (f_{m25D}) can be obtained by contacting the Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711.

(A) Method 25D in 40 CFR part 60, appendix A.

(B) Method 624 in 40 CFR part 136, appendix A.

(C) Method 625 in 40 CFR part 136, appendix A. Perform corrections to the compounds for which the analysis is being conducted based on the "accuracy as recovery" using the factors in Table 7 of the method.

(D) Method 1624 in 40 CFR part 136, appendix A.

(E) Method 1625 in 40 CFR part 136, appendix A.

(F) Method 8260(B) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846, Third Edition, September 1986, as amended by Update I, November 15, 1992 (incorporated by reference - refer to §260.11 of this chapter). Maintain a formal quality assurance program consistent with the requirements of Method 8260(B). The quality assurance program shall include the following elements:

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

(2) Measurement of the overall accuracy and precision of the specific procedures.

(G) Method 8270(C) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846, Third Edition, September 1986, as amended by Update I, November 15, 1992 (incorporated by reference - refer to §260.11 of this chapter). Maintain a formal quality assurance program consistent with the requirements of Method 8270(C). The quality assurance program shall include the following elements:

(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) Measurement of the overall accuracy and precision of the specific procedures.

(H) Any other EPA standard method that has been validated in accordance with "Alternative Validation Procedure for EPA Waste and Wastewater Methods", 40 CFR part 63, appendix D. As an alternative, other EPA standard methods may be validated by the procedure specified in paragraph (a)(3)(iii)(I) of this section.

(I) Any other analysis method that has been validated in accordance with the procedures specified in Section 5.1 or Section 5.3, and the corresponding calculations in Section 6.1 or Section 6.3, of Method 301 in 40 CFR part 63, appendix A. 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 0.7 to 1.30. Other sections of Method 301 are not required.

(iv) Calculations. The average VO concentration ($\overline{C}$) on a mass-weighted basis shall be calculated by using the results for all samples analyzed in accordance with paragraph (a)(3)(iii) of this section and the following equation:

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

where:

$\overline{C}$ = Average VO concentration of the hazardous waste at the point of waste origination on a mass-weighted basis, ppmw.

i = Individual sample "i" of the hazardous waste.

n = Total number of samples of the hazardous waste collected (at least 4) for the averaging period (not to exceed 1 year).

Q_i = Mass quantity of hazardous waste stream represented by C_i, kg/hr.

Q_T = Total mass quantity of hazardous waste during the averaging period, kg/hr.

C_i = Measured VO concentration of sample "i" as determined in accordance with the requirements of §265.1084(a)(3)(iii) of this subpart, ppmw.

(4) Use of owner or operator knowledge to determine average VO concentration of a hazardous waste at the point of waste origination.

(i) Documentation shall be prepared that presents the information used as the basis for the owner's or operator's knowledge of the hazardous waste stream's average VO concentration. Examples of information that may be used as the basis for knowledge include: material balances for the source or process generating the hazardous waste stream; constituent-specific chemical test data for the hazardous waste stream from previous testing that are still applicable to the current waste stream; previous test data for other locations managing the same type of waste stream; or other knowledge based on information included in manifests, shipping papers, or waste certification notices.

(ii) If test data are used as the basis for knowledge, then the owner or operator shall document the test method, sampling protocol, and the means by which sampling variability and analytical variability are accounted for in the determination of the average VO concentration. For example, an owner or operator may use organic concentration test data for the hazardous waste stream that are validated in accordance with Method 301 in 40 CFR part 63, appendix A as the basis for knowledge of the waste.

(iii) An owner or operator using chemical constituent-specific concentration test data as the basis for knowledge of the hazardous waste may adjust the test data to the corresponding average VO concentration value which would have been obtained had the waste samples been analyzed using Method 25D in 40 CFR part 60, appendix A. To adjust these data, the measured concentration for each individual chemical constituent contained in the waste is multiplied by the appropriate constituent-specific adjustment factor (f_{m25D}).

(iv) In the event that the Regional Administrator and the owner or operator disagree on a determination of the average VO concentration for a hazardous waste stream using knowledge, then the results from a determination of average VO concentration using direct measurement as specified in paragraph (a)(3) of this section shall be used to establish compliance with the applicable requirements of this subpart. The Regional Administrator may perform or request that the owner or operator perform this determination using direct measurement.

(b) Waste determination procedures for treated hazardous waste.

(1) An owner or operator shall perform the applicable waste determination for each treated hazardous waste placed in a waste management unit exempted under the provisions of §265.1083(c)(2) of this subpart from using air emission controls in accordance with standards specified in §265.1085 through §265.1088 of this subpart, as applicable to the waste management unit.

(2) The owner or operator shall designate and record the specific provision in §265.1083(c)(2) of this subpart under which the waste determination is being performed. The waste determination for the treated hazardous waste shall be performed using the applicable procedures specified in paragraphs (b)(3) through (b)(9) of this section.

(3) Procedure to determine the average VO concentration of a hazardous waste at the point of waste treatment.

(i) Identification. The owner or operator shall identify and record the point of waste treatment for the hazardous waste.

(ii) Sampling. Samples of the hazardous waste stream shall be collected at the point of waste treatment in a manner such that volatilization of organics contained in the waste and in the subsequent sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.

(A) The averaging period to be used for determining the average VO concentration for the hazardous waste 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 hazardous waste stream but shall not exceed 1 year.

(B) A sufficient number of samples, but no less than four samples, shall be collected for the hazardous waste stream to represent the complete range of compositions and quantities that occur during the entire averaging period due to normal variations in the operating conditions for the process treating the hazardous waste stream. Examples of such normal variations are seasonal variations in waste quantity or fluctuations in ambient temperature.

(C) 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 hazardous waste 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 on-site in the facility 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, Third Edition, September 1986, as amended by Update I, November 15, 1992 (incorporated by reference - refer to §260.11 of this chapter), or Method 25D in 40 CFR part 60, appendix A.

(iii) Analysis. Each collected sample shall be prepared and analyzed in accordance with one or more of the methods listed in paragraphs (b)(3)(iii)(A) through (b)(3)(iii)(I) of this section, including appropriate quality assurance and quality control (QA/QC) checks and use of target compounds for calibration. If Method 25D in 40 CFR part 60, appendix A is not used, then one or more methods should be chosen that are appropriate to ensure that the waste determination accounts for and reflects all organic compounds in the waste with Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) [which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3] at 25 degrees Celsius. Each of the analytical methods listed in paragraphs (b)(3)(iii)(B) through (b)(3)(iii)(G) of this section has an associated list of approved chemical compounds, for which EPA considers the method appropriate for measurement. If an owner or operator uses EPA Method 624, 625, 1624, or 1625 in 40 CFR part 136, appendix A to analyze one or more compounds that are not on that method's published list, the Alternative Test Procedure contained in 40 CFR Part 136.4 and 136.5 must be followed. If an owner or operator uses EPA Method 8260(B) or 8270(C) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846, Third Edition, September 1986, as amended by Update I, November 15, 1992 (incorporated by reference - refer to §260.11 of this chapter) to analyze one or more compounds that are not on that method's published list, the procedures in paragraph (b)(3)(iii)(H) of this section must be followed. At the owner's or operator's discretion, the concentration of each individual chemical constituent measured in the waste by a method other than Method 25D may be corrected to the concentration had it been measured using Method 25D by multiplying the measured concentration by the constituent-specific adjustment factor (f_{m25D}) as specified in paragraph (a)(4)(iii) of this section. Constituent-specific adjustment factors (f_{m25D}) can be obtained by contacting the Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711.

(A) Method 25D in 40 CFR part 60, appendix A.

(B) Method 624 in 40 CFR part 136, appendix A.

(C) Method 625 in 40 CFR part 136, appendix A.

Perform corrections to the compounds for which the analysis is being conducted based on the "accuracy as recovery" using the factors in Table 7 of the method.

(D) Method 1624 in 40 CFR part 136, appendix A.

(E) Method 1625 in 40 CFR part 136, appendix A.

(F) Method 8260(B) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846, Third Edition, September 1986, as amended by Update I, November 15, 1992 (incorporated by reference - refer to §260.11 of this chapter). Maintain a formal quality assurance program consistent with the requirements of Method 8260(B). The quality assurance program shall include the following elements:

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

(2) Measurement of the overall accuracy and precision of the specific procedures.

(G) Method 8270(C) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846, Third Edition, September 1986, as amended by Update I, November 15, 1992 (incorporated by reference - refer to §260.11 of this chapter). Maintain a formal quality assurance program consistent with the requirements of Method 8270(C). The quality assurance program shall include the following elements:

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

(2) Measurement of the overall accuracy and precision of the specific procedures.

(H) Any other EPA standard method that has been validated in accordance with "Alternative Validation Procedure for EPA Waste and Wastewater Methods", 40 CFR part 63, appendix D. As an alternative, other EPA standard methods may be validated by the procedure specified in paragraph (b)(3)(iii)(I) of this section.

(I) Any other analysis method that has been validated in accordance with the procedures specified in Section 5.1 or Section 5.3, and the corresponding calculations in Section 6.1 or Section 6.3, of Method 301 in 40 CFR part 63, appendix A. 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 0.7 to 1.30. Other sections of Method 301 are not required.

(iv) Calculations. The average VO concentration ($\overline{C}$) on a mass-weighted basis shall be calculated by using the results for all samples analyzed in accordance with paragraph (b)(3)(iii) of this section and the following equation:

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

where:

$\overline{C}$ = Average VO concentration of the hazardous waste at the point of waste treatment on a mass-weighted basis, ppmw.

i = Individual sample "i" of the hazardous waste.

n = Total number of samples of the hazardous waste collected (at least 4) for the averaging period (not to exceed 1 year).

Q_i = Mass quantity of hazardous waste stream represented by C_i, kg/hr.

Q_T = Total mass quantity of hazardous waste during the averaging period, kg/hr.

C_i = Measured VO concentration of sample "i" as determined in accordance with the requirements of §265.1084(b)(3)(iii) of this subpart, ppmw.

(4) Procedure to determine the exit concentration limit (C_t) for a treated hazardous waste.

(i) The point of waste origination for each hazardous waste treated by the process at the same time shall be identified.

(ii) If a single hazardous waste stream is identified in paragraph (b)(4)(i) of this section, then the exit concentration limit (C_t) shall be 500 ppmw.

