

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 264, 265, and 270

[IL-64-2-5807; FRL-5931-7]

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; clarification and technical amendment.

SUMMARY: Under the authority of the Resource Conservation and Recovery Act (RCRA), as amended, the EPA has promulgated 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 control organic emissions from 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.

Since publication of the final standards on December 6, 1994, the EPA has given public notice and taken comment on several proposed revisions to the final rule, and has made corresponding amendments. In response to public comments and inquiries, today's action makes clarifying amendments to certain regulatory text, and provides clarification of certain preamble language that was contained in previous documents for this rulemaking.

DATES: These amendments are effective December 8, 1997.

ADDRESSES: This document 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 "RCRA-FIN.ZIP" to download this document. 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 the subpart CC 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, F-96-CE3F-FFFFF, and F-96-CE4A-FFFFF. The RCRA docket is located at Crystal Gateway, 1235 Jefferson Davis Highway, First Floor, Arlington, Virginia. Review of docket materials is conducted 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 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. Contacts for specific information are listed in the SUPPLEMENTARY INFORMATION section of this preamble.

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 § 264.1030 and § 265.1030 of the RCRA subpart AA rules, § 264.1050 and § 265.1050 of the RCRA subpart BB rules, and § 264.1080 and § 265.1080 of the RCRA subpart CC air rules.

Informational Contacts

If you have questions regarding the applicability of this action to a particular situation, or questions about compliance approaches, permitting, enforcement and rule determinations,

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For questions about testing or  
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number (919) 541-0443. For  
information concerning the analyses  
performed in developing this rule,  
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#### Background

Section 3004(n) of RCRA requires  
EPA to develop standards to control air  
emissions from hazardous waste  
treatment, storage, and disposal  
facilities (TSDF) as may be necessary to  
protect human health and the  
environment. This requirement echoes  
the general requirement in RCRA  
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 today is making technical  
amendments to the final subpart AA,  
BB, and CC standards, and providing  
interpretations for certain provisions of  
those rules. Since the publication of the  
final subpart CC rule (59 FR 69826,  
December 4, 1994), the EPA has  
published four **Federal Register**  
documents that delayed 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, and  
the fourth (61 FR 59931, November 25,  
1996) established the ultimate effective  
date of December 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  
1996 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.

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. At that time, a total  
of six seminars were held nationally. An  
updated series of six seminars was held  
in September through December 1996  
and two additional seminars were held  
March and April of 1997 in conjunction  
with an industry trade association.  
(Refer to EPA RCRA Docket No. F-95-  
CE3A-FFFFF.) 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 this final action.

On February 9, 1996, the EPA  
published a **Federal Register** document  
(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.

On November 25, 1996, the EPA  
published a **Federal Register** document  
(61 FR 59932), "Final rule" that  
amended 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 to be December 6,  
1996.

Today's action makes technical  
amendments to the final subparts AA,  
BB, CC rules in order to clarify the  
regulatory text of the final standards;  
interpret those standards; correct  
typographical, printing, and  
grammatical errors; and clarify certain  
language published in the preambles of  
previous **Federal Register** documents, to  
better convey the EPA's original intent.

Today's amendments include one  
change to 40 CFR Part 270, to correct a  
typographical error made in the  
December 6, 1994 final rule. The text  
listing the sections of regulatory  
requirements that must be included in  
the general inspection schedule  
incorrectly listed "245.193(i)" where  
section 264.193(i) was intended. This  
was obviously a typographical error, as  
all of the sections listed in that  
provision are from 40 CFR part 264; the  
sections are listed in numeric order, and  
"245.193(i)" was very obviously out of  
place. Further, no section 245.193(i)  
exists; in fact, no 40 CFR 245 exists.  
Today's amendment corrects this  
typographical error.

#### Outline

The information presented in this  
preamble is organized as follows:

- I. Subpart B—General Facility Standards
- II. Subpart E—Manifest System,  
Recordkeeping, and Reporting
- III. Subpart AA—Air Emission Standards for  
Process Vents
  - A. Applicability
  - B. Definitions
  - C. Standards: Closed-Vent Systems and  
Control Devices
  - D. Recordkeeping Requirements
- IV. Subpart BB—Air Emission Standards for  
Equipment Leaks
  - A. Applicability
  - B. Standards: Closed-Vent Systems and  
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  - C. Alternative Standards for Valves
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  - E. Open-ended Valves and Lines
- V. Subpart CC—Air Emission Standards for  
Tanks, Surface Impoundments, and  
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  - A. Applicability and Definitions
  - B. Schedule for Implementation of Air  
Emission Standards
  - C. Standards: General

- D. Waste Determination Procedures
- E. Standards: Tanks
- F. Standards: Surface Impoundments
- G. Standards: Containers
- H. Standards: Closed-Vent Systems and Control Devices
- I. Recordkeeping and Reporting Requirements
- J. Appendix VI to Part 265
- VI. Administrative Requirements
  - A. Docket
  - B. Paperwork Reduction Act
  - C. Executive Order 12866
  - D. Regulatory Flexibility
  - E. Unfunded Mandates Act
  - F. Immediate Effective Date
- VII. Legal Authority

## **I. Subpart B—General Facility Standards**

Today's action removes §§ 264.1091(b) and 265.1091(b) from the list of sections in §§ 264.15 and 265.15, respectively. Sections 264.15 and 265.15 contain a list of provisions from which inspection items and frequencies are required to be included in the general facility inspection schedule. The inspection requirements for floating roof tanks that were in §§ 264.1091(b) and 265.1091(b) of subpart CC as promulgated, were incorporated into §§ 264.1084 and 265.1085 by the November 25, 1996, final rule amendments (61 FR 59944). That action also removed and reserved §§ 264.1091(b) and 265.1091(b). Therefore, the EPA is revising this provision to reference the paragraphs that now contain the inspection requirements. The EPA is also correcting a previous omission, by including a reference to the sections of subpart CC that include inspections requirements.

## **II. Subpart E—Manifest System, Recordkeeping, and Reporting**

Today's action also removes §§ 264.1091(b) and 265.1091(b) from the list of sections from which monitoring, testing, or analytical data, and corrective action requirements must be included in the facility operating record. The monitoring and testing requirements for floating roof tanks that were in §§ 264.1091(b) and 265.1091(b) of subpart CC as promulgated, were incorporated into §§ 264.1084 and 265.1085 by the November 25, 1996 final rule amendments (61 FR 59944) and, as just noted, §§ 264.1091(b) and 265.1091(b) were removed and reserved. Therefore, the EPA is revising this provision to reference the paragraphs that now contain the appropriate requirements, and including a reference to provisions of subpart CC that were previously omitted through an oversight.

## **III. Subpart AA—Air Emission Standards for Process Vents**

### **A. Applicability**

In today's action, the EPA is amending §§ 264.1030(b)(3), 264.1050(b)(3), 265.1030(b)(3), and 265.1050(b)(3) to make clear the EPA's original intent as to when recycling units are subject to the subpart AA and BB rules. The EPA made clear in the November 25, 1996 preamble that recycling units which are otherwise exempt from RCRA subtitle C regulation under 40 CFR 261.6(c)(1) are not subject to subpart AA and BB standards unless some other unit at the facility has to obtain a RCRA permit. See 61 FR at 59932–33, and 59935. The Agency also showed how the existing regulation could be interpreted to give this result. *Id.* at 59935. Put another way, Subparts AA and BB are applicable to recycling units at permitted TSDF and interim status TSDF. Also, at both TSDF and generator facilities (generators' 90-day accumulation units), subparts AA and BB are applicable to units that are not recycling units. However, the EPA believes that the rule language can be drafted to make this point more clearly, and is doing so in today's rule, for both subpart AA and BB.

The EPA is further clarifying that the RCRA "permit-as-shield" provisions do not apply to the subpart AA (or the subpart BB or CC standards); see Section VI.E of the preamble to the final rule, 59 FR 62910, December 6, 1994. This means that owners and operators receiving permits before the date those rules became effective must nevertheless comply with the subpart AA (and the subpart BB and CC) regulatory standards. The EPA is adding a sentence to § 264.1030(c) which essentially cross-references the existing § 270.4(d) provision stating that "permit-as-a shield" does not apply to these units.

The EPA has previously amended 40 CFR 270.4 (see 59 FR 62952, December 6, 1994) to require that owners and operators of TSDF that have been issued final permits prior to December 6, 1996, comply with the air standards under 40 CFR part 265, subparts AA, BB, and CC until the facility's permit is reviewed or reissued by the EPA. As was explained in Section VIII.A of the preamble to the final rule (59 FR 62920, December 6, 1994), this amendment eliminates application of the "permit-as-a-shield" practice for these air standards but does not require that the EPA or the TSDF owner or operator initiate a permit modification to add the requirements of 40 CFR part 264, subparts AA, BB, or CC. The EPA believes that this

minimizes the administrative burden on the TSDF owner or operator as well as limits the additional burden on the permitting resources of the EPA.

However, when a permit is reopened or subject to renewal, or when a TSDF owner or operator submits a Class 3 modification request pertaining to an existing unit or addition of a new unit subject to these standards, then the applicable requirements of 40 CFR part 264, subparts AA, BB, and CC will be incorporated into the modified permit conditions.