(iii) If more than one hazardous waste stream is identified in paragraph (b)(4)(i) of this section, then the average VO concentration of each hazardous waste stream at the point of waste origination shall be determined in accordance with the requirements of paragraph (a) of this section. The exit concentration limit (C_t) shall be calculated by using the results determined for each individual hazardous waste stream and the following equation:

$$C_t = \frac{\sum_{x=1}^{m} (Q_x \times \overline{C_x}) + \sum_{y=1}^{n} (Q_y \times 500 \text{ ppmw})}{\sum_{x=1}^{m} Q_x + \sum_{y=1}^{n} Q_y}$$

where:

C_t = Exit concentration limit for treated hazardous waste, ppmw.

x = Individual hazardous waste stream "x" that has an average VO concentration less than 500 ppmw at the point of waste origination as determined in accordance with the requirements of §265.1084(a) of this subpart.

y = Individual hazardous waste stream "y" that has an average VO concentration equal to or greater than

500 ppmw at the point of waste origination as determined in accordance with the requirements of §265.1084(a) of this subpart.

m = Total number of "x" hazardous waste streams treated by process.

n = Total number of "y" hazardous waste streams treated by process.

Q_x = Annual mass quantity of hazardous waste stream "x," kg/yr.

Q_y = Annual mass quantity of hazardous waste stream "y," kg/yr.

$\overline{C}_x$ = Average VO concentration of hazardous waste stream "x" at the point of waste origination as determined in accordance with the requirements of §265.1084(a) of this subpart, ppmw.

(5) Procedure to determine the organic reduction efficiency (R) for a treated hazardous waste.

(i) The organic reduction efficiency (R) for a treatment process shall be determined based on results for a minimum of three consecutive runs.

(ii) All hazardous waste streams entering the treatment process and all hazardous waste streams exiting the treatment process shall be identified. The owner or operator shall prepare a sampling plan for measuring these streams that accurately reflects the retention time of the hazardous waste in the process.

(iii) For each run, information shall be determined for each hazardous waste stream identified in paragraph (b)(5)(ii) of this section using the following procedures:

(A) The mass quantity of each hazardous waste stream entering the process (Q_b) and the mass quantity of each hazardous waste stream exiting the process (Q_a) shall be determined.

(B) The average VO concentration at the point of waste origination of each hazardous waste stream entering the process ($\overline{C}_b$) during the run shall be determined in accordance with the requirements of paragraph (a)(3) of this section. The average VO concentration at the point of waste treatment of each waste stream exiting the process ($\overline{C}_a$) during the run shall be determined in accordance with the requirements of paragraph (b)(3) of this section.

(iv) The waste volatile organic mass flow entering the process (E_b) and the waste volatile organic mass flow exiting the process (E_a) shall be calculated by using the results determined in accordance with paragraph (b)(5)(iii) of this section and the following equations:

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

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

where:

E_a = Waste volatile organic mass flow exiting process, kg/hr.

E_b = Waste volatile organic mass flow entering process, kg/hr.

m = Total number of runs (at least 3)

j = Individual run "j"

Q_b = Mass quantity of hazardous waste entering process during run "j," kg/hr.

Q_a = Average mass quantity of hazardous waste exiting process during run "j," kg/hr.

$\overline{C}_a$ = Average VO concentration of hazardous waste exiting process during run "j" as determined in accordance with the requirements of §265.1084(b)(3) of this subpart , ppmw.

$\overline{C}_b$ = Average VO concentration of hazardous waste entering process during run "j" as determined in accordance with the requirements of §265.1084(a)(3) of this subpart, ppmw.

(v) The organic reduction efficiency of the process shall be calculated by using the results determined in accordance with paragraph (b)(5)(iv) of this section and the following equation:

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

where:

R = Organic reduction efficiency, percent.

E_b = Waste volatile organic mass flow entering process as determined in accordance with the requirements of paragraph (b)(5)(iv) of this section, kg/hr.

E_a = Waste volatile organic mass flow exiting process as determined in accordance with the requirements of paragraph (b)(5)(iv) of this section, kg/hr.

(6) Procedure to determine the organic biodegradation efficiency (R_{bio}) for a treated hazardous waste.

(i) The fraction of organics biodegraded (F_{bio}) shall be determined using the procedure specified in 40 CFR part 63, appendix C of this chapter.

(ii) The R_{bio} shall be calculated by using the following equation:

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

where:

R_{bio} = Organic biodegradation efficiency, percent.

F_{bio} = Fraction of organic biodegraded as determined in accordance with the requirements of paragraph (b)(6)(i) of this section.

(7) Procedure to determine the required organic mass

removal rate (RMR) for a treated hazardous waste.

(i) All of the hazardous waste streams entering the treatment process shall be identified.

(ii) The average VO concentration of each hazardous waste stream at the point of waste origination shall be determined in accordance with the requirements of paragraph (a) of this section.

(iii) For each individual hazardous waste stream that has an average VO concentration equal to or greater than 500 ppmw at the point of waste origination, the average volumetric flow rate and the density of the hazardous waste stream at the point of waste origination shall be determined.

(iv) The RMR shall be calculated by using the average VO concentration, average volumetric flow rate, and density determined for each individual hazardous waste stream, and the following equation:

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

where:

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

y = Individual hazardous waste stream "y" that has an average VO concentration equal to or greater than 500 ppmw at the point of waste origination as determined in accordance with the requirements of

§265.1084(a) of this subpart.

n = Total number of "y" hazardous waste streams treated by process.

V_y = Average volumetric flow rate of hazardous waste stream "y" at the point of waste origination, m^3/hr.

k_y = Density of hazardous waste stream "y," kg/m^3

$\bar{C}_y$ = Average VO concentration of hazardous waste stream "y" at the point of waste origination as determined in accordance with the requirements of §265.1084(a) of this subpart, ppmw.

(8) Procedure to determine the actual organic mass removal rate (MR) for a treated hazardous waste.

(i) The MR shall be determined based on results for a minimum of three consecutive runs. The sampling time for each run shall be 1 hour.

(ii) The waste volatile organic mass flow entering the process (E_b) and the waste volatile organic mass flow exiting the process (E_a) shall be determined in accordance with the requirements of paragraph (b)(5)(iv) of this section.

(iii) The MR shall be calculated by using the mass flow rate determined in accordance with the requirements of paragraph (b)(8)(ii) of this section and the following equation:

$$MR = E_b - E_a$$

where:

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

E_b = Waste volatile organic mass flow entering process as determined in accordance with the requirements of paragraph (b)(5)(iv) of this section, kg/hr.

E_a = Waste volatile organic mass flow exiting process as determined in accordance with the requirements of paragraph (b)(5)(iv) of this section, kg/hr.

(9) Procedure to determine the actual organic mass biodegradation rate (MR_{bio}) for a treated hazardous waste.

(i) The MR_{bio} shall be determined based on results for a minimum of three consecutive runs. The sampling time for each run shall be 1 hour.

(ii) The waste organic mass flow entering the process (E_b) shall be determined in accordance with the requirements of paragraph (b)(5)(iv) of this section.

(iii) The fraction of organic biodegraded (F_{bio}) shall be determined using the procedure specified in 40 CFR part 63, appendix C of this chapter.

(iv) The MR_{bio} shall be calculated by using the mass flow rates and fraction of organic biodegraded determined in accordance with the requirements of paragraphs (b)(9)(ii) and (b)(9)(iii), respectively, of this section and the following equation:

$$MR_{bio} = E_b \times F_{bio}$$

where:

MR_{bio} = Actual organic mass biodegradation rate, kg/hr.

E_b = Waste organic mass flow entering process as determined in accordance with the requirements of paragraph (b)(5)(iv) of this section, kg/hr.

F_{bio} = Fraction of organic biodegraded as determined in accordance with the requirements of paragraph (b)(9)(iii) of this section.

(c) Procedure to determine the maximum organic vapor pressure of a hazardous waste in a tank.

(1) An owner or operator shall determine the maximum organic vapor pressure for each hazardous waste placed in a tank using Tank Level 1 controls in accordance with the standards specified in §265.1085(c) of this subpart.

(2) An owner or operator shall use either direct measurement as specified in paragraph (c)(3) of this section or knowledge of the waste as specified by paragraph (c)(4) of this section to determine the maximum organic vapor pressure which is representative of the hazardous waste composition stored or treated in the tank.

(3) Direct measurement to determine the maximum organic vapor pressure of a hazardous waste.

(i) Sampling. A sufficient number of samples shall be collected to be representative of the waste contained in the tank. 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 hazardous waste 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 on-site in the facility 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, Third Edition, September 1986, as amended by Update I, November 15, 1992 (incorporated by reference - refer to §260.11 of this chapter), or Method 25D in 40 CFR part 60, appendix A.

(ii) Analysis. Any appropriate one of the following methods may be used to analyze the samples and compute the maximum organic vapor pressure of the hazardous waste:

(A) Method 25E in 40 CFR part 60 appendix A;

(B) Methods described in American Petroleum Institute Publication 2517, Third Edition, February 1989, "Evaporative Loss from External Floating-Roof Tanks," (incorporated by reference - refer to §260.11 of this chapter);

(C) Methods obtained from standard reference texts;

(D) ASTM Method 2879-92 (incorporated by reference - refer to §260.11 of this chapter); or

(E) Any other method approved by the Regional Administrator.

(4) Use of knowledge to determine the maximum organic vapor pressure of the hazardous waste. Documentation shall be prepared and recorded that presents the information used as the basis for the owner's or operator's knowledge that the maximum organic vapor pressure of the hazardous waste is less than the maximum vapor pressure limit listed in §265.1085(b)(1)(i) of this subpart for the applicable tank design capacity category. An example of information that may be used is documentation that the hazardous waste is generated by a process for which at other locations it previously has been determined by direct measurement that the waste maximum organic vapor pressure is less than the maximum vapor pressure limit for the appropriate tank design capacity category.

(d) 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 hazardous waste having an organic concentration representative of the range of concentrations for the hazardous waste 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 hazardous waste placed in the waste management 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 in air at a concentration of approximately, but less than 10,000 ppmv.

(6) The background level shall 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 of 40 CFR part 60, appendix A. 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) The arithmetic difference between the maximum organic concentration indicated by the instrument and the background level shall be compared with the value of 500 ppmv except when monitoring a seal around a rotating shaft that passes through a cover opening, in which case the comparison shall be as specified in paragraph (d)(9) of this section. If the difference is less than 500 ppmv, then the potential leak interface is determined to operate with no detectable organic emissions.

(9) For the seals around a rotating shaft that passes

through a cover opening, the arithmetic difference between the maximum organic concentration indicated by the instrument and the background level shall be compared with the value of 10,000 ppmw. If the difference is less than 10,000 ppmw, then the potential leak interface is determined to operate with no detectable organic emissions.

42. Section 265.1085 is revised by replacing the entire section with the new section to read as follows:

§265.1085 Standards: Tanks

(a) The provisions of this section apply to the control of air pollutant emissions from tanks for which §265.1083(b) of this subpart references the use of this section for such air emission control.

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

(1) For a tank that manages hazardous waste that meets all of the conditions specified in paragraphs (b)(1)(i) through (b)(1)(iii) of this section, the owner or operator shall control air pollutant emissions from the tank in accordance with the Tank Level 1 controls specified in paragraph (c) of this section or the Tank Level 2 controls specified in paragraph (d) of this section.

(i) The hazardous waste in the tank has a maximum organic vapor pressure which is less than the maximum organic vapor pressure limit for the tank's design capacity category as follows:

(A) For a tank design capacity equal to or greater than 151 m^3, the maximum organic vapor pressure limit for the tank is 5.2 kPa.

(B) For a tank design capacity equal to or greater than 75 m^3 but less than 151 m^3, the maximum organic vapor pressure limit for the tank is 27.6 kPa.

(C) For a tank design capacity less than 75 m^3, the maximum organic vapor pressure limit for the tank is 76.6 kPa.

(ii) The hazardous waste in the tank is not heated by the owner or operator to a temperature that is greater than the temperature at which the maximum organic vapor pressure of the hazardous waste is determined for the purpose of complying with paragraph (b)(1)(i) of this section.

(iii) The hazardous waste in the tank is not treated by the owner or operator using a waste stabilization process, as defined in §265.1081 of this subpart.

(2) For a tank that manages hazardous waste that does not meet all of the conditions specified in paragraphs (b)(1)(i) through (b)(1)(iii) of this section, the owner or operator shall control air pollutant emissions from the tank by using Tank Level 2 controls in accordance with the requirements of paragraph (d) of this section. Examples of tanks required to use Tank Level 2 controls include: a tank used for a waste stabilization process; and

a tank for which the hazardous waste in the tank has a maximum organic vapor pressure that is equal to or greater than the maximum organic vapor pressure limit for the tank's design capacity category as specified in paragraph (b)(1)(i) of this section.

(c) Owners and operators controlling air pollutant emissions from a tank using Tank Level 1 controls shall meet the requirements specified in paragraphs (c)(1) through (c)(4) of this section:

(1) The owner or operator shall determine the maximum organic vapor pressure for a hazardous waste to be managed in the tank using Tank Level 1 controls before the first time the hazardous waste is placed in the tank. The maximum organic vapor pressure shall be determined using the procedures specified in §265.1084(c) of this subpart. Thereafter, the owner or operator shall perform a new determination whenever changes to the hazardous waste managed in the tank could potentially cause the maximum organic vapor pressure to increase to a level that is equal to or greater than the maximum organic vapor pressure limit for the tank design capacity category specified in paragraph (b)(1)(i) of this section, as applicable to the tank.

(2) The tank shall be equipped with a fixed roof designed to meet the following specifications:

(i) The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the hazardous waste in the tank. The fixed roof may be a separate cover installed on the tank (e.g., a removable cover mounted on an open-top tank) or may be an integral part of the tank structural design (e.g., a horizontal cylindrical tank equipped with a hatch).

(ii) The fixed roof shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between roof section joints or between the interface of the roof edge and the tank wall.

(iii) Each opening in the fixed roof shall be either:

(A) Equipped with a closure device 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 opening and the closure device; or

(B) Connected by a closed-vent system that is vented to a control device. The control device shall remove or destroy organics in the vent stream, and it shall be operating whenever hazardous waste is managed in the tank.

(iv) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: organic vapor permeability, the effects of any contact with the hazardous waste or its vapors managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

(3) Whenever a hazardous waste is in the tank, the fixed roof shall be installed with each closure device secured in the closed position except as follows:

(i) Opening of closure devices or removal of the fixed roof is allowed at the following times:

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

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

(ii) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the tank internal pressure in accordance with the tank design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the tank internal pressure is within the internal pressure operating range determined by the owner or operator based on the tank manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the tank internal pressure exceeds the internal pressure operating range for the tank as a result of loading operations or diurnal ambient temperature fluctuations.

(iii) Opening of a safety device, as defined in §265.1081 of this subpart, is allowed at any time conditions require doing so to avoid an unsafe condition.

(4) The owner or operator shall inspect the air emission control equipment in accordance with 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 pollutant emissions.

Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(ii) The owner or operator shall perform an initial inspection of the fixed roof and its closure devices on or before the date that the tank becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year except under the special conditions provided for in paragraph (l) 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 (k) of this section.

(iv) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §265.1090(b) of this subpart.

(d) Owners and operators controlling air pollutant emissions from a tank using Tank Level 2 controls shall use one of the following tanks:

(1) A fixed-roof tank equipped with an internal floating roof in accordance with the requirements specified in paragraph (e) of this section;

(2) A tank equipped with an external floating roof in accordance with the requirements specified in paragraph (f)

of this section;

(3) A tank vented through a closed-vent system to a control device in accordance with the requirements specified in paragraph (g) of this section;

(4) A pressure tank designed and operated in accordance with the requirements specified in paragraph (h) of this section; or

(5) 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.

(e) The owner or operator who controls air pollutant emissions from a tank using a fixed-roof with an internal floating roof shall meet the requirements specified in paragraphs (e)(1) through (e)(3) of this section.

(1) The tank shall be equipped with a fixed roof and an internal floating roof in accordance with the following requirements:

(i) The internal floating roof shall be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.

(ii) The internal floating roof shall be equipped with a continuous seal between the wall of the tank and the floating roof edge that meets either of the following requirements:

(A) A single continuous seal that is either a liquid-mounted seal or a metallic shoe seal, as defined in §265.1081 of this subpart; or

(B) Two continuous seals mounted one above the other. The lower seal may be a vapor-mounted seal.

(iii) The internal floating roof shall meet the following specifications:

(A) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

(B) Each opening in the internal floating roof shall be equipped with a gasketed cover or a gasketed lid except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains.

(C) Each penetration of the internal floating roof for the purpose of sampling shall have a slit fabric cover that covers at least 90 percent of the opening.

(D) Each automatic bleeder vent and rim space vent shall be gasketed.

(E) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

(F) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

(2) The owner or operator shall operate the tank in accordance with the following requirements:

(i) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be completed as soon as practical.

(ii) Automatic bleeder vents are to be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

(iii) Prior to filling the tank, each cover, access hatch, gauge float well or lid on any opening in the internal floating roof shall be bolted or fastened closed (i.e., no visible gaps). Rim space vents are to be set to open only when the internal floating roof is not floating or when the pressure beneath the rim exceeds the manufacturer's recommended setting.

(3) The owner or operator shall inspect the internal floating roof in accordance with the procedures specified as follows:

(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 pollutant 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 hazardous waste surface 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 in paragraph (e)(3)(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 12 months 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.

(iii) As an alternative to performing the inspections specified in paragraph (e)(3)(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.

(iv) Prior to each inspection required by paragraph (e)(3)(ii) or (e)(3)(iii) of this section, the owner or operator shall notify the Regional Administrator in advance of each inspection to provide the Regional Administrator with the opportunity to have an observer present during the inspection. The owner or operator shall notify the Regional Administrator of the date and location of the inspection as follows:

(A) Prior to each visual inspection of an internal floating roof in a tank that has been emptied and degassed, written notification shall be prepared and sent by the owner or operator so that it is received by the Regional Administrator at least 30 calendar days before refilling the tank except when an inspection is not planned as provided for in paragraph (e)(3)(iv)(B) of this section.

(B) When a visual inspection is not planned and the owner or operator could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator shall notify the Regional Administrator as soon as possible, but no later than 7 calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Regional Administrator at least 7 calendar days before refilling the tank.

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

(vi) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §265.1090(b) of this subpart.

(f) The owner or operator who controls air pollutant emissions from a tank using an external floating roof shall meet the requirements specified in paragraphs (f)(1) through (f)(3) of this section.

(1) The owner or operator shall design the external floating roof in accordance with the following requirements:

(i) The external floating roof shall be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.

(ii) The floating roof shall be equipped with two continuous seals, one above the other, between the wall of the tank and the roof edge. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

(A) The primary seal shall be a liquid-mounted seal or a metallic shoe seal, as defined in §265.1081 of this subpart. The total area of the gaps between the tank wall and the primary seal shall not exceed 212 square centimeters (cm^2) 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 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 above the liquid surface.

(B) The secondary seal shall be mounted above the primary seal and cover the annular space between the floating roof and the wall of the tank. The total area of the gaps between the tank wall and the secondary seal shall not exceed 21.2 square centimeters (cm^2) per meter of tank diameter, and the width of any portion of these gaps shall not exceed 1.3 centimeters (cm).

(iii) The external floating roof shall meet the following specifications:

(A) Except for automatic bleeder vents (vacuum breaker vents) and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface.

(B) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid.

(C) Each access hatch and each gauge float well shall be equipped with a cover designed to be bolted or fastened when the cover is secured in the closed position.

(D) Each automatic bleeder vent and each rim space vent shall be equipped with a gasket.

(E) Each roof drain that empties into the liquid managed in the tank shall be equipped with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

(F) Each unslotted and slotted guide pole well shall be equipped with a gasketed sliding cover or a flexible fabric sleeve seal.

(G) Each unslotted guide pole shall be equipped with a gasketed cap on the end of the pole.

(H) Each slotted guide pole shall be equipped with a gasketed float or other device which closes off the liquid surface from the atmosphere.

(I) Each gauge hatch and each sample well shall be equipped with a gasketed cover.

(2) The owner or operator shall operate the tank in accordance with the following requirements:

(i) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be completed as soon as practical.

(ii) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be secured and maintained in a closed position at all times except when the closure device must be open for access.

(iii) Covers on each access hatch and each gauge float well shall be bolted or fastened when secured in the closed position.

(iv) Automatic bleeder vents shall be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

(v) Rim space vents shall be set to open only at those times that the roof is being floated off the roof leg supports or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

(vi) The cap on the end of each unslotted guide pole shall be secured in the closed position at all times except when measuring the level or collecting samples of the liquid in the tank.

(vii) The cover on each gauge hatch or sample well shall be secured in the closed position at all times except when the hatch or well must be opened for access.

(viii) Both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the tank in a continuous fashion except during inspections.

(3) The owner or operator shall inspect the external floating roof in accordance with the procedures specified as follows:

(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 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every 5 years.

(B) The owner or operator shall perform measurements of gaps between the tank wall and the secondary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every year.

(C) If a tank ceases to hold hazardous waste for a period of 1 year or more, subsequent introduction of hazardous waste into the tank shall be considered an initial operation for the purposes of paragraphs (f)(3)(i)(A) and (f)(3)(i)(B) of this section.