The EPA is also amending the applicability provision of subpart AA by adding a new § 264.1030(d) and § 265.1030(d). This provision states that a process vent is not subject to the subpart AA standards provided the owner or operator certifies that all subpart AA-regulated process vents at the facility are equipped with and operating air emission controls in accordance with the requirements of an applicable Clean Air Act regulation codified in Part 60, 61, or 63. The EPA adopted a similar provision for units subject to subpart CC as part of the November 1996 amendments (see § 264.1080(d) and § 265.1080(d) of subpart CC) and the logic for applying the same exemption in the same manner to subpart AA process vents is identical. The preamble discussion at Section IV.C, 61 FR 59938–59939 (November 25, 1996) explains at length why this exemption avoids unnecessary duplication with CAA requirements, all of which discussion applies equally here. The EPA in fact intended that the exemption apply to subpart AA process vents as well (since there is no basis for distinguishing between subpart AA and CC units for this purpose), but inadvertently omitted the exemption from subpart AA when it codified the subpart CC exemption. Today's amendment corrects that oversight.

This exemption is, however, implemented slightly differently from the parallel exemption for subpart CC units. Both of the compliance approaches allowed under the existing subpart AA rules require emission control or emission limits on a facility-wide basis. See 40 CFR 264.1032(a)(1) and (a)(2). Thus, to be equally protective of human health and the environment, the EPA considers it necessary that any alternative compliance demonstration require control of all of the process vents at the facility that would have otherwise been regulated under subpart AA. Therefore, today's exemption is only available at a facility where each and every process vent that would otherwise be subject to subpart AA is equipped with, and operating air

emission controls, in compliance with an applicable CAA standard under Parts 60, 61, or 63. As with the similar provisions in subparts BB and CC, to comply with the requirements at paragraphs § 264.1030(d) or § 265.1030(c), the emissions from each subpart AA process vent must be routed through an air emission control device; a vent that is in compliance with a CAA standard under an exemption from control device requirements is not in compliance with those provisions of subpart AA. Despite this minor restriction, the EPA considers this alternative to provide the facility owner or operator with a broader degree of compliance flexibility, and less extensive monitoring, recordkeeping, and reporting requirements under RCRA, and therefore to warrant promulgation.

The EPA has received inquiries as to whether portable equipment that otherwise meets the definition of a unit subject to the subpart AA, BB, or CC regulations, is subject to the requirements of subparts AA, BB, and CC. The literal language of the regulations clearly applies, since there is no exemption for portable equipment in the regulations. Nor does the EPA consider that such an exemption is appropriate. Portable equipment that is used to manage hazardous waste consistent with the applicability requirements of these subparts would emit the same volume of organics that stationary equipment would emit. The EPA therefore considers it appropriate to subject portable equipment to the same control requirements as stationary, or non-portable equipment. By this interpretation, the EPA is not extending the applicability of the AA, BB, or CC standards; rather, the EPA is merely clarifying that these standards do not contain any exemption or special criteria for portable equipment. Moreover, the fact that such portable equipment may also be used for non-hazardous waste applications has no bearing on the EPA's intent to regulate the portable equipment during instances when it is used for hazardous waste applications. The EPA does not consider that fact to affect the need to control the equipment when it is in hazardous waste service.

#### B. Definitions

"In light liquid service" was defined in § 264.1031 to be consistent with the definition of "in light liquid service" in the NSPS for equipment leaks of VOC in the synthetic organic chemicals manufacturing industry (40 CFR part 60, subpart VV). It was the EPA's intent that the determination of "in light liquid

service" be based on the organic content of a liquid. However, questions have been raised by the regulated community regarding how to account for water in the determination of "in light liquid service." In response to the questions, the definition of "in light liquid service" in § 264.1031 is revised by changing "\* \* \* the vapor pressure of one or more of the components in the stream is greater than 0.3 kilopascals (kPa) at 20 °C, the total concentration of the pure components having a vapor pressure greater than 0.3 kilopascals (kPa) at 20 °C is equal to or greater than 20 percent by weight \* \* \*" to read as follows "\* \* \* the vapor pressure of one or more of the organic components in the stream is greater than 0.3 kilopascals (kPa) at 20 °C, the total concentration of the pure organic components having a vapor pressure greater than 0.3 kilopascals (kPa) at 20 °C is equal to or greater than 20 percent by weight \* \* \*". This revision clarifies that the definition applies only to the organic components of the waste stream; not to non-organic chemicals that meet the vapor pressure criteria (e.g., water). The revised definition is consistent with the definition of "in light liquid service" in the recently promulgated NESHAP for equipment leaks (40 CFR part 63, subpart H).

#### C. Standards: Closed-Vent Systems and Control Devices

The final subpart AA air emission standards for process vents provided up to an 18-month implementation schedule after the effective date that a facility becomes subject to the provisions of subpart AA, for installation and operation of closed-vent systems and control devices. The February 9, 1996 (61 FR 4911) revisions to §§ 264.1033(a)(2) and 265.1033(a)(2) extended the implementation schedule to as much as 30 months, consistent with the requirements of subpart CC. Consistent with this existing provision, today's revisions clarify that units which become newly subject after the subpart AA effective date of December 21, 1990 as a result of an EPA regulatory change or statutory change, are also provided a 30-month implementation schedule. The provision is also amended to clarify that units which become newly subject to subpart AA after that effective date due to any reason other than an EPA regulatory change or statutory amendment are not allowed to comply using an implementation schedule; they must be in compliance on the date that the unit first becomes subject to subpart AA.

A printing correction is also being made to this section in

§ 265.1033(f)(2)(vi)(B). The degree symbol was inadvertently printed in lower case rather than as a superscript; today's action corrects this.

The November 25, 1996, amendments to the subpart CC standards (at § 265.1088(c)(2)(i)) for control devices and closed-vent systems, added provisions to allow up to 240 hours per year for periods of planned, routine maintenance of a control device; during such time, the control device is not required to meet the performance requirements for emission reductions specified in the rule. The EPA's rationale for adding this allowance to subpart CC is explained in the preamble to those amendments at 61 FR 59948. The EPA has determined that, based on the nature of the affected operation or the type of unit that is being served by the control device, there are circumstances in which a limited allowance for control device down-time during maintenance is reasonable. For example, the EPA made a similar allowance of up to 240 hours for control device performance in the HON requirements for storage vessels, i.e., tanks, (see § 63.119(e)(3)); this allowance was made based on consideration of the fact that a HON facility with affected storage vessels normally would not have adequate excess storage tank capacity to handle emptying an affected tank(s) each time the control device serving the vessel(s) is shut down for routine maintenance. It is also important to note that the HON regulation did not extend this same routine maintenance allowance for control devices to other types of units, or to affected process vents; the HON allowance is only for control devices serving storage vessels. The EPA has judged that the operational practices of process vents are significantly different from those of storage vessels, and thus do not warrant a similar allowance for control device down-time.

In the amendments to the subpart CC rule that were published in November 1996, the EPA adopted the provision from the HON, and further extended and broadened the control device allowance in applying it to control devices that serve not only tanks but also surface impoundments and containers (see § 264.1087(c)(2)(i)). The decision to extend the allowance to the subpart CC hazardous waste management units was also based on the consideration of typical operational practices of affected TSDF. Within the waste management industry, the quantities and compositions of the waste managed vary widely over time; also, many regulated waste management units (i.e., tanks and impoundments)

have vent flow rates low enough that several units are controlled using a single device. For several waste management units served by a single control device, it is not feasible in most cases to have enough excess storage capacity to handle all the units that would be served by a single control device. Therefore, the EPA included the control device maintenance allowance in the subpart CC standards for containers and surface impoundments, as well as for tanks. As in the case of the HON, the EPA does not consider it appropriate to extend the control device allowance for maintenance time to control devices serving process vents. Therefore, the EPA is not extending the control device maintenance allowance to subpart AA process vents.

It also has come to the attention of the EPA that some commenters have misinterpreted the language relating to the accuracy of the temperature monitoring devices that the EPA specified in the subpart AA standards for closed-vent systems and control devices, found at §§ 264.1033(f) and 265.1033(f). As these commenters interpret the rule language, the EPA has specified a degree of accuracy that precludes monitoring devices with greater accuracy than is specified in the regulations. This is not the EPA's intent, and the Agency does not consider this to be a reasonable interpretation of the rule. At numerous places in this rule and other rules, the EPA has specified the accuracy of temperature monitoring devices by requiring "an accuracy of  $\pm 1$  percent of the temperature being monitored in degrees Celsius ( $^{\circ}\text{C}$ ) or  $\pm 0.5^{\circ}\text{C}$ , whichever is greater." It is implicit in the use of this language that the EPA is providing a range of accuracy with which the monitoring device must comply or conform. For example, the term " $\pm 1$  percent" indicates that the accuracy of the device must fall within the range from plus 1 percent to minus 1 percent. Any device that has an accuracy within this range complies with the rule requirement. It was not the intent of the EPA to preclude the use of devices with greater (i.e., better) accuracy than the absolute value specified.

#### **D. Recordkeeping Requirements**

Commenters have stated that the requirement at § 265.1035(c)(10)(iv) to record the maximum instrument reading measured by Method 21 after a leak has been successfully repaired or determined to be not repairable is unnecessary. They contend that because other rules which require use of EPA Method 21, such as the Off-Site Waste and Recovery Operations NESHAP (40

CFR part 63, subpart DD), do not require this instrument reading, the requirement should be removed. Although subpart DD to part 63 does not contain a similar recordkeeping requirement for the instrument reading, as part of the information recorded when a leak is detected using Method 21, various other regulations do have similar requirements (see § 63.181(d)(4) of 40 CFR part 63, subpart H, National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks). The EPA continues to believe that this information is useful in the implementation and enforcement of the air emission regulations. Instrument monitoring after a repair is an indication of the success of the repair, information which EPA considers commensurate with the initial leak monitoring requirements at § 265.1033(k)(1)(i). Instrument monitoring upon determination that a leak is not repairable is an indication of the severity of the organic emissions that will continue to be emitted from the non-repairable equipment, which EPA considers valuable information for the implementation and future review of its organic air emissions standards. Therefore, EPA will maintain this recordkeeping requirement.