(D) The owner or operator 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) 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 (f)(3) 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 perimeter of the tank. These total gap areas for the primary seal and secondary seal are then are compared to the respective standards for the seal type as specified in paragraph (f)(1)(ii) of this section.

(E) In the event that the seal gap measurements do not conform to the specifications in paragraph (f)(1)(ii) of this section, the owner or operator shall repair the defect in accordance with the requirements of paragraph (k) of this section.

(F) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §265.1090(b) 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 pollutant 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 an initial inspection of the external floating roof and its closure devices on or before the date that the tank becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in paragraph (l) of this section.

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

(D) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §265.1090(b) of this subpart.

(iii) Prior to each inspection required by paragraph (f)(3)(i) or (f)(3)(ii) of this subpart, the owner or operator shall notify the Regional Administrator in advance of each inspection to provide the Regional Administrator with the opportunity to have an observer present during the inspection. The owner or operator shall notify the Regional Administrator of the date and location of the inspection as follows:

(A) Prior to each inspection to measure external floating roof seal gaps as required under paragraph (f)(3)(i) of this section, written notification shall be prepared and sent by the owner or operator so that it is received by the Regional Administrator at least 30 calendar days before the date the measurements are scheduled to be performed.

(B) Prior to each visual inspection of an external floating roof in a tank that has been emptied and degassed, written notification shall be prepared and sent by the owner or operator so that it is received by the Regional Administrator at least 30 calendar days before refilling the tank except when an inspection is not planned as provided for in paragraph (f)(3)(iii)(C) of this section.

(C) When a visual inspection is not planned and the owner or operator could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator shall notify the Regional Administrator as soon as possible, but no later than 7 calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Regional Administrator at least 7 calendar days before refilling the tank.

(g) The owner or operator who controls air pollutant emissions from a tank by venting the tank to a control device shall meet the requirements specified in paragraphs (g)(1) through (g)(3) of this section.

(1) The tank shall be covered by a fixed roof and vented directly through a closed-vent system to a control device in accordance with the following requirements:

(i) The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the tank.

(ii) Each opening in the fixed roof not vented to the control device shall be equipped with a closure device. If the pressure in the vapor headspace underneath the fixed roof is less than atmospheric pressure when the control device is operating, the closure devices 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 cover opening and the closure device. If the pressure in the vapor headspace underneath the fixed roof is equal to or greater than atmospheric pressure when the control device is operating, the closure device shall be designed to operate with no detectable organic emissions.

(iii) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: organic vapor permeability, the effects of any contact with the liquid and its vapor managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

(iv) The closed-vent system and control device shall be designed and operated in accordance with the requirements of §265.1088 of this subpart.

(2) Whenever a hazardous waste is in the tank, the fixed roof shall be installed with each closure device secured in the closed position and the vapor headspace underneath the fixed roof vented to the control device except as follows:

(i) Venting to the control device is not required, and opening of closure devices or removal of the fixed roof is allowed at the following times:

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

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

(ii) Opening of a safety device, as defined in §265.1081 of this subpart, is allowed at any time conditions require doing so to avoid an unsafe condition.

(3) The owner or operator shall inspect and monitor the air emission control equipment in accordance with the following procedures:

(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 pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(ii) The closed-vent system and control device shall be inspected and monitored by the owner or operator in accordance with the procedures specified in §265.1088 of this subpart.

(iii) The owner or operator shall perform an initial inspection of the air emission control equipment on or before the date that the tank becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in paragraph (l) of this section.

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

(v) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §265.1090(b) of this subpart.

(h) The owner or operator who controls air pollutant emissions by using a pressure tank shall meet the following requirements.

(1) The tank shall be designed not to vent to the atmosphere as a result of compression of the vapor headspace in the tank during filling of the tank to its design capacity.

(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 §265.1084(d) of this subpart.

(3) Whenever a hazardous waste is in the tank, the tank shall be operated as a closed system that does not vent to the atmosphere except in the event that a safety device, as defined in §265.1081 of this subpart, is required to open to avoid an unsafe condition.

(i) The owner or operator who controls air pollutant 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)(4) of this section.

(1) The tank shall be located inside an enclosure. The enclosure shall be 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 means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The owner or operator shall 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" initially when the enclosure is first installed and, thereafter, annually.

(2) The enclosure shall be vented through a closed-vent

system to an enclosed combustion control device that is designed and operated in accordance with the standards for either a vapor incinerator, boiler, or process heater specified in §265.1088 of this subpart.

(3) Safety devices, as defined in §265.1081 of this subpart, may be installed and operated as necessary on any enclosure, closed-vent system, or control device used to comply with the requirements of paragraphs (i)(1) and (i)(2) of this section.

(4) The owner or operator shall inspect and monitor the closed-vent system and control device as specified in §265.1088 of this subpart.

(j) The owner or operator shall transfer hazardous waste to a tank subject to this section in accordance with the following requirements:

(1) Transfer of hazardous waste, except as provided in paragraph (j)(2) of this section, to the tank from another tank subject to this section or from a surface impoundment subject to §265.1086 of this subpart shall be conducted using continuous hard-piping or another closed system that does not allow exposure of the hazardous waste to the atmosphere. For the purpose of complying with this provision, an individual drain system is considered to be a closed system when it meets the requirements of 40 CFR part 63, subpart RR - National Emission Standards for Individual Drain Systems.

(2) The requirements of paragraph (j)(1) do not apply when transferring a hazardous waste to the tank under any of the following conditions:

(i) The hazardous waste meets the average VO concentration conditions specified in §265.1083(c)(1) of this subpart at the point of waste origination.

(ii) The hazardous waste has been treated by an organic destruction or removal process to meet the requirements in §265.1083(c)(2) of this subpart.

(k) The owner or operator shall repair each defect detected during an inspection performed in accordance with the requirements of paragraphs (c)(4), (e)(3), (f)(3), or (g)(3) of this section as follows:

(1) 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 (k)(2) of this section.

(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 hazardous waste normally managed in the tank. In this case, the owner or operator shall repair the defect the next time the process or unit that is generating the hazardous waste managed in the tank

stops operation. Repair of the defect shall be completed before the process or unit resumes operation.

(l) Following the initial inspection and monitoring of the cover as required by the applicable provisions of this subpart, subsequent inspection and monitoring may be performed at intervals longer than 1 year under the following special conditions:

(1) In the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions, then the owner or operator may designate a cover as an "unsafe to inspect and monitor cover" and comply with all of the following requirements:

(i) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required.

(ii) Develop and implement a written plan and schedule to inspect and monitor the cover, using the procedures specified in the applicable section of this subpart, as frequently as practicable during those times when a worker can safely access the cover.

(2) In the case when a tank is buried partially or entirely underground, an owner or operator is required to inspect and monitor, as required by the applicable provisions of this section, only those portions of the tank cover and those connections to the tank (e.g., fill ports, access hatches, gauge wells, etc.) that are located on or

above the ground surface.

43. Section 265.1086 is revised by replacing the entire section with the new section to read as follows:

§265.1086 Standards: surface impoundments.

(a) The provisions of this section apply to the control of air pollutant emissions from surface impoundments for which §265.1083(b) of this subpart references the use of this section for such air emission control.

(b) The owner or operator shall control air pollutant emissions from the surface impoundment by installing and operating either of the following:

(1) A floating membrane cover in accordance with the provisions specified in paragraph (c) of this section; or

(2) A cover that is vented through a closed-vent system to a control device in accordance with the provisions specified in paragraph (d) of this sections.

(c) The owner or operator who controls air pollutant emissions from a surface impoundment using a floating membrane cover shall meet the requirements specified in paragraphs (c)(1) through (c)(3) of this section.

(1) The surface impoundment shall be equipped with a floating membrane cover designed to meet the following specifications:

(i) The floating membrane cover shall be designed to float on the liquid surface during normal operations and form a continuous barrier over the entire surface area of the liquid.

(ii) The cover shall be fabricated from a synthetic membrane material that is either:

(A) High density polyethylene (HDPE) with a thickness no less than 2.5 millimeters (mm); or

(B) A material or a composite of different materials determined to have both organic permeability properties that are equivalent to those of the material listed in paragraph (c)(1)(ii)(A) of this section and chemical and physical properties that maintain the material integrity for the intended service life of the material.

(iii) The cover shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between cover section seams or between the interface of the cover edge and its foundation mountings.

(iv) Except as provided for in paragraph (c)(1)(v) of this section, each opening in the floating membrane cover shall be equipped with a closure device 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 cover opening and the closure device.

(v) The floating membrane cover may be equipped with one or more emergency cover drains for removal of stormwater. Each emergency cover drain shall be equipped with a slotted membrane fabric cover that covers at least

90 percent of the area of the opening or a flexible fabric sleeve seal.

(vi) The closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the closure devices throughout their intended service life. Factors to be considered when selecting the materials of construction and designing the cover and closure devices shall include: organic vapor permeability; the effects of any contact with the liquid and its vapor managed in the surface impoundment; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the surface impoundment on which the floating membrane cover is installed.

(2) Whenever a hazardous waste is in the surface impoundment, the floating membrane cover shall float on the liquid and each closure device shall be secured in the closed position except as follows:

(i) Opening of closure devices or removal of the cover is allowed at the following times:

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

(B) To remove accumulated sludge or other residues from the bottom of surface impoundment.

(ii) Opening of a safety device, as defined in §265.1081 of this subpart, is allowed at any time conditions require doing so to avoid an unsafe condition.

(3) The owner or operator shall inspect the floating membrane cover in accordance with the following procedures:

(i) The floating membrane cover and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover section seams or between the interface of the cover edge and its foundation mountings; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(ii) The owner or operator shall perform an initial inspection of the floating membrane cover and its closure devices on or before the date that the surface impoundment becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in paragraph (g) 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 (f) of this section.

(iv) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §265.1090(c) of this subpart.

(d) The owner or operator who controls air pollutant emissions from a surface impoundment using a cover vented to a control device shall meet the requirements specified in paragraphs (d)(1) through (d)(3) of this section.

(1) The surface impoundment shall be covered by a cover and vented directly through a closed-vent system to a control device in accordance with the following requirements:

(i) The cover and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the surface impoundment.

(ii) Each opening in the cover not vented to the control device shall be equipped with a closure device. If the pressure in the vapor headspace underneath the cover is less than atmospheric pressure when the control device is operating, the closure devices 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 cover opening and the closure device. If the pressure in the vapor headspace underneath the cover is equal to or greater than atmospheric pressure when the control device is operating, the closure device shall be designed to operate with no detectable organic emissions using the procedure specified in §265.1084(d) of this subpart.

(iii) The cover and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the cover and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the cover and closure devices shall include: organic vapor permeability; the effects of any contact with the liquid or its vapors managed in the surface impoundment; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the surface impoundment on which the cover is installed.

(iv) The closed-vent system and control device shall be designed and operated in accordance with the requirements of §265.1088 of this subpart.

(2) Whenever a hazardous waste is in the surface impoundment, the cover shall be installed with each closure device secured in the closed position and the vapor headspace underneath the cover vented to the control device except as follows:

(i) Venting to the control device is not required, and opening of closure devices or removal of the cover is allowed at the following times:

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

(B) To remove accumulated sludge or other residues from the bottom of surface impoundment.

(ii) Opening of a safety device, as defined in §265.1081 of this subpart, is allowed at any time conditions require doing so to avoid an unsafe condition.

(3) The owner or operator shall inspect and monitor the air emission control equipment in accordance with the following procedures:

(i) The surface impoundment cover and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover section seams or between the interface of the cover edge and its foundation mountings; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(ii) The closed-vent system and control device shall be inspected and monitored by the owner or operator in accordance with the procedures specified in §265.1088 of this subpart.

(iii) The owner or operator shall perform an initial inspection of the air emission control equipment on or before the date that the surface impoundment becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in paragraph (g) of this section.

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

(v) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §265.1090(c) of this subpart.

(e) The owner or operator shall transfer hazardous waste to a surface impoundment subject to this section in accordance with the following requirements:

(1) Transfer of hazardous waste, except as provided in paragraph (e)(2) of this section, to the surface impoundment

from another surface impoundment subject to this section or from a tank subject to §265.1085 of this subpart shall be conducted using continuous hard-piping or another closed system that does not allow exposure of the waste to the atmosphere. For the purpose of complying with this provision, an individual drain system is considered to be a closed system when it meets the requirements of 40 CFR part 63, subpart RR - National Emission Standards for Individual Drain Systems.

(2) The requirements of paragraph (e)(1) of this section do not apply when transferring a hazardous waste to the surface impoundment under either of the following conditions:

(i) The hazardous waste meets the average VO concentration conditions specified in §265.1083(c)(1) of this subpart at the point of waste origination.

(ii) The hazardous waste has been treated by an organic destruction or removal process to meet the requirements in §265.1083(c)(2) of this subpart.

(f) The owner or operator shall repair each defect detected during an inspection performed in accordance with the requirements of paragraph (c)(3) or (d)(3) of this section as follows:

(1) 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 (f)(2) of this section.

(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 surface impoundment and no alternative capacity is available at the site to accept the hazardous waste normally managed in the surface impoundment. In this case, the owner or operator shall repair the defect the next time the process or unit that is generating the hazardous waste managed in the tank stops operation. Repair of the defect shall be completed before the process or unit resumes operation.

(g) Following the initial inspection and monitoring of the cover as required by the applicable provisions of this subpart, subsequent inspection and monitoring may be performed at intervals longer than 1 year in the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions. In this case, the owner or operator may designate the cover as an "unsafe to inspect and monitor cover" and comply with all of the following requirements:

(1) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required.

(2) Develop and implement a written plan and schedule

to inspect and monitor the cover using the procedures specified in the applicable section of this subpart as frequently as practicable during those times when a worker can safely access the cover.

44. Section 265.1087 is revised by replacing the entire section with the new section to read as follows:

§265.1087 Standards: Containers

(a) The provisions of this section apply to the control of air pollutant emissions from containers for which §265.1083(b) of this subpart references the use of this section for such air emission control.

(b) General requirements.

(1) The owner or operator shall control air pollutant 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 (b)(2) of this section apply to the container.

(i) For a container having a design capacity greater than 0.1 m^3 and less than or equal to 0.46 m^3, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in paragraph (c) of this section.

(ii) For a container having a design capacity greater than 0.46 m^3 that is not in light material service, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in paragraph (c) of this section.

(iii) For a container having a design capacity greater than 0.46 m^3 that is in light material service, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 2 standards specified in paragraph (d) of this section.

(2) When a container having a design capacity greater than 0.1 m^3 is used for treatment of a hazardous waste by a waste stabilization process, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 3 standards specified in paragraph (e) of this section at those times during the waste stabilization process when the hazardous waste in the container is exposed to the atmosphere.

(c) Container Level 1 standards.

(1) A container using Container Level 1 controls is one of the following:

(i) A container that meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as specified in paragraph (f) of this section.

(ii) A container equipped with a cover and closure devices that form a continuous barrier over the container openings such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps, or other open spaces into the interior of the container. The cover may be a separate cover installed on the container (e.g., a lid on a drum or a suitably secured tarp on a roll-off box) or may be an integral part of the container structural design (e.g., a "portable tank" or bulk cargo container equipped with a screw-type cap).

(iii) An open-top container in which an organic-vapor suppressing barrier is placed on or over the hazardous waste in the container such that no hazardous waste is exposed to the atmosphere. One example of such a barrier is application of a suitable organic-vapor suppressing foam.

(2) A container used to meet the requirements of paragraph (c)(1)(ii) or (c)(1)(iii) of this section shall be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the hazardous waste to the atmosphere and to maintain the equipment integrity for as long as it is in service. Factors to be considered in selecting the materials of construction and designing the cover and closure devices shall include: organic vapor permeability, the effects of contact with the hazardous waste or its vapor managed in the container; the effects of outdoor exposure of the closure device or cover material to wind, moisture, and sunlight; and the operating practices for which the container is intended to be used.

(3) Whenever a hazardous waste is in a container using

Container Level 1 controls, the owner or operator shall install all covers and closure devices for the container, as applicable to the container, and secure and maintain each closure device in the closed position except as follows:

(i) Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container as follows:

(A) In the case when the container is filled to the intended final level in one continuous operation, the owner or operator shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

(B) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

(ii) Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:

(A) For the purpose of meeting the requirements of this section, an empty container as defined in 40 CFR 261.7(b) may be open to the atmosphere at any time (i.e., covers and closure devices are not required to be secured in the closed position on an empty container).

(B) In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in 40 CFR 261.7(b), the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

(iii) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

(iv) Opening of a spring-loaded, pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the container internal pressure in accordance with the design specifications of the container. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the owner or operator based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.

(v) Opening of a safety device, as defined in §265.1081 of this subpart, is allowed at any time conditions require doing so to avoid an unsafe condition.

(4) The owner or operator of containers using Container Level 1 controls shall inspect the containers and their covers and closure devices as follows:

(i) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied (i.e., does not meet the conditions for an empty container as specified in 40 CFR 261.7(b)) within 24 hours after the container is accepted at the facility, the owner or operator shall visually inspect the container and its cover and closure devices 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 (c)(4)(iii) of this section.

(ii) In the case when a container used for managing hazardous waste remains at the facility for a period of 1 year or more, the owner or operator shall visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, 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 (c)(4)(iii) of this section.

(iii) When a defect is detected for the container, cover, or closure devices, the owner or operator shall make first efforts at repair of the defect no later than 24 hours after detection, and repair shall 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 hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired.

(5) The owner or operator shall maintain at the facility a copy of the procedure used to determine that containers with capacity of 0.46 m^3 or greater, which do not meet applicable DOT regulations as specified in paragraph (f) of this section, are not managing hazardous waste in light material service.

(d) Container Level 2 standards.

(1) A container using Container Level 2 controls is one of the following:

(i) A container that meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as specified in paragraph (f) of this section.

(ii) A container that operates with no detectable organic emissions as defined in §265.1081 of this subpart and determined in accordance with the procedure specified in paragraph (g) of this section.

(iii) A container that has been demonstrated within the preceding 12 months to be vapor-tight by using 40 CFR part 60, appendix A, Method 27 in accordance the procedure specified in paragraph (h) of this section.

(2) Transfer of hazardous waste in or out of a container using Container Level 2 controls shall be conducted in such a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good engineering and safety practices for handling flammable, ignitable, explosive, reactive or other hazardous materials. Examples of container loading procedures that the EPA considers to meet the requirements of this paragraph include using any one of the following: a submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the hazardous waste is filled and subsequently purging the transfer line before removing it from the container opening.

(3) Whenever a hazardous waste is in a container using Container Level 2 controls, the owner or operator shall

install all covers and closure devices for the container, and secure and maintain each closure device in the closed position except as follows:

(i) Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container as follows:

(A) In the case when the container is filled to the intended final level in one continuous operation, the owner or operator shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

(B) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

(ii) Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:

(A) For the purpose of meeting the requirements of this section, an empty container as defined in 40 CFR 261.7(b) may be open to the atmosphere at any time (i.e., covers and closure devices are not required to be secured in the closed position on an empty container).

(B) In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in 40 CFR 261.7(b), the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

(iii) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

(iv) Opening of a spring-loaded, pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emission when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the owner or operator based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.

(v) Opening of a safety device, as defined in §265.1081 of this subpart, is allowed at any time conditions require doing so to avoid an unsafe condition.

(4) The owner or operator of containers using Container Level 2 controls shall inspect the containers and their covers and closure devices as follows:

(i) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied (i.e., does not meet the conditions for an empty container as specified in 40 CFR 261.7(b)) within 24 hours after the container arrives at the facility, the owner or operator shall visually inspect the container and its cover and closure devices 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 (d)(4)(iii) of this section.

(ii) In the case when a container used for managing hazardous waste remains at the facility for a period of 1 year or more, the owner or operator shall visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, 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 (d)(4)(iii) of this section.

(iii) When a defect is detected for the container, cover, or closure devices, the owner or operator shall make first efforts at repair of the defect no later than 24 hours after detection, and repair shall 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 hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired.

(e) Container Level 3 standards.

(1) A container using Container Level 3 controls is one of the following:

(i) A container that is vented directly through a closed-vent system to a control device in accordance with the requirements of paragraph (e)(2)(ii) of this section.

(ii) A container that is vented inside an enclosure which is exhausted through a closed-vent system to a control device in accordance with the requirements of paragraphs (e)(2)(i) and (e)(2)(ii) of this section.

(2) The owner or operator shall meet the following requirements, as applicable to the type of air emission control equipment selected by the owner or operator:

(i) The container enclosure shall be 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 containers through the enclosure by conveyor or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The owner or operator shall 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" initially when the enclosure is first installed and, thereafter, annually.

(ii) The closed-vent system and control device shall be designed and operated in accordance with the requirements of §265.1088 of this subpart.

(3) Safety devices, as defined in §265.1081 of this subpart, may be installed and operated as necessary on any container, enclosure, closed-vent system, or control device used to comply with the requirements of paragraph (e)(1) of this section.

(4) Owners and operators using Container Level 3 controls in accordance with the provisions of this subpart shall inspect and monitor the closed-vent systems and control devices as specified in §265.1088 of this subpart.