#### **IV. Subpart BB—Air Emission Standards for Equipment Leaks**

##### **A. Applicability**

Today's action adds appropriate language to the subpart BB applicability provisions to cross reference and clarify that the EPA has modified the "permit-as-a-shield" practice for implementation of the subpart BB (as well as the subpart AA and CC) RCRA air rules. The modification of this practice affects owners and operators of existing TSDF for which final RCRA permits have been issued by the EPA. Paragraph (c) in § 264.1050 and § 265.1050 is being revised to clarify that the owner or operator is subject to the requirements of 40 CFR part 265, subpart BB until such date that the owner or operator receives a final RCRA permit incorporating the requirements of 40 CFR part 264, subpart BB.

The EPA has previously amended 40 CFR 270.4 (see 59 FR 62952, December 6, 1994) to require that owners and operators of TSDF that have been issued final permits prior to December 6, 1996, comply with the air standards under 40 CFR part 265, subparts AA, BB, and CC until the facility's permit is reviewed or reissued by the EPA to include the part 264 standards. As is explained in Section VIII.A of the preamble to the final rule (59 FR 62920, December 6,

1994), this amendment eliminates application of the "permit-as-a-shield" practice for these air standards, but does not require that the EPA or the TSDF owner or operator initiate a permit modification to add the requirements of 40 CFR part 264, subparts AA, BB, or CC. The EPA considers the existing regulatory text to accurately convey this intent, and is providing this preamble discussion in response to commenters' requests.

##### **B. Standards: Closed-Vent Systems and Control Devices**

The final subpart BB air emission standards for equipment leaks referenced the subpart AA closed-vent system and control device requirements to provide up to an 18-month implementation schedule after the effective date that a facility becomes subject to the provisions of subpart BB, for installation and operation of closed-vent systems and control devices. The February 9, 1996 (61 FR 4911) revisions to §§ 264.1060 and 265.1060 added a paragraph to extend the implementation schedule to as much as 30 months, consistent with the requirements of subpart CC. Today's amendments clarify that units that begin operation after the subpart BB effective date of December 21, 1990, and that become subject to the requirements of subpart BB because of an EPA regulatory change or a statutory change after December 21, 1990, are also provided a 30-month implementation schedule. The provision is also amended to clarify that units which become newly subject to subpart BB after that effective date due to any reason other than an EPA regulatory change or a statutory amendment are not allowed to comply using an implementation schedule; they must be in compliance on the date that the unit first becomes subject to subpart BB. In recognition that facilities have been on notice since 1990 of the applicability of subparts AA and BB, and since 1991 of the applicability of subpart CC, the EPA considers it reasonable to expect facilities that become newly-subject to these subparts, through other than a statutory or EPA regulatory change, to be in compliance with the provisions on the date that they become newly subject.

##### **C. Alternative Standards for Valves**

Clarifying language is being added to the alternative standards for valves in gas/vapor service or in light liquid service: skip period leak detection and repair. The EPA has received comments on the ambiguity of the skip period leak detection and repair provisions as codified. The codified language is ambiguous because it gives no

indication of how the alternative work practice that involves two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 percent which allows the owner or operator to skip one of the quarterly leak detection periods [§ 264.1062(b)(2) or § 265.1062(b)(2)] interacts with the alternative work practice that involves five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 percent which allows the owner or operator to skip three of the quarterly leak detection periods [§ 264.1062(b)(3) or § 265.1062(b)(3)]. Nor is the codified language clear on whether the periods with the percentage of valves leaking equal to or less than 2 percent need to be repeated after the initial skipped periods, or if the owner or operator is allowed to continue on the skip period schedule once the criteria have been met for one period.

In order to clarify the EPA's intent regarding the skip monitoring alternatives, paragraphs in § 264.1062(b) and § 265.1062(b) are being amended to more fully explain that, if the specified criteria are met under the alternatives, the owner or operator can monitor for leaks once every six months (i.e., under § 264.1062(b)(2)) or once every year (i.e., under § 264.1062(b)(3)). If an owner or operator is monitoring equipment every six months, under § 264.1062(b)(2), he is not complying with the five consecutive quarterly leak detection requirements of § 264.1062(b)(3), and thus does not qualify to begin monitoring once every year. Essentially, if an owner or operator meets the requirements of subsection (b)(2), he may choose to either begin monitoring every six months, or he may choose to continue quarterly monitoring in an attempt to meet the requirements of subsection (b)(3); complying with the provision of subsection (b)(2) excludes the opportunity to comply with the requirements of subsection (b)(3).

Once an owner or operator meets the qualifications of either subsection (b)(2) or subsection (b)(3), he is then allowed to continue the skip monitoring of that provision as long as the percentage of valves found leaking by the semiannual or annual monitoring is equal to or less than 2 percent. These clarifying amendments reflect the Agency's prior intent regarding the implementation of the alternative standards for valves.

#### *D. Recordkeeping Requirements*

The recordkeeping provisions of subpart BB are being amended to eliminate any owner or operator burden caused by regulatory overlap. The subpart BB recordkeeping provisions in § 264.1064(m) and § 265.1064(m) are

being amended to allow any equipment that contains or contacts hazardous waste that is subject to subpart BB and also subject to regulations in 40 CFR part 60, 61, or 63 to determine compliance with subpart BB by documentation of compliance with the relevant provisions of the Clean Air Act rules codified under 40 CFR part 60, part 61, or part 63. Because compliance with subpart BB is demonstrated through recordkeeping, this recordkeeping revision has the effect of exempting equipment that would otherwise be subject to subpart BB from subpart BB requirements, provided the equipment is operated, monitored and repaired in accordance with an applicable CAA standard, and appropriate records are kept to that effect.

As is described in Section III.A of this preamble regarding the potential regulatory overlap of the RCRA air rules and Clean Air Act regulations, the EPA is providing this exemption to reduce the possibility of duplicative or conflicting requirements for those TSDF units using organic emission controls in compliance with a NESHAP but which are also subject to requirements under the RCRA standards. The EPA considers this to be the most appropriate approach to ensure that air emissions from equipment managing hazardous waste are controlled to the extent necessary to protect human health and the environment. This exemption was originally included with the promulgation of subpart BB on June 21, 1990 (55 FR 25454), in the same format, but with more specificity as to the CAA regulations. As discussed in Section III.A. of this preamble, it was clearly the Agency's intent to apply the same rationale explained in the November 25, 1996 preamble at 61 FR 59938, to extend the applicability exemption to subpart BB equipment operated, monitored and repaired in accordance with an applicable CAA standard under 40 CFR part 60, 61, or 63.

The November 25, 1996 final rule amendments added a provision to the applicability of subpart BB that excludes equipment that contains or contacts affected hazardous waste for a period of less than 300 hours per calendar year. See 61 FR at 59937. One commenter has requested that the Agency clarify whether equipment which is not in service, but contains hazardous waste residue, is considered to be in contact with hazardous waste. The EPA considers the language of the provision explicit on this point; the amount of time that equipment contains hazardous waste, whether at operating capacity or as a residue, is considered

time that the equipment "contains or contacts" hazardous waste. Thus, if subpart BB equipment contains subpart BB-regulated hazardous waste residues for more than 300 hours during a calendar year, that equipment would not be exempt from subpart BB under the provisions at § 264.1050(f) or § 265.1050(f). The EPA purposefully worded the provision to say, "contains or contacts" because the emissions from the equipment are related to the organic hazardous waste that is in the equipment; even if the process or equipment is not in service, the organic hazardous waste in contact with the equipment has the potential to volatilize, and EPA considers it necessary to subject the equipment to the requirements of subpart BB. Thus, EPA is today reiterating that the regulation at § 264.1050(f) and § 265.1050(f) requires the equipment to be void of subpart BB-regulated waste for a minimum of 300 hours per calendar year.

The same commenter inquired whether, for the purposes of this same provision, the period of time which the equipment contains or contacts subpart BB-regulated waste must be consecutive (e.g. 290 consecutive hours), or if it could be the sum of shorter periods (e.g., ten periods of 29 hours each). The provision was intended to exempt equipment that does not contain or contact subpart BB-regulated waste a total of 300 hours of more during a calendar year. This provision was adopted from similar provisions of the Hazardous Organic NESHAP promulgated under 40 CFR 63.160. See preamble discussion at 61 FR 59937, November 25, 1996. It is implicit in reading the language at 40 CFR 63.160(a) that the EPA intended the requirement to refer to a sum, or total, of 300 hours per calendar year, as opposed to a single period of 300 hours. The EPA is today amending regulatory text at 264.1050(f) and 265.1050(e) and the associated recordkeeping requirements at 264.1064(g)(6) and 265.1064(g)(6) to remove the phrase, "a period of" and thus, remove any ambiguity as to the Agency's intent that for this regulatory requirement, instances during which equipment contains or contacts subpart BB-regulated waste need not be consecutive; it is only required that the sum of all time that the equipment contains or contacts subpart BB-regulated waste is less than 300 hours per calendar year.

#### *E. Open-Ended Valves and Lines*

Several comments have been received regarding the requirements for open-

ended lines or valves as they relate to gravity piping. Commenters expressed concern that gravity feed piping that is equipped with an open valve or line does not meet the requirements of the subpart BB standards. Subpart BB requires that each open-ended valve or line be equipped with a cap, blind flange, plug, or a second valve when managing hazardous wastes with an organic content equal to or greater than 10 percent by weight. The commenters have suggested that the EPA amend the subpart BB requirements to state that 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. The EPA has examined this issue and has found no technical basis for making a change to the existing rule. Moreover, the Part 63 subpart RR requirements are intended for control of waste in organic concentrations on the order of magnitude with the 500 ppmw action level of the subpart CC standards, whereas the subpart BB standards in parts 264 and 265 are applicable to equipment that contacts waste with an organic concentration of 10 percent by weight. There is a significant difference in the level of required control between the two standards. The EPA does not consider it appropriate to allow the subpart RR drain system requirements to substitute for the more extensive open-ended valve and line requirements of subpart BB, because application of the subpart RR standards to subpart BB equipment would not provide an equivalent level of organic emission control as would be achieved by compliance with the applicable subpart BB requirements. Facility owners or operators with gravity feed piping that requires a vent to facilitate draining can comply with the subpart BB and CC standards by installing organic emission control equipment on the pipe vent. The control requirements in subpart BB are appropriate and adequate for control of open-ended lines and valves.

#### **V. Subpart CC—Air Emission Standards for Tanks, Surface Impoundments, and Containers**

##### **A. Applicability and Definitions**

In §§ 264.1080 and 265.1080, the EPA is revising the effective date of the subpart CC rules to be December 6, 1996. This revised effective date was established in the November 25, 1996 amendments, but this regulatory change was inadvertently omitted from that action. Today's revision corrects this oversight.

In § 265.1081, the definition of "in light material service" is revised to correct a typographical error to capitalize the T in "the" as follows, "\* \* \* The vapor pressure of one or more of the organic constituents \* \* \*"

##### **B. Schedule for Implementation of Air Emission Standards**

The final subpart CC standards allow the owner or operator to prepare an implementation schedule for installation of control equipment that cannot be installed and in operation by the effective date of the rule (See § 265.1082(a)(2)). The EPA intended that the implementation schedule apply to any capital projects implemented by the owner or operator to comply with the subpart CC requirements. (See 61 FR at 4905, February 9, 1996.) This intent was expressed in the 1994 final rule; see Hazardous Waste TSD Background Information for Promulgated Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers, EPA-453/R-94-076b ("BID") page 9-7, which states that 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 longer than 18 months to complete (e.g., replacing a large open surface impoundment with a series of covered tanks). To further clarify this intent, § 265.1082 is revised by today's action to specify that compliance can be demonstrated through an implementation schedule when either: (1) control equipment or waste management units can not be installed and in operation by the rule effective date; or (2) modifications of production or treatment processes to satisfy subpart CC exemption criteria in accordance with § 265.1083(c) can not be completed by the rule effective date. In either case, the implementation schedule must be entered into the facility record, and must contain information demonstrating that the facility will be in compliance with all of the requirements of subpart CC, no later than December 8, 1997. The revisions to the schedule for implementation also incorporate the revised effective date of December 6, 1996.

Commenters have questioned whether compliance activities other than those involving the installation of equipment or the modification of processes may be accomplished under an implementation schedule. For example, whether a facility can delay compliance past the rule effective date for monitoring or testing requirements. The preamble to the February 9, 1996 **Federal Register** document clarified that "The EPA

expects such instances to be rare, but in the event a facility cannot implement any technical requirement of subparts AA, BB, or CC, it is the EPA's intent that the owner or operator document the necessity for a delay in the facility operating record. To be in compliance with the rule, the necessary documentation must be in place by [the rule effective date]." See 61 FR at 4905, February 9, 1996. The EPA maintains that there may be circumstances in which a facility owner or operator can not be in compliance with certain monitoring or testing requirements by the effective date of the standards. For example, if a facility owner or operator is unable to begin operation of a control device prior to the rule effective date, he would not be able to perform the required monitoring of that device by that date either. However, to be in compliance with the subpart CC rules, the owner or operator must be in compliance with all the rule requirements as soon as is practicable, but no later than December 8, 1997.

(Note: The only exceptions to this final compliance date are those requirements applicable to certain tanks in which stabilization operations are performed, which must be in compliance no later than June 8, 1998 (see 59 FR at 62912, December 6, 1994), and requirements delayed by the Regional Administrator, as discussed below in this section of today's preamble.

Today's action is also amending regulatory language to clarify that owners or operators of facilities and units that become newly subject to the requirements of subpart CC after December 8, 1997, because of an action other than an EPA regulatory change or a statutory change under RCRA, must comply with all applicable rule requirements immediately (i.e., must have control devices installed and operating on the date the facility or unit becomes subject to subpart CC); the 30-month implementation schedule does not apply in this case. The EPA considered this to be implicit in the existing language of paragraph (b) of § 265.1082. The Agency is adding new language in response to questions and comments from affected facilities regarding interpretation of the rule requirements regarding implementation schedules. The new provision will be codified as paragraph 265.1082(c).

One commenter expressed concern regarding the initial monitoring of closed-vent systems. They noted that delayed compliance is allowed under the rules for routine monitoring of those systems that are either inaccessible or unsafe to monitor, and requested that similar provision be allowed for initial monitoring that may be delayed due to



weather or process conditions. The EPA has examined this issue and has concluded that a change in the rule is not appropriate. The industry has been on notice for several years that the subpart CC rules would require these monitoring inspections. Any facilities that become newly subject to the subpart through an EPA regulatory amendment or statutory amendment are typically allowed at least 6 months from the date of publication of the action; the EPA considers this to have been sufficient notice to adequately prepare for, and perform, the necessary monitoring.

As published in the December 6, 1994, final rule, paragraph (c) of § 265.1082 allowed the EPA Regional Administrator to "extend the implementation date for control equipment at a facility, on a case by case basis \* \* \*," In the preamble to the final rule (see 59 FR 62919, December 6, 1994, and the amendments to the rule published November 25, 1996, (see 61 FR 59938), the EPA stated its intent to include the provision to allow the Regional Administrator to extend the implementation date in situations beyond the owner or operators's control, and that this extension would be available only in "situations such as delays in State permit processing." The Agency went even further in placing constraints on these limited conditions by identifying situations associated with permit processing where the allowance would not apply (see 59 FR 62919). It is clear from the literal reading of the provision that the EPA fully intends that the Regional Administrator's extension of an implementation schedule is only allowable for a capital project implemented by a facility owner or operator to comply with the subpart CC air emission control requirements. It is also clear that the Agency does not intend that this Regional Administrator allowance for implementation schedule extensions apply to anything other than the installation of air emission control equipment. Today's action re-designates this provision as paragraph 265.1082(d) to allow the regulatory amendment described above in this section of today's preamble to be codified as subsection (c); however, the provision for Regional Administrator extensions of the final rule compliance date is not changed.

#### *C. Standards: General*

Today's amendments are further clarifying that the subpart CC RCRA air rules apply only to units managing a hazardous waste; to this effect, the EPA is adding the word "hazardous" in front of the word "waste" in §§ 264.1082(b)

and 265.1083(b). This point has been made by the EPA throughout the proposal and promulgation of the subpart CC rules (see 59 FR 62896, December 6, 1994, and 61 FR 4906, February 9, 1996); however, there have remained some questions and uncertainties regarding applicability of the rules to non-hazardous wastes. The changes being made today are intended to provide additional emphasis that only hazardous wastes are subject to the subpart CC controls.

Paragraph 265.1083(c)(2)(i) is revised to correct a typographical error in the symbol for the exit concentration limit; the symbol should be C subscript t "(C)<sub>t</sub>."

In addition, §§ 264.1082(c)(3) and 265.1083(c)(3) have been revised to add as an exempt unit a surface impoundment used for biological treatment of hazardous waste in accordance with subpart CC requirements. The EPA intended to exempt surface impoundments used for biological treatment from the subpart CC control requirements. The preamble to the final rule in Section VII(A)(5) (59 FR 62917, December 6, 1994) clearly states "air emission controls are not required for a surface impoundment in which biological treatment of a hazardous waste is performed under the same conditions specified in the rule for tanks." However, surface impoundments performing biological treatment were inadvertently left out of the biological treatment unit exemption in the November 25, 1996, final rule amendments (61 FR 59954).

The EPA has received a number of inquiries asking for interpretations of the provision of the subpart CC rules which states that wastes that meet applicable Land Disposal Restriction (LDR) treatment standards for organic hazardous constituents are exempt from the subpart CC air emission standards. Section 264.1082(c)(4) exempts from the RCRA subpart CC air emission standards:

"A tank, surface impoundment, or container for which all hazardous wastes placed in the unit \* \* \*

"(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 \* \* \*

A parallel exemption for interim status facilities is found at § 265.1083(c)(4). Under these provisions, tanks, surface impoundments, and containers receiving hazardous wastes that meet

the concentration limits for organics applicable to the waste under the generally-applicable treatment standards of the LDR program are not subject to the subpart CC air emission control regulations. See 61 FR 59941 in the preamble and 59954 in the rule (Nov. 25, 1996).

A number of members of the regulated industry (including the Environmental Technology Council, Chemical Waste Management, and the Chemical Manufacturers Association) have inquired as to how this provision applies to situations where the wastes in question are not yet prohibited from land disposal or consist of mixtures of different hazardous wastes. This preamble answers those questions. Copies of correspondence between EPA and these entities have been placed in the public docket for the rule.