(5) Owners and operators that use Container Level 3 controls in accordance with the provisions of this subpart

shall prepare and maintain the records specified in §265.1090(d) of this subpart.

(f) For the purpose of compliance with paragraph (c)(1)(i) or (d)(1)(i) of this section, containers shall be used that meet the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as follows:

(1) The container meets the applicable requirements specified in 49 CFR part 178 - Specifications for Packaging or 49 CFR part 179 - Specifications for Tank Cars.

(2) Hazardous waste is managed in the container in accordance with the applicable requirements specified in 49 CFR part 107, subpart B - Exemptions; 49 CFR part 172 - Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements; 49 CFR part 173 - Shippers - General Requirements for Shipments and Packages; and 49 CFR part 180 - Continuing Qualification and Maintenance of Packagings.

(3) For the purpose of complying with this subpart, no exceptions to the 49 CFR part 178 or part 179 regulations are allowed except as provided for in paragraph (f)(4) of this section.

(4) For a lab pack that is managed in accordance with the requirements of 49 CFR part 178 for the purpose of complying with this subpart, an owner or operator may comply

with the exceptions for combination packagings specified in 49 CFR 173.12(b).

(g) The owner or operator shall use the procedure specified in §265.1084(d) of this subpart for determining a container operates with no detectable organic emissions for the purpose of complying with paragraph (d)(1)(ii) of this section.

(1) Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the container, its cover, and associated closure devices, as applicable to the container, shall be checked. Potential leak interfaces that are associated with containers include, but are not limited to: the interface of the cover rim and the container wall; the periphery of any opening on the container or container 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 container is filled with a material having a volatile organic concentration representative of the range of volatile organic concentrations for the hazardous wastes expected to be managed in this type of container. During the test, the container cover and closure devices shall be secured in the closed position.

(h) Procedure for determining a container to be vapor-tight using Method 27 of 40 CFR part 60, appendix A for the purpose of complying with paragraph (d)(1)(iii) of this section.

(1) The test shall be performed in accordance with Method 27 of 40 CFR part 60, appendix A of this chapter.

(2) A pressure measurement device shall be used that has a precision of ± 2.5 mm water and that is capable of measuring above the pressure at which the container is to be tested for vapor tightness.

(3) If the test results determined by Method 27 indicate that the container sustains a pressure change less than or equal to 750 Pascals within 5 minutes after it is pressurized to a minimum of 4,500 Pascals, then the container is determined to be vapor-tight.

45. Section 265.1088 is amended by revising paragraph (b)(3), adding paragraph (b)(4), revising paragraphs (c)(2), (c)(3)(ii), and (c)(5)(i)(D)-(E), and adding paragraph (c)(7) to read as follows:

§265.1088 Standards: Closed-vent systems and control devices.

* * * * *

(b) * * *

(3) In the case when the closed-vent system includes bypass devices that could be used to divert the gas or vapor stream to the atmosphere before entering the control device, each bypass device shall be equipped with either a flow indicator as specified in paragraph (b)(3)(i) of this

section or a seal or locking device as specified in paragraph (b)(3)(ii) of this section. For the purpose of complying with this paragraph, low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, spring-loaded pressure relief valves, and other fittings used for safety purposes are not considered to be bypass devices.

(i) If a flow indicator is used to comply with paragraph (b)(3) of this section, the indicator shall be installed at the inlet to the bypass line used to divert gases and vapors from the closed-vent system to the atmosphere at a point upstream of the control device inlet. For this paragraph, a flow indicator means a device which indicates the presence of either gas or vapor flow in the bypass line.

(ii) If a seal or locking device is used to comply with paragraph (b)(3) of this section, the device shall 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 closed position such that the bypass device cannot be opened without breaking the seal or removing the lock. Examples of such devices include, but are not limited to, a car-seal or a lock-and-key configuration valve. The owner or operator shall visually inspect the seal or closure mechanism at least once every month to verify that the bypass mechanism is maintained in the closed position.

(4) The closed-vent system shall be inspected and monitored by the owner or operator in accordance with the procedure specified in 40 CFR 265.1033(k).

(c) * * *

(2) The owner or operator who elects to use a closed-vent system and control device to comply with the requirements of this section shall comply with the requirements specified in paragraphs (c)(2)(i) through (c)(2)(vi) of this section.

(i) Periods of planned routine maintenance of the control device, during which the control device does not meet the specifications of paragraphs (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this section, as applicable, shall not exceed 240 hours per year.

(ii) The specifications and requirements in paragraphs (c)(1)(i), (c)(1)(ii), and (c)(1)(iii) of this section for control devices do not apply during periods of planned routine maintenance.

(iii) The specifications and requirements in paragraphs (c)(1)(i), (c)(1)(ii), and (c)(1)(iii) of this section for control devices do not apply during a control device system malfunction.

(iv) The owner or operator shall demonstrate compliance with the requirements of paragraph (c)(2)(i) of this section (i.e., planned routine maintenance of a control device, during which the control device does not meet the specifications of paragraphs (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this section, as applicable, shall not exceed 240 hours per year) by recording the information specified in §265.1090(e)(1)(v) of this subpart.

(v) The owner or operator shall correct control device system malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of air pollutants.

(vi) The owner or operator shall operate the closed-vent system such that gases, vapors, and/or fumes are not actively vented to the control device during periods of planned maintenance or control device system malfunction (i.e., periods when the control device is not operating or not operating normally) except in cases when it is necessary to vent the gases, vapors, or fumes to avoid an unsafe condition or to implement malfunction corrective actions or planned maintenance actions.

* * * * *

(3) * * *

(i) * * *

(ii) All carbon removed from the control device shall be managed in accordance with the requirements of 40 CFR 265.1033(m).

* * * * *

(5) * * *

(i) * * *

(D) A boiler or industrial furnace burning hazardous waste for which the owner or operator has been issued a final permit under 40 CFR part 270 and has designed and operates the unit in accordance with the requirements of 40 CFR part 266, subpart H; or

(E) A boiler or industrial furnace burning hazardous waste for which the owner or operator has designed and operates in accordance with the interim status requirements of 40 CFR part 266, subpart H.

* * * * *

(7) The control device shall be inspected and monitored by the owner or operator in accordance with the procedures specified in 40 CFR 265.1033(f)(2) and 40 CFR 265.1033(k). The readings from each monitoring device required by 40 CFR 265.1033(f)(2) shall be inspected at least once each operating day to check control device operation. Any necessary corrective measures shall be immediately implemented to ensure the control device is operated in compliance with the requirements of this section.

46. Section 265.1089 is revised by replacing the entire section with the new section to read as follows:

§265.1089 Inspection and monitoring requirements.

(a) The owner or operator shall inspect and monitor air emission control equipment used to comply with this subpart in accordance with the applicable requirements specified in §265.1085 through §265.1088 of this subpart.

(b) The owner or operator shall develop and implement a written plan and schedule to perform the inspections and monitoring required by paragraph (a) of this section. The owner or operator shall incorporate this plan and schedule into the facility inspection plan required under 40 CFR 265.15.

47. Section 265.1090 is revised by replacing the entire section with the new section to read as follows:

§265.1090 Recordkeeping requirements.

(a) Each owner or operator of a facility subject to requirements in this subpart shall record and maintain the information specified in paragraphs (b) through (i) of this section, as applicable to the facility. Except for air emission control equipment design documentation and information required by paragraph (i) of this section, records required by this section shall be maintained in the operating record for a minimum of 3 years. Air emission control equipment design documentation shall be maintained in the operating record until the air emission control equipment is replaced or otherwise no longer in service. Information required by paragraph (i) of this section shall be maintained in the operating record for as long as the tank or container is not using air emission controls specified in §§264.1084 through 264.1087 of this subpart in accordance with the conditions specified in §264.1084(d) of this subpart.

(b) The owner or operator of a tank using air emission controls in accordance with the requirements of §265.1085 of this subpart shall prepare and maintain records for the tank that include the following information:

(1) For each tank using air emission controls in accordance with the requirements of §265.1085 of this subpart, the owner or operator shall record:

(i) A tank identification number (or other unique identification description as selected by the owner or operator).

(ii) A record for each inspection required by §265.1085 of this subpart that includes the following information:

(A) Date inspection was conducted.

(B) For each defect detected during the inspection, the following information: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of §265.1085 of this subpart, the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.

(2) In addition to the information required by paragraph (b)(1) of this section, the owner or operator shall record the following information, as applicable to the tank:

(i) The owner or operator using a fixed roof to comply with the Tank Level 1 control requirements specified in §265.1085(c) of this subpart shall prepare and maintain records for each determination for the maximum organic vapor pressure of the hazardous waste in the tank performed in accordance with the requirements of §265.1085(c) of this subpart. The records shall include the date and time the samples were collected, the analysis method used, and the analysis results.

(ii) The owner or operator using an internal floating roof to comply with the Tank Level 2 control requirements specified in §265.1085(e) of this subpart shall prepare and maintain documentation describing the floating roof design.

(iii) Owners and operators using an external floating roof to comply with the Tank Level 2 control requirements specified in §265.1085(f) of this subpart shall prepare and maintain the following records:

(A) Documentation describing the floating roof design and the dimensions of the tank.

(B) Records for each seal gap inspection required by §265.1085(f)(3) of this subpart describing the results of the seal gap measurements. The records shall include the date that the measurements were performed, the raw data obtained for the measurements, and the calculations of the total gap surface area. In the event that the seal gap measurements do not conform to the specifications in §265.1085(f)(1) of this subpart, the records shall include a description of the repairs that were made, the date the repairs were made, and the date the tank was emptied, if necessary.

(iv) Each owner or operator using an enclosure to comply with the Tank Level 2 control requirements specified in §265.1085(i) of this subpart shall prepare and maintain the following records:

(A) Records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of 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.

(B) Records required for the closed-vent system and control device in accordance with the requirements of paragraph (e) of this section.

(c) The owner or operator of a surface impoundment using air emission controls in accordance with the requirements of §265.1086 of this subpart shall prepare and maintain records for the surface impoundment that include the following information:

(1) A surface impoundment identification number (or other unique identification description as selected by the owner or operator).

(2) Documentation describing the floating membrane cover or cover design, as applicable to the surface

impoundment, that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the specifications listed in §265.1086(c) of this subpart.

(3) A record for each inspection required by §265.1086 of this subpart that includes the following information:

(A) Date inspection was conducted.

(B) For each defect detected during the inspection the following information: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of §265.1086(f) of this subpart, the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.

(4) For a surface impoundment equipped with a cover and vented through a closed-vent system to a control device, the owner or operator shall prepare and maintain the records specified in paragraph (e) of this section.

(d) The owner or operator of containers using Container Level 3 air emission controls in accordance with the requirements of §265.1087 of this subpart shall prepare and maintain records that include the following information:

(1) Records for the most recent set of calculations and measurements performed by the owner or operator to verify

that the enclosure meets the criteria of 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.

(2) Records required for the closed-vent system and control device in accordance with the requirements of paragraph (e) of this section.

(e) The owner or operator using a closed-vent system and control device in accordance with the requirements of §265.1088 of this subpart shall prepare and maintain records that include the following information:

(1) Documentation for the closed-vent system and control device that includes:

(i) Certification that is signed and dated by the owner or operator stating that the control device is designed to operate at the performance level documented by a design analysis as specified in paragraph (e)(1)(ii) of this section or by performance tests as specified in paragraph (e)(1)(iii) of this section when the tank, surface impoundment, or container is or would be operating at capacity or the highest level reasonably expected to occur.

(ii) If a design analysis is used, then design documentation as specified in 40 CFR 265.1035(b)(4). The documentation shall include information prepared by the owner or operator or provided by the control device manufacturer or vendor that describes the control device design in accordance with 40 CFR 265.1035(b)(4)(iii) and certification by the owner or operator that the control equipment meets the applicable specifications.

(iii) If performance tests are used, then a performance test plan as specified in 40 CFR 265.1035(b)(3) and all test results.

(iv) Information as required by 40 CFR 265.1035(c)(1) and 40 CFR 265.1035(c)(2), as applicable.

(v) An owner or operator shall record, on a semiannual basis, the information specified in paragraphs (e)(1)(v)(A) and (e)(1)(v)(B) of this section for those planned routine maintenance operations that would require the control device not to meet the requirements of §265.1088(c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this subpart, as applicable.

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

(B) A description of the planned routine maintenance that was performed for the control device during the previous 6-month period. This description shall include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of §265.1088(c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this subpart, as applicable, due to planned routine maintenance.

(vi) An owner or operator shall record the information specified in paragraphs (e)(1)(vi)(A) through (e)(1)(vi)(C) of this section for those unexpected control device system malfunctions that would require the control device not to meet the requirements of §265.1088(c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this subpart, as applicable.

(A) The occurrence and duration of each malfunction of the control device system.

(B) The duration of each period during a malfunction when gases, vapors, or fumes are vented from the waste management unit through the closed-vent system to the control device while the control device is not properly functioning.

(C) Actions taken during periods of malfunction to restore a malfunctioning control device to its normal or usual manner of operation.

(vii) Records of the management of carbon removed from a carbon adsorption system conducted in accordance with §265.1088(c)(3)(ii) of this subpart.

(f) The owner or operator of a tank, surface impoundment, or container exempted from standards in accordance with the provisions of §265.1083(c) of this subpart shall prepare and maintain the following records, as applicable:

(1) For tanks, surface impoundments, or containers

exempted under the hazardous waste organic concentration conditions specified in §265.1083(c)(1) or (c)(2) of this subpart, the owner or operator shall record the information used for each waste determination (e.g., test results, measurements, calculations, and other documentation) in the facility operating log. If analysis results for waste samples are used for the waste determination, then the owner or operator shall record the date, time, and location that each waste sample is collected in accordance with applicable requirements of §265.1084 of this subpart.

(2) For tanks, surface impoundments, or containers exempted under the provisions of §265.1083(c)(2)(vii) or §265.1083(c)(2)(viii) of this subpart, the owner or operator shall record the identification number for the incinerator, boiler, or industrial furnace in which the hazardous waste is treated.

(g) An owner or operator designating a cover as "unsafe to inspect and monitor" pursuant to §265.1085(l) or §265.1086(g) of this subpart shall record in a log that is kept in the facility operating record the following information: the identification numbers for waste management units with covers that are designated as "unsafe to inspect and monitor," the explanation for each cover stating why the cover is unsafe to inspect and monitor, and the plan and schedule for inspecting and monitoring each cover.

(h) The owner or operator of a facility that is subject to this subpart and to the control device standards in 40 CFR part 60, subpart VV, or 40 CFR part 61, subpart V, may elect to demonstrate compliance with the applicable sections of this subpart by documentation either pursuant to this subpart, or pursuant to the provisions of 40 CFR part 60, subpart VV or 40 CFR part 61, subpart V, to the extent that the documentation required by 40 CFR parts 60 or 61 duplicates the documentation required by this section.

(i) For each tank or container not using air emission controls specified in §§265.1085 through 265.1088 of this subpart in accordance with the conditions specified in §265.1080(d) of this subpart, the owner or operator shall record and maintain the following information:

(1) A list of the individual organic peroxide compounds manufactured at the facility that meet the conditions specified in §265.1080(d)(1).

(2) A description of how the hazardous waste containing the organic peroxide compounds identified in paragraph (i)(1) of this section are managed at the facility in tanks and containers. This description shall include the following information:

(i) For the tanks used at the facility to manage this hazardous waste, sufficient information shall be provided to describe for each tank: a facility identification number for the tank; the purpose and placement of this tank in the management train of this hazardous waste; and the procedures used to ultimately dispose of the hazardous waste managed in the tanks.

(ii) For containers used at the facility to manage these hazardous wastes, sufficient information shall be provided to describe: a facility identification number for the container or group of containers; the purpose and placement of this container, or group of containers, in the management train of this hazardous waste; and the procedures used to ultimately dispose of the hazardous waste handled in the containers.

(3) An explanation of why managing the hazardous waste containing the organic peroxide compounds identified in paragraph (i)(1) of this section in the tanks and containers as described in paragraph (i)(2) of this section would create an undue safety hazard if the air emission controls, as required under §§265.1085 through 265.1088 of this subpart, are installed and operated on these waste management units. This explanation shall include the following information:

(i) For tanks used at the facility to manage these hazardous wastes, sufficient information shall be provided to explain: how use of the required air emission controls on the tanks would affect the tank design features and facility operating procedures currently used to prevent an undue safety hazard during the management of this hazardous waste in the tanks; and why installation of safety devices on the required air emission controls, as allowed under this subpart, will not address those situations in which evacuation of tanks equipped with these air emission controls is necessary and consistent with good engineering and safety practices for handling organic peroxides.

(ii) For containers used at the facility to manage these hazardous wastes, sufficient information shall be provided to explain: how use of the required air emission controls on the containers would affect the container design features and handling procedures currently used to prevent an undue safety hazard during the management of this hazardous waste in the containers; and why installation of safety devices on the required air emission controls, as allowed under this subpart, will not address those situations in which evacuation of containers equipped with these air emission controls is necessary and consistent with good engineering and safety practices for handling organic peroxides.

48. Part 265 is amended by removing and reserving Section 265.1091.

49. Part 265 is amended by adding Appendix VI to read as follows:

APPENDIX VI TO PART 265 -
COMPOUNDS WITH HENRY'S LAW CONSTANT LESS THAN 0.1 Y/X
(AT 25 DEGREES CELSIUS)

Compound Name	CAS Number
TRICHLORO(1,1,2)TRIFLUORO	
FORMALDEHYDE	50-00-0
HYDROCYANIC ACID	74-90-8
FORMAMIDE	
QUINONE	
DIMETHYL HYDRAZINE(1,1)	57-14-7
METHYL ACRYLATE	96-33-3
ACETAMIDE	60-35-5
METHYL HYDRAZINE	60-34-4
DIETHYLHYDRAZINE N,N	
FORMIC ACID	64-18-6
DIMETHYL DISULFIDE	624-92-0
PHORATE	298-02-2
HYDRAZINE	302-01-2
LEAD SUBACTEATE	1335-32-
LEAD ACETATE	301-04-2
NAPHTHOL,beta-	135-19-3
DIETHYLENE GLYCOL MONOMETHYL ETHER	
NITROSODIMETHYLAMINE N	62-75-9
DIETHYLENE GLYCOL MONOBUTYL ETHER	
ACETYL-2-THIOUREA,1-	591-08-2
ACRYLIC ACID	79-10-7
ETHYLENE GLYCOL MONOPHENYL ETHER	
ETHYLENE GLYCOL MONOMETHYL ETHER	
DIMETHYL FORMAMIDE	68-12-2
DIETHYLENE GLYCOL DIMETHYL ETHER	
PROPIOLACTONE b	57-57-8
ETHYLENE GLYCOL MONOPROPYL ETHER	
METHYL SULFURIC ACID	
METHYL THIOPHENOL 4	106-45-6
ETHYLENE GLYCOL MONOETHYL ETHER Cellosol	
DIMETHYL CARBAMOYL CHLORIDE	
ETHYLENE GLYCOL MONOETHYL ETHER ACETATE	
BUTYL CELLOSOLVE	111-76-2
TOLUENE DIAMINE(2,4)	95-80-7
DIMETHYLSULFOXIDE	
ANILINE	62-53-3

Compound Name	CAS Number
DIETHYLENE GLYCOL	111-46-6
ETHYLPHENOL,3-	620-17-7
GYLCIDOL	556-52-5
BUTYRIC ACID	107-92-6
NITROSO-N-METHYLUREA N	684-93-5
MONOMETHYL FORMANIDE	
ETHYL CARBAMATE	
ETHYL MORPHOLINE, ethyl diethylene oxime	
ETHANOLAMINE(mono-)	141-43-5
ETHYLENE THIOUREA	
PHENOL	108-95-2
ETHYLENE GLYCOL MONOBUTYL ETHER	
CRESOL	1319-77-
PROPYLENE GLYCOL	57-55-6
TRIETHYLENE GLYCOL DIMETHYL ETHER	
CRESOL(-o)	95-48-7
TOLUIDINE m	
CHLOROPHENOL-4	106-48-9
BENZYL ALCOHOL	100-51-6
ACETALDOL	
CHLOROACETIC ACID	79-11-8
GLYPHOSATE	
ETHYLENE GLYCOL	107-21-1
ADENINE	73-24-5
HEXAMETHYLPHOSPHORAMIDE	
DIETHYLENE GLYCOL MONOETHYL ETHER ACETAT	
DICHLOROPHENOL 2,5	
CRESOL(-p)	106-44-5
NITROSOMORPHOLINE	
QUINOLINE	91-22-5
DIMETHYLSULFONE	
CRESOL(-m)	108-39-4
TOLUENE DIISOCYANATE(2,4)	584-84-9
HYDROXY-(2)-PROPIONITRILE	109-78-4
HEXANOIC ACID	142-62-1
FUMARIC ACID	110-17-8
METHANE SULFONIC ACID	75-75-2
MESITYL OXIDE	141-79-7
CHLORO-2,5-DIKETOPYRROLIDINE 3	
PYRIDINIUM BROMIDE	
METHYLIMINOACETIC ACID	
DIMETHOATE	60-51-5