The key phrase in the above exemption is what treatment standards are "applicable to the waste." EPA interprets this phrase expansively to include the treatment standard for organics that would apply to the waste whether or not the waste is currently prohibited, so that the exemption may apply to wastes not yet required to be treated for organics as a precondition to land disposal. Under this interpretation, hazardous wastes could be exempt from subpart CC regulation if they meet the treatment standards for organics that would ultimately be required as a precondition to land disposal. This is a reasonable construction of the rule's language (the phrase "applicable to the waste" is ambiguous as to its precise scope), and is supported by the preamble to the rule (which says that the exemption can apply to wastes that are not prohibited, see 61 FR 59941). In addition, this reading is consistent with the exemption's underlying principle: if hazardous wastes meet generally-applicable LDR treatment standards for organics, their concentrations of organics are in virtually every case going to be less than warrants control under the subpart CC rules (i.e., volatile organic concentrations will be less than 500 ppmw).

The EPA recognizes that it could interpret the language to apply only to hazardous wastes that are prohibited and actually subject to a treatment standard for organics. This more restrictive interpretation does not seem desirable because hazardous wastes which actually meet treatment standards for organics are likely to have been treated to remove or destroy the organics and thus not warrant regulation under subpart CC. On the other hand, it is EPA's further interpretation that this exemption does not apply to hazardous



wastes for which there would be no treatment standards for organics, namely wastes that are listed solely because of inorganic content. There is no potentially "applicable" organic treatment standard for such wastes, and the exemption thus does not apply. In addition, such wastes would not likely be treated for organic constituents; so in the event they contain higher concentrations of organics, this particular LDR exemption should not apply. Such wastes may, however, be exempt from the subpart CC rules because they contain less than 500 ppmw volatile organics at the point of waste origination (40 CFR 264.1082(c)(1)).

The following principles set out how the EPA interprets the rule for this subpart CC exemption in specific situations:

#### 1. Listed Waste

(A) If the waste is already subject to an LDR treatment standard for organics (for example, the organic spent solvent listed as F001), the waste is not subject to subpart CC if it meets the treatment standards for organic hazardous constituents in that waste (e.g. the treatment standards for organics in F001 set out in § 268.40);

(B) If the waste is newly listed so that no treatment standard under § 268.40 has yet been established, determine if the waste was listed for organic constituents in Part 261 Appendix VII and if so, if the waste meets the Universal Treatment Standards (UTS) for those constituents (set out in § 268.40) then the waste is exempt from subpart CC. The EPA considers the UTS to be "applicable" because it is clear that this is the standard which will apply when the waste is prohibited;

(C) If the waste is listed only because it contains inorganic constituents (e.g. electroplating wastewater treatment sludge (F006)), then it is not eligible for the LDR exemption at § 264.1082(c)(4) but could be exempt for other reasons, such as containing less than 500 ppmw volatile organics at the point of waste origination. This is true whether or not the waste is already a prohibited hazardous waste, or is newly listed.

#### 2. Mixtures of Listed Wastes

The same principles as presented above apply when mixtures of listed wastes are involved:

(A) If the mixture contains listed wastes for which there are organic concentration limits in § 268.40 and newly listed wastes listed (in Appendix VII of Part 261) for organic hazardous constituents, the waste would be exempt from subpart CC if it meets the

treatment standards in § 268.40 and the treatment standards to which the newly listed waste will be subject. Thus, to be exempt under § 264.1082(c)(4), a mixture of F001 wastes and FXXX (a hypothetical newly listed waste listed for presence of benzene) would have to meet the treatment standards for the organic hazardous constituents set out in § 268.40 for F001 plus UTS for benzene;

(B) If the mixture contains listed wastes for which there are organic concentration limits in § 268.40 and listed wastes with treatment standards only for inorganic constituents (or which is newly listed, and is listed only due to presence of inorganic hazardous constituents), the waste mixture would be eligible for the § 264.1082(c)(4) variance if it meets the organic concentration limits in § 268.40. Thus, a mixture of F001 and F006 wastes would be exempt from subpart CC if it meets the treatment standard for F001 organic hazardous constituents;

(C) If the mixture consists of listed wastes which are exclusively subject to, or are listed for, inorganic hazardous constituents, the mixture is not eligible for the § 264.1082(c)(4) exemption.

Finally, part of the "applicable" LDR standard for listed wastes is that the standard not be achieved by impermissible dilution (as set out in § 268.3 and several EPA interpretations, such as in 60 FR 11706–11708 (March 2, 1995)). Impermissible dilution could involve not only mixing an agent to the waste to increase volume without contributing to the treatment process, but also allowing volatilization from the waste without capture and destruction of the organic emissions. 52 FR at 25779 (July 8, 1987); *Chemical Waste Management v. EPA*, 976 F. 2d 2, 17 (D.C. Cir. 1992). In essence, this means that the LDR standards need to be achieved by treatment that destroys or removes the organic hazardous constituent (or the wastes may meet the treatment standard as generated). See 60 FR 11708. The subpart CC rules likewise contain provisions prohibiting dilution as a means of making a waste eligible for an exemption from the rule (see, e.g., § 265.1083(c)(2)(vi)). Thus, to be eligible for this exemption from the subpart CC standards, listed wastes must either meet treatment standards for organics by treatment which destroys or removes hazardous organic constituents, or the wastes must meet those standards as generated.

#### 3. Characteristic Wastes

The first principle to bear in mind regarding characteristic hazardous wastes is that the subpart CC rule no

longer applies once these wastes are decharacterized, i.e., no longer exhibit a characteristic of hazardous waste. This is because the subpart CC rules only apply to wastes that are identified or listed as hazardous. See, e.g., § 265.1080(a). Also, since the rules do not prohibit any method which removes a hazardous characteristic, dilution can be used for this purpose; see § 261.3(d)(1). Thus, in the discussion that follows, it must be understood that all references to characteristic hazardous wastes are to wastes which continue to exhibit a characteristic.

Characteristic wastes can be identified because of the presence of organic hazardous constituents, but also can contain organic "underlying hazardous constituents"—hazardous constituents present at levels exceeding the Universal Treatment Standards but which do not cause the waste to exhibit a characteristic; see § 268.2(i). Such hazardous constituents typically must be treated to meet UTS before a characteristic waste is land disposed (see *Chemical Waste Management v. EPA*, 976 F. 2d 2, 16–18), and so UTS can be considered to be an applicable standard for purposes of the subpart CC exemption under discussion in this preamble.

Principles applicable to specific situations involving characteristic hazardous wastes are therefore:

(A) Since subpart CC controls do not apply to nonhazardous wastes, these standards do not apply as the result of managing decharacterized wastes.

(B) If the waste exhibits ignitability, corrosivity, or reactivity (or is a mixture which exhibits one or more of these characteristics), then the waste is exempt from subpart CC if it meets treatment standards for any of the organic underlying hazardous constituents which are present (and the waste is no longer subject to subpart CC if it no longer exhibits a characteristic, whether or not treatment standards for underlying hazardous constituents are achieved). In this example, these characteristic wastes are prohibited and subject to the requirement to treat for underlying hazardous constituents, so that these standards clearly are applicable;

(C) If the waste or waste mixture exhibits a characteristic for an organic hazardous constituent (so-called Toxicity Characteristic (TC) organic wastes), then the waste must meet the treatment standard for that constituent plus UTS for any organic underlying hazardous constituent. These are the current requirements set out in Part 268 for the waste and so are clearly applicable;

(D) If the waste or waste mixture exhibits a characteristic for a metal, the waste would be exempt from subpart CC if it meets UTS for any organic underlying hazardous constituent which may be present. This result comes from the *Chemical Waste Management* opinion cited above (although the EPA has not yet amended the Part 268 rules to reflect the court's holding with respect to these wastes), and so can be viewed as applicable standards for purposes of the subpart CC exemption.

#### 4. Examples

A number of examples that illustrate the EPA intent and interpretation of the subpart CC LDR exemption are summarized below.

1. F001 + F006. Listed organic plus listed inorganic. Meet treatment standards for organics in F001;

2. F001 + D018. Listed organic plus organic TC. Meet treatment standards for F001, treatment standards for benzene, and treatment standards for any organic underlying hazardous constituent in the D018 waste (or eliminate the D018 characteristic before the waste is managed in a tank, container or surface impoundment, in which case only the treatment standards for F001 waste would have to be satisfied for the exemption to apply);

3. F001 + D008. Listed organic plus TC metal. Meet treatment standards for F001 plus treatment standards for any organic underlying hazardous constituents which may be present in the D008 waste (or eliminate the D008 characteristic before the waste is managed in a tank, container or surface impoundment, leaving the F001 standard as the applicable treatment standard);

4. F006 + D018 + D008. Listed inorganic, TC organic, TC inorganic. Meet treatment standard for benzene and for organic underlying hazardous constituents in D018 and D008 wastes;

5. F006. Ineligible for § 264.1082(c)(4) exemption.

There have also been questions regarding whether this LDR exemption applies to mixtures that would meet the organic constituent concentration limits specified for the hazardous wastes in the mixture but for the contribution of organic constituents from the decharacterized wastes in the mixture. The EPA interprets the rule so that the LDR exemption does not apply in these circumstances. First, the language of the rule refers to "all hazardous waste placed in the unit" having to meet the treatment standard, which logically means meeting the standard at the point the hazardous waste is placed in the unit. Second, it is reasonable to look at

the point of mixing as a new point of waste origination in keeping with the overall thrust of the provision to reserve the exemption for wastes which actually are treated. See 54 FR at 26633 (June 23, 1989) where the EPA noted a similar view in the LDR context. The EPA also notes that this interpretation is consistent with other provisions of the rule where the Agency has indicated expressly that organic removal is to be evaluated in the context of each individual waste stream entering a treatment process. See section § 265.1083(c)(2)(v)(C).

The last issue addressed on this topic in today's preamble concerns the relationship of this exemption and treatment variances under the LDR program. The EPA notes that the exemption from subpart CC standards applies only to hazardous wastes that have been treated to meet the treatment standards set out in 40 CFR 268.40. This language excludes alternative standards which are established as part of the treatment variance process, which alternative standards are codified in 40 CFR 268.44. This distinction is intentional. As the EPA recently noted in the rulemaking amending the treatment variance standards, it is possible that a treatment variance may result in a standard which does not fully remove volatile organics to the extent contemplated in creating the subpart CC exemption. For this reason, the EPA has indicated explicitly that such wastes may remain subject to the subpart CC rules. The EPA reiterates that approach here.

The EPA is today amending the treatment demonstration provision for valuing waste analysis results below the limit of detection for an analytical method. In response to comments, EPA is today revising paragraphs (A) and (B) of § 264.1082(c)(2)(ix) and § 265.1083(c)(2)(ix). The change to paragraph (A) is being made in recognition that a relatively high blank value for Method 25D does not necessarily indicate that a waste stream has failed to meet the treatment demonstration requirements of § 265.1083(c)(2)(i) through (vi). The blank value required in paragraph 4.4 of EPA Reference Method 25D (codified in appendix A to 40 CFR part 60) is an indication of the organics contained in the Polyethylene Glycol, not the organics in the waste. For a Method 25D analytical result, the method instructs the operator to report the value of the instrument results minus the blank value. In a circumstance that the instrument results are higher than the blank value, the reported Method 25D result would not be non-detect, but

rather, would be a numerical concentration value. In circumstances that the instrument results are equal to the blank value, the reported result would be non-detect. In the circumstance resulting in a non-detect, the Agency does not consider it appropriate to require the facility owner or operator to compare the treatment results of paragraphs (c)(2)(i) through (vi) in § 264.1082 and § 265.1083 to one-half of the blank value, as was required by the regulatory requirement being revised today. Therefore, the Agency is adding a provision that allows the facility owner or operator to substitute a value of 25 ppmw for a non-detect Method 25D result, if one-half the Method 25D blank value is more than 25 ppmw. The Agency has selected the value of 25 ppmw because it represents 95 percent reduction of organics in a waste stream of 500 ppmw, the required percent reduction for a waste stream with a VO concentration equal to the action level for the subpart CC standards.

No default value similar to the 25 ppmw value described here is included in the provisions for non-detect results in waste determinations performed to determine whether the hazardous waste is below 500 ppmw at its point of waste origination. See 265.1084(a)(3). Such a provision is necessary in situations where an owner or operator is attempting to demonstrate a process has achieved 95 percent reduction of organics, because the concentration of the stream exiting the process unit may need to be demonstrated to be as low as 25 ppmw. Such is not the case with waste determinations performed to demonstrate that the hazardous waste stream is below the subpart CC action level of 500 ppmw, where the waste determination need only demonstrate that the waste is below 500 ppmw. The valuing of non-detects for waste determinations performed at the point of waste origination is discussed further in the following section of this preamble.

The EPA is revising paragraph (B) of § 264.1082(c)(2)(ix) and § 265.1083(c)(2)(ix) to clarify the Agency's intent that the level of detection for an analytical method other than method 25D is the sum of the limits of detection for each of the regulated compounds in the waste sample. As previously written, the provision did not clearly indicate that for purposes of this subpart, only the detection limits for organic compounds with Henry's Law greater than or equal to 0.1 Y/X are required to be summed, to establish the limit of detection for an analytical method.

The EPA is also adding a reference to organic hazardous constituents in paragraph (c)(4)(ii) of § 264.1082 (which applies when the LDR standard is a designated method of treatment), to make clear that this provision requires treatment of organics. With this revision, § 264.1082(c)(4)(ii) now conforms to § 264.1082(c)(4)(i). A conforming change is being made to the requirement for interim status facilities, at § 265.1083(c)(4)(ii).

#### D. Waste Determination Procedures

Paragraphs in § 264.1083(a)(2) and § 265.1084(a)(2) are revised by changing "The average VO concentration of a hazardous waste at the point of waste origination may be determined \* \* \*" to read as follows: "For a waste determination that is required by paragraph (a)(1) of this section, the average VO concentration of a hazardous waste at the point of waste origination may be determined \* \* \*". This waste determination requirement was explained in Section VII.A.3, *Waste Determination Procedures*, of the preamble to the final rule (59 FR 62915, December 6, 1994) as follows: "A determination of the volatile organic concentration of a hazardous waste is required by the subpart CC standards only when a hazardous waste is placed in a tank, surface impoundment, or container subject to the rule that does not use air emission controls in accordance with the requirements of the rule. A TSD owner or operator is not required to determine the volatile organic concentration of the waste if it is placed in a tank, surface impoundment, or container using the required air emission controls." Consistent with this statement, the EPA is slightly revising the current rule to make clear that the average VO concentration determination is required only for hazardous waste placed in a unit not using subpart CC air emission controls and not otherwise exempt from using subpart CC air emission controls.

Today's action also revises § 265.1084(a)(3)(ii)(B) to clarify the EPA's intent regarding the number of samples required for a waste determination. The amended paragraph states (as did the published rule language at § 265.1084(a)(5)(iv)(A) (see 59 FR 62939, December 6, 1994)), that the average of four or more sample results constitutes a waste determination for the waste stream. This amended paragraph further clarifies that one or more waste determinations may be needed to represent the average VO concentration over the complete range of waste 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). Therefore, to determine the average VO concentration of a waste stream generated by a process with large seasonal variations in waste quantity, or fluctuations in ambient temperature, several waste determinations (of four or more samples each) will be required.

The affected public has been fully informed of the EPA's intent regarding the fact that four samples constitute a waste determination, and that one or more waste determinations may be needed to characterize the waste stream's VO concentration over the averaging period. To inform the public of the technical requirements and compliance options in the amended subpart CC RCRA air rules, the EPA conducted a series of six seminars during August and September of 1995 and an additional six seminars during August through November of 1996. During these seminars, the EPA presented a thorough discussion of the details associated with making a waste determination. (Refer to EPA RCRA Docket No. F-95-CE3A-FFFFF, Item No. F-95-CE3A-S0017 and Docket No. F-96-CE3A-FFFFF.)

In another clarifying revision, in each citation of Method 8260(B) and Method 8270(C) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, the reference to version (B) or (C) is being deleted by today's action. The citations that are being revised were added by the November 25, 1996, final rule amendments (61 FR 59932) to the following paragraphs of § 265.1084: (a)(3)(iii), (a)(3)(iii)(F), (a)(3)(iii)(G), (b)(3)(iii), (b)(3)(iii)(F), and (b)(3)(iii)(G).

It was the EPA's intent that the current version of each of these methods, as applicable to the waste being measured, be used in making a waste determination, not necessarily the specific versions cited. At the time the November 25, 1996 amendments were published, the versions 8260(B) and 8270(C) were only proposed methods; the published versions were 8260(A) and 8270(B). Specifying these particular versions was an inadvertent error, which is being corrected by today's action. As was stated in Section IV.F, *Waste Determination Procedures*, of the preamble to the final rule amendments (61 FR 59942, November 25, 1996), 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 was appropriate to add Methods 624, 625, 1624, and 1625 (all contained in 40 CFR part 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 was noted 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. It was further noted that for the purpose of a waste determination, the owner or operator must evaluate the mass of all VO compounds in a waste that have Henry's Law value above the 0.1 Y/X value. Therefore, it is the EPA's position that 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.

(Note: Today's action includes a revised list of known compounds with a Henry's Law value less than or equal to 0.1 Y/X, contained in appendix VI of subpart 265; the revisions correct typographical errors, and format the list to be alphabetical.)

Also in today's action, a printing error that placed § 265.1084(a)(3)(iii)(A) at the end of § 265.1084(a)(3)(iii) has been corrected. In addition, in the November 25, 1996 final rule amendments, because of a typographical error in § 265.1084(a)(3)(iii)(G), the words "introduction and analysis" were omitted from the sample handling steps for which site-specific procedures must be documented in the quality assurance program to minimize the loss of compounds due to volatilization, biodegradation, reaction, or sorption. Today's amendments revise § 265.1084(a)(3)(iii)(G) to read as follows: "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."

Several commenters have stated that the subpart CC provisions for treatment of non-detect values in the analysis of treated waste samples, contained in §§ 264.1082(c)(ix) and 265.1083(c)(2)(ix), should also apply to waste determinations at the point of waste origination, for purposes of determining compliance with the 500 ppmw VO concentration action level of the standards. Commenters requested

this application of the non-detect policy to waste determinations because a waste determination consists of the average of four or more samples, and some of the samples analyzed may yield results that are below the analytical method's limit of detection. The commenters' concern is the same rationale that led EPA to amend the provisions at sections 264.1082 and 265.1083 in the November 25, 1996 final rule amendments; without such a provision, the owner or operator does not have a way to assign a numeric value for a non-detect reading, when computing the average of four or more waste samples to calculate a waste determination. The same logic applies to both circumstances, and it was obviously an oversight that EPA did not include this provision in the November 25, 1996 final rule amendments. Thus, the EPA is today adding to the waste determination provisions at § 265.1084(a)(3)(iv), a provision for valuing non-detect analytical results. The new rule language provides the appropriate guidance on the valuing of non-detects in the calculation of the average of four or more samples for a waste determination.