Compound Name	CAS Number
GUANIDINE, NITROSO	674-81-7
PHENYLACETIC ACID	103-82-2
BENZENE SULFONIC ACID	
ACETYL-5-HYDROXYPIPERIDINE 3	
LEUCINE	61-90-5
alpha-PICOLINE	1333-41-
METHYL-2-METHOXYAZIRIDINE 1	
BROMOCHLOROMETHYL ACETATE	
DICHLOROTETRAHYDROFURAN 3,4	3511-19-
ACETYLPIPERIDINE 3	618-42-8
CHLORO-1,2-ETHANE DIOL	
CYANIDE	57-12-5
NIACINAMIDE	98-92-0
METHOXYPHENOL P	150-76-5
METHYLFURFURAL 5	620-02-0
GLYCINAMIDE	598-41-4
SUCCINIMIDE	123-56-8
SULFANILIC ACID	121-47-1
MALEIC ACID	110-16-7
AMETRYN	
DIMETHYLPHENOL(3,4)	
ANISIDINE,o-	90-04-0
TETRAETHYLENE PENTAMINE	
DIETHYLENE GLYCOL MONOETHYL ETHER	
CHLORACETOPHENONE,2-	93-76-5
DIPROPYLENE GLYCOL	
HEXAMETHYLENE 1,6 DIISOCYANATE	
NEOPENTYL GLYCOL	126-30-7
BHC,gamma-	58-89-9
PHENYLENE DIAMINE(-m)	108-45-2
CHLOROHYDRIN, a 3 CHLORO 1,2 PROPANEDIOL	
XYLENOL(3,4)	95-65-8
DINITRO-o-CRESOL(4,6)	534-52-1
PROPORUR (Baygon)	
DIBROMO-4-HYDROXYBENZONITRILE, 3,5	
CATECHOL	120-80-9
CHLOROANILINE,p-	106-47-8
DICHLORVOS	
ACRYLAMIDE	79-06-1
THIOSEMICARBAZIDE	79-19-6
TRIETHANOLAMINE	102-71-6
PENTAERYTHRITOL	115-77-5

Compound Name	CAS Number
PHENYLENE DIAMINE(-o)	95-54-5
CAPROLACTAM	
BENZOIC ACID	65-85-0
TOLUENEDIAMINE(3,4)	496-72-0
TRIPROPYLENE GLYCOL	
PHENYLENE DIAMINE(-p)	106-50-3
TEREPHTHALIC ACID	
NITROGLYCERIN	55-63-0
CHLORO(-p)CRESOL(-m)	59-50-7
DICHLOROANILINE 2,3	
NITROANILINE(-o)	88-74-4
DIETHYL (N,N) ANILINE	91-66-7
NAPHTHOL,alpha-	90-15-3
AMINOPYRIDINE,4-	504-24-5
ADIPONITRILE	
BROMOXYNIL	
PHTHALIC ANHYDRIDE	85-44-9
MALEIC ANHYDRIDE	108-31-6
NITROPHENOL,2-	88-75-5
ACETYLAMINOFLUORENE,2-	53-96-3
PROPANE SULTONE,1,3-	1120-71-
CITRIC ACID	77-92-9
EPINEPHRINE	51-43-4
CHLOROPHENOL POLYMERS	
CREOSOTE	8001-58-
FLUOROACETIC ACID, SODIUM SALT	62-74-8
SODIUM ACETATE	
SUCCINIC ACID	110-15-6
SODIUM FORMATE	141-53-7
PHENACETIN	62-44-2
HYDROQUINONE	123-31-9
DIMETHYLAMINOAZOBENZENE,4-	60-11-7
METHYLENE DIPHENYL DIISOCYANATE	
OXALIC ACID	144-62-7
BENZO(A)PYRENE	50-32-8
DICHLOROBENZONITRILE,2,6-	1194-65-
AMINOBIPHENYL,4-	92-67-1
NAPHTHYLAMINE,alpha-	134-32-7
DIETHANOLAMINE	
METHYLENEDIANILINE 4,4	
NAPHTHYLAMINE,beta-	91-59-8
METHYLENE DIPHENYLAMINE (MDA)	

Compound Name	CAS Number
GLUTARIC ACID	110-94-1
RESORCINOL	108-46-3
TOLUIC ACID (para-)	99-94-5
GUTHION	
DIMETHYL PHTHALATE	131-11-3
GLYCERIN (GLYCEROL)	56-81-5
THIOFANOX	39196-18
DIBUTYLPHTHALATE	84-74-2
ALDICARB	116-06-3
NITROPHENOL,4-	100-02-7
METHYLENE-BIS (2-CHLOROANILINE),4,4'-	101-14-4
DIPHENYLHYDRAZINE(1,2)	122-66-7
METHOMYL	16752-77
MALATHION	121-75-5
PARATHION	56-38-2
ADIPIC ACID	124-04-9
ALACHLOR	15972-60
STRYCHNIDIN-10-ONE,2,3-DIMETHOXY-	357-57-3
TOLUENEDIAMINE(2,6)	823-40-5
CUMYLPHENOL-4	27576-86
DIAZINON	
BENZENE ARSONIC ACID	98-05-5
WARFARIN	81-81-2
METHYL PARATHION	298-00-0
DIETHYLTHIOPHOSPHATEBENZO M ETHYL PETHER	
PHENYL MERCURIC ACETATE	62-38-4
DIETHYL PROPIONAMIDE,2aN	15299-99
CHLOROBENZOPHENONE (PARA)	134-85-0
THIOUREA,1-(o-CHLOROPHENYL)-	5344-82-
DIMETHYLBENZIDINE 3,3	
DICHLORO-(2,6)-NITROANILINE(4)	99-30-9
CELLULOSE	9000-11-
CELL WALL	
BENZIDINE	92-87-5
TETRAETHYLDITHIOPYROPHOSPHATE	3689-24-
NABAM	
ATRAZINE	1912-24-
ENDRIN	72-20-8
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7
BENZO(A)ANTHRACENE	56-55-3
CYANOMETHYL BENZOATE 4	
ANTHRAQUINONE	84-65-1

Compound Name	CAS Number
STRYCHNINE	57-24-9
SIMAZINE	122-34-9
PYRENE	129-00-0
CHLOROBENZYLATE	510-15-6
DIMETHYLBENZ(A)ANTHRACENE(7,12)	57-97-6
INDENO(1,2,3-cd)-PYRENE	193-39-5
CHRYSENE	218-01-9
BENZO(ghi)PERYLENE	191-24-2
BENZO(k)FLUORANTHENE	207-08-9
DIBENZO(a,h)ANTHRACENE	53-70-3
DIETHYL PHOSPHOROTHIOATE	126-75-0

PART 270--EPA ADMINISTERED PERMIT PROGRAMS: THE HAZARDOUS WASTE MANAGEMENT PROGRAM

50. The authority citation for Part 270 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912, 6925, 6927, 6939, and 6974.

Subpart B--Permit Application

51. Section 270.14 is amended by revising paragraph (b)(5) to read as follows:

§270.14 Contents of Part B: General requirements.

* * * * *

(b) * * *

(5) A copy of the general inspection schedule required by §264.15(b). Include where applicable, as part of the inspection schedule, specific requirements in §§264.174, 245.193(i), 264.195, 264.226, 264.254, 264.273, 264.303, 264.602, 264.1033, 264.1052, 264.1053, 264.1058, 264.1084, 264.1085, 264.1086, and 264.1088.

* * * * *

52. Section 270.27 is revised to read as follows:

§270.27 Specific Part B information requirements for air emission controls for tanks, surface impoundments, and containers.

(a) Except as otherwise provided in 40 CFR 264.1, owners and operators of tanks, surface impoundments, or containers that use air emission controls in accordance with the requirements of 40 CFR part 264, subpart CC shall provide the following additional information:

(1) Documentation for each floating roof cover installed on a tank subject to 40 CFR 264.1084(d)(1) or 40 CFR 264.1084(d)(2) that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the applicable design specifications as listed in 40 CFR 264.1084(e)(1) or 40 CFR 264.1084(f)(1).

(2) Identification of each container area subject to the requirements of 40 CFR part 264, subpart CC and certification by the owner or operator that the requirements of this subpart are met.

(3) Documentation for each enclosure used to control air pollutant emissions from tanks or containers in accordance with the requirements of 40 CFR 264.1084(d)(5) or 40 CFR 264.1086(e)(1)(ii) of this chapter that includes records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of 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.

(4) Documentation for each floating membrane cover installed on a surface impoundment in accordance with the

requirements of 40 CFR 264.1085(c) that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the specifications listed in 40 CFR 264.1085(c)(1).

(5) Documentation for each closed-vent system and control device installed in accordance with the requirements of 40 CFR 264.1087 that includes design and performance information as specified in §270.24(c) and (d) of this part.

(6) An emission monitoring plan for both Method 21 in 40 CFR part 60, appendix A and control device monitoring methods. This plan shall include the following information: monitoring point(s), monitoring methods for control devices, monitoring frequency, procedures for documenting exceedances, and procedures for mitigating noncompliances.

(7) When an owner or operator of a facility subject to 40 CFR part 265, subpart CC cannot comply with 40 CFR part 264, subpart CC by the date of permit issuance, the schedule of implementation required under 40 CFR 265.1082.

PART 271--REQUIREMENTS FOR AUTHORIZATION OF STATE HAZARDOUS WASTE PROGRAMS

53. The authority citation for Part 271 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), and 6926.

Subpart A--Requirements for Final Authorization

54. Section 271.1(j) is amended by revising the effective date of the following entry in Table 1 to read as follows:

§271.1 Purpose and Scope

* * * * *

(j) * * *

TABLE 1--REGULATIONS IMPLEMENTING THE HAZARDOUS WASTE AND SOLID WASTE AMENDMENTS OF 1984

Promulgation date	Title of regulation	Federal Register reference	Effective date
* * * * *	* * * * *	* * * * *	* * * * *
December 6, 1994	Air Emission Standards for Tanks, Surface Impoundments, and Containers	59 FR 62896-62953	December 6, 1996

54. Section 271.1(j) is amended by revising the effective date of the following entry in Table 2 to read as follows:

TABLE 2--SELF-IMPLEMENTING PROVISIONS OF THE HAZARDOUS WASTE AND SOLID WASTE AMENDMENTS OF 1984

Effective date	Self-implementing provision	RCRA citation	Federal R refer
* * * * *	* * * * *	* * * * *	* * *
December 6, 1996	Air Emission Standards for Tanks, Surface Impoundments, and Containers	3004(n)	December 6, 59 FR 6289

[Billing Code 6560-50-P]