(Note: A corresponding amendment is not required at § 265.1084(b)(3)(iv) for treated hazardous waste because those rules, specifically § 264.1082(c)(2)(ix) and § 265.1083(c)(2)(ix), contain provisions for valuing non-detects when determining performance of an organic destruction or removal process.)

The EPA today is also amending regulatory language to reflect a clarification that was addressed in the November 25, 1996 rulemaking preamble (61 FR at 59943), but was inadvertently omitted from the regulatory text. This amendment adds two new paragraphs to the waste determination provisions, § 265.1084(a)(3)(v) and (b)(3)(v), to state that EPA would determine compliance with the subpart CC regulations based on the same test method used by the facility owner or operator, provided the owner or operator had used a test method appropriate for the waste. The appropriateness of an analytical method is described in paragraphs § 265(a)(3)(iii) and (b)(3)(iii), respectively. The November 25, 1995 preamble to the final rule amendments (61 FR 59943) stated 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." Today's

amendments add a paragraph to the analysis section of the final rule's waste determination procedures at § 265.1084(a) and (b) to codify this intended provision.

As published in the November 25, 1996 final rule amendments (61 FR 59975), paragraph 265.1084(a)(4)(iv) provides that the results of a direct measurement of average VO concentration shall be used to resolve a disagreement between the Regional Administrator and the owner or operator regarding a determination of the average VO concentration of a hazardous waste stream using knowledge. To clarify that in such cases where there is disagreement regarding use of knowledge, the owner or operator has the discretion to choose an appropriate test method or methods, the following sentence has been added to § 265.1084(a)(4)(iv): "The owner or operator may choose one or more appropriate methods to analyze each collected sample in accordance with the requirements of paragraph (a)(3)(iii) of this section."

The EPA is also clarifying the waste determination requirements for treated wastes. Prior to today's amendment, the subpart CC regulatory text required analysis of all treated waste. As explained below, a waste determination is unnecessary for a waste treated by either a boiler or industrial furnace (BIF) operated in accordance with subpart H to 40 CFR part 266, or a hazardous waste incinerator operated in accordance with subpart O to 40 CFR parts 264 or 265; the EPA is amending the rule to clarify this. Today's action revises paragraph (b)(1) of §§ 264.1083 and 265.1084 to require that the owner or operator perform the applicable waste determination for each treated hazardous waste placed in a waste management unit exempted under the provisions of paragraphs (c)(2)(i) through (c)(2)(vi) of §§ 264.1082 and 265.1083, respectively. Those specific paragraphs are cited in today's amended rule language to clarify that a waste determination is only required for a hazardous waste placed in a waste management unit exempted under one of the treatment demonstration options that is a performance standard, as opposed to an equipment specification standard. As was noted in Section VII.A.2.b, *Treated Hazardous Waste*, of the final rule preamble (59 FR 62914, December 6, 1994), provisions for hazardous waste treatment are specified in the subpart CC standards for the following processes: (1) An organic destruction, biological degradation, or organic removal process that reduces the organic content of the hazardous

waste and is designed and operated in accordance with certain conditions specified in the rule; (2) a hazardous waste incinerator that is designed and operated in accordance with the requirements of 40 CFR part 264 subpart O or 40 CFR part 265 subpart O; or (3) a BIF that is subject to the requirements of 40 CFR part 266 subpart H.

Under today's amendments to the rule, the EPA is clarifying its original intent, that a waste determination is required only for a treated hazardous waste placed in a waste management unit, if the unit is exempt from air emission control requirements under provisions contained in paragraphs (c)(2)(i) through (c)(2)(vi) of §§ 264.1082 and 265.1083. The EPA requires waste demonstration options to ensure that the treatment conditions specified in subpart CC have been met. As explained in the December 1994 final rule preamble (59 FR at 62914, December 6, 1994), the waste demonstration results are required to indicate that a sufficient mass of organic constituents have been removed or destroyed from a regulated waste stream, prior to it being placed in a hazardous waste management unit that is not equipped with air emission controls. The treatment demonstration options listed in paragraphs (c)(2)(i) through (viii) of §§ 264.1082 and 265.1083 are based on the treatment process achieving a 95% reduction by weight of organic constituents in the waste. For the provisions of (c)(2)(i) through (c)(2)(vi) of §§ 264.1082 and 265.1083, the treatment process is not specified in the regulation; rather the requirement is based on the removal efficiency of the treatment process. Thus, to demonstrate compliance, EPA considers it necessary that the owner or operator perform waste determinations to demonstrate the appropriate removal efficiency has been achieved. However, the treatment demonstration provisions of paragraph (c)(2)(vii) in §§ 264.1082 and 265.1083 require that the hazardous waste be treated in an incinerator that is designed and operated in accordance with the requirements of subpart O in 40 CFR part 264 or part 265; and the treatment demonstration provisions of paragraph (c)(2)(viii) in §§ 264.1082 and 265.1083 require that the hazardous waste be treated in a BIF that is designed and operated in accordance with the requirements of 40 CFR part 266, subpart H. The EPA considers compliance with those combustion standards to be sufficient demonstration that the organics in the waste will be destroyed by 95 percent or more, by weight, and does not consider a waste

determination necessary. The EPA has consistently given verbal guidance that waste determinations are not required for waste treated in the above-mentioned specific units, and is today making an amendment to the regulatory text to make the regulatory requirements consistent with this guidance.

In a further clarification, the EPA intended that the owner or operator use the same test method to determine the average VO concentration at the point of waste origination as is used at the point of waste origination, if these values are to be used to determine the effectiveness of a treatment system. As was stated in Section IV.F, *Waste Determination Procedures*, of the preamble to the final rule amendments (61 FR 59942, November 25, 1996), "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."

Since the effectiveness of a waste treatment process must be judged on the basis of the process's capacity to reduce the organics in waste relative to their concentration at the point of waste origination or at the point of entry to the treatment system, the method(s) used for the waste determination at the point of waste treatment must be appropriate to detect and measure the compounds in the waste at the point of waste origination; to put the measurements on a common basis and provide an accurate comparison, the EPA considers it necessary that the method(s) used at the point of waste origination must be the same as the method(s) used at the point of waste treatment. To clarify this requirement, which the EPA has heretofore considered implicit, the following sentence is being added to § 265.1084(b)(3)(iii): "When the owner or operator is making a waste determination for a treated hazardous waste that is to be compared to an average VO concentration at the point of waste origination or the point of waste entry to the treatment system, to determine if the conditions of § 264.1082(c)(2)(i) through (c)(2)(vi) or § 265.1083(c)(2)(i) through (c)(2)(vi) are met, then the waste samples shall be prepared and analyzed using the same method(s) as were used in making the

initial waste determination(s) at the point of waste origination or at the point of entry to the treatment system." (Only the waste determination provisions in part 265 are being revised in connection with this rule clarification and the following rule clarification, because the subpart CC waste determination protocols are contained in part 265, and the part 264 standards cross-reference part 265.)

Because of a printing error, the equations for calculating the actual organic mass removal rate in § 265.1084(b)(8)(iii) and for calculating the actual organic mass biodegradation rate in § 265.1084(b)(9)(iv) were out of place in the November 25, 1996 amendments (61 FR 59978). This document corrects the placement of these equations.

In a further clarification to the waste determination procedures of subpart CC, paragraph 265.1084(d)(5)(ii) required that a mixture of methane in air at a concentration of approximately, but less than, 10,000 ppmw be used to calibrate the detection instrument used to determine no detectable organic emissions. It was the EPA's intent that the calibration procedure be consistent with the procedure specified in the subpart BB equipment leak test methods and procedures at §§ 264.1063 and 265.1063, as they reference the same monitoring procedure. Paragraph (b)(4)(ii) of §§ 264.1063 and 265.1063 specifies that calibration gases for the detection instrument shall be, "A mixture of methane or n-hexane and air at a concentration of approximately, but less than 10,000 ppm methane or n-hexane. Consistent with this requirement, today's action revises the requirement for calibration gases in parts 264 and 265 to provide the owner or operator the choice of using a mixture of methane or n-hexane and air.

#### *E. Standards: Tanks*

Commenters have questioned whether a facility owner or operator is permitted to install a closure device on a tank manifold system or header vent when a series of tanks have their vents (i.e., tank openings) connected to a common header. In many tanks systems, tank vents are connected to a manifold or central header, and a closure device (or pressure/vacuum device such as a conservation vent) is installed on the header rather than on the individual tanks. Prior to today's amendment, the subpart CC level 1 tank requirements at paragraph (2)(2)(iii) in § 264.1084 and § 265.1085 could have been interpreted to require that each opening on a Level 1 tank fixed roof must be either equipped with a closure device or

connected through a closed-vent system to a control device, with no allowance for the closure device or pressure/vacuum device to be installed on the tank manifold system. The EPA did not intend the regulatory requirement to disallow a closure device or pressure/vacuum device from being installed on a tank manifold system. The EPA is aware that such tank manifold or vent header systems provide a degree of emissions reduction which is derived from vapor balancing between tanks during unloading and inter-tank transfers; the EPA clearly did not intend to discourage their use. The EPA is therefore amending the subpart CC tank standards to provide that a closure device can be installed on a manifold vent header for Level 1 tanks, by revising paragraph (c)(2)(iii) in § 264.1084 and § 265.1085.

In the November 25, 1996 final rule amendments, the EPA promulgated a provision that allowed a facility to install and operate air emission control devices on Level 1 tanks. As published, the regulatory language for that provision inadvertently made it mandatory that these control devices be operating at all times when hazardous waste is managed in the tank, even at times of routine maintenance. The EPA is amending the rules today to clarify that the control device is not required to be operating during specified periods, including those instances it is necessary to provide access to the tank for performing routine inspections, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port or hatch to maintain or repair equipment. Paragraph (B) is being revised in § 264.1084(c)(2)(iii) and § 265.1085(c)(2)(iii) to better convey this intent.

In the amendments to the final rule published on November 25, 1996 (61 FR 59944), the preamble at Section G. *Standards: Tanks* that discussed the revisions to the subpart CC tank standards, stated "\* \* \* 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," in order to comply with the tank level 2 air emission control requirements. However, the latter portion of this statement was incorrect and the EPA is clarifying that it was the EPA's intent that only enclosed combustion devices can be used as control devices under this alternative to comply with the Tank

Level 2 air emission control requirements. It should also be noted that the regulation as amended by the November 25, 1996 **Federal Register** document (at §§ 264.1084(d)(5) and 265.1085(d)(5)) was correct and did not contain the statement regarding the use of a (non-combustion) "control device designed and operated to reduce the total organic content of the inlet vapor stream by at least 95 percent by weight." Since publication of the November 25, 1996 preamble, the EPA has consistently and repeatedly provided verbal clarification in all forums where the subject of level 2 tank enclosures has been raised, that the noted preamble text is incorrect, and that level 2 tanks operated inside an enclosure must be vented to an enclosed combustion device. The EPA provided this information publicly at each of the six seminars EPA conducted in September through December of 1996; additionally, an industry trade association provided this same clarification at the two seminars the industry trade group conducted in March and April of 1997 (these seminars are discussed in the Background section of today's preamble). Additionally, the requirement for enclosed combustion devices on level 2 tank enclosures was strongly affirmed in the accompanying printed materials for each of these EPA and industry trade group seminars; those printed materials were distributed to all seminar attendees, and to additional members of EPA and the regulated community, for informational purposes and peer review. Further, the RCRA Hotline has been clarifying the regulatory text requirement for enclosed combustion devices to callers who have raised the topic to Hotline representatives. The requirement for enclosed combustion devices on level 2 tank enclosures is not being amended by today's action. However, the EPA is currently considering a future amendment to this requirement that would allow owners or operators to operate a Level 2 tank enclosure vented to an alternate control device, provided they make certain site-specific demonstrations. The reason EPA currently requires enclosure emissions to be vented to an enclosed combustion device is because organic concentrations in air within the enclosure are very dilute, due to the inherent dilution in the enclosure, and are often less than 100 ppm organics by volume. It is not clear to the EPA that control devices other than enclosed combustion devices, can reduce organics in such a dilute vent stream by the 95 percent control efficiency required the subpart

CC standards. The EPA has agreed to investigate the possibility whereby a facility could make a case-by-case demonstration of a non-combustion control device efficiency; the EPA would require the demonstration to show that a mass of organics would be removed from a given waste, using a particular enclosure and control device, equivalent to 95 percent reduction of organics in the tank headspace, if the tank were to be equipped with a discreet cover. Though such a demonstration would likely be fairly detailed and costly, commenters have indicated that they would be interested in pursuing such an option if it were included in the subpart CC tank enclosure requirements. The EPA considers that such an equivalency would be consistent with the existing tank standards; if a technically feasible and verifiable equivalency demonstration technique can be developed, this could be a reasonable alternative to the requirement for enclosed combustion devices under the Level 2 tank enclosure control option. The EPA will continue to investigate this option, and if a viable approach can be developed, will publish a future amendment to incorporate it into the subpart CC Level 2 tank standards.

The EPA has received inquiries as to whether doors are allowed to be open on level 2 tank enclosures, and how doors are regarded under the provisions for natural draft openings (NDO) in the "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, appendix B ("Criteria T") requirements. The Criteria T evaluation of NDO is intended to evaluate the effectiveness of the enclosure at capturing emissions from within the enclosure. Therefore, for purposes of Criteria T, the evaluation of the enclosure must be conducted on the enclosure as it is operated during hazardous waste management operations. If the enclosure has a door that is closed during waste operations, then the open doorway would not be considered an NDO; however, cracks or openings that exist around the door when it is closed would be considered NDO. Doors on enclosures are often very large, to accommodate waste transportation vehicles; thus, the effectiveness of an enclosure is severely altered by the positioning of such a door. Obviously, if a door is normally open during times when hazardous waste is managed in the enclosed tank, the open doorway would be considered an NDO.

By this clarification, the EPA is not precluding the opening of enclosure

doors. The EPA considers it appropriate to allow enclosure doors to be open for the same circumstances that tank covers can be open under paragraph 265.1085(g)(2)(i)(A) and similar paragraphs for tanks equipped with fixed roofs—when necessary to provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Also commensurate with paragraph 265.1085(g)(2)(i)(A), following completion of the activity, the owner or operator should promptly secure the door in the position it was in during the evaluation of the NDO.

It also warrants clarification that the enclosure door (and other openings not accounted for as Criteria T NDO) must be closed at all times that hazardous waste is managed in the enclosed tank (unless the tank is exempt from subpart CC air emission control requirements), not just when waste is being treated in the tank. The EPA considers it inherently obvious within the tank standards that the enclosure around a tank must be operated in the same manner in which it was evaluated for the Criteria T requirements. Specifically, paragraphs § 264.1084(i)(1) and § 265.1085(i)(1) require that the enclosure be designed and operated in accordance with the Criteria T.

The EPA recognizes that it is not feasible to require all waste transfer to and from a tank enclosure to be conducted by enclosed transfer systems. However, the EPA does consider it reasonable to interpret the provisions of § 264.1084(i)(1) and § 265.1085(i)(1) to require that the enclosure be operated in the same manner in which it was evaluated for compliance with Criteria T. Thus, the EPA is clarifying that enclosure doors and other openings not evaluated as NDO shall be closed when hazardous waste is managed inside the enclosure, except when it is necessary to open the door or opening for waste transfer, equipment access, or worker access.

In the December 6, 1994 final regulation, the regulatory text at §§ 264.1084(g) and 265.1085(g) allowed that an owner or operator may install and operate a safety device on tank covers, closed-vent systems and control devices. The amendments published on November 25, 1996 amended the tank requirements; in those amendments, the provision for safety devices was inadvertently omitted from the tank requirements for floating roof covers. Today's action adds new paragraphs 264.1084(e)(4), 264.1084(f)(4), 265.1085(e)(4), and 265.1085(f)(4) stating that safety devices are allowed

on both internal and external floating roof tank covers.

Today's action amends § 264.1084(f)(3)(iii) to correct a typographical error. The sentence "Prior to each inspection required by paragraph (f)(3)(i) or (f)(3)(ii) of this subpart \* \* \*" is revised to read as follows, "Prior to each inspection required by paragraph (f)(3)(i) or (f)(3)(ii) of this section \* \* \*". Also, to correct another typographical error in § 264.1084(f)(3)(i)(D)(4) and § 265.1085(f)(3)(i)(D)(4), the phrase "\* \* \*" and then dividing the sum for each seal type by the nominal perimeter of the tank." is revised to read as follows "\* \* \*" and then dividing the sum for each seal type by the nominal diameter of the tank."

In the November 25, 1996 final rule amendments (61 FR 59932), an exemption from the control requirements of subpart CC was added for a tank, surface impoundment, or container for which all the hazardous waste placed in the unit meets the Land Disposal Restrictions (LDR) as specified in §§ 264.1082(c)(4) and 265.1083(c)(4). However, the EPA inadvertently failed to add this exemption based on meeting applicable LDR treatment standards to the exemption from the closed system transfer requirements. Today's change adds paragraph (iii) under §§ 264.1084(j)(2) and 265.1085(j)(2) to correct this oversight. It was originally the EPA's intent to make this conforming amendment for closed system transfer requirements in the November 25, 1996 action. The basic structure of the subpart CC rule is that once a hazardous waste is subject to the provisions of the rule, all containers, tanks, and impoundments managing the waste are subject to the rule's requirements. However, once a waste is treated to destroy or remove organics in a manner specified in the rule, downstream tanks, containers, and surface impoundments are not subject to the subpart CC air requirements to operate the units with covers and/or control devices.

(Note: Recordkeeping, monitoring, reporting and testing requirements may apply to those downstream units.) See Section VII.A.2.b, *Treated Hazardous Waste*, of the preamble to the final rule (59 FR 62914, December 6, 1994). The EPA inadvertently failed to codify this core principle for closed system transfer and is correcting the omission in today's rule.

#### F. Standards: Surface Impoundments

Today's action corrects a typographical error in §§ 264.1085(b)(2) and 265.1086(b)(2) by revising the phrase "\* \* \*" paragraph (d) of this sections." to read "\* \* \*" paragraph (d)

of this section." Also, the EPA is clarifying the requirements of §§ 264.1085(d)(1)(iii) and 265.1086(d)(1)(iii) by making a non-substantive editing change. "Factors to be considered when selecting the materials for \* \* \*" is redrafted to read "Factors to be considered when selecting the materials of construction \* \* \*". To correct another typographical error in §§ 264.1085(d)(2)(i)(B) and § 265.1086(d)(2)(i)(B), "To remove accumulated sludge or other residues from the bottom of surface impoundment." is revised to read, "To remove accumulated sludge or other residues from the bottom of the surface impoundment."

As is discussed regarding tanks, in Section E of this preamble, the EPA inadvertently failed to add the exemption for hazardous wastes that have been treated to meet applicable LDR treatment standards to the exemption from the closed system transfer requirements for hazardous waste that is transferred to a surface impoundment. Today's action adds this exemption to the exemptions from closed system transfer requirements in §§ 264.1085(e)(2)(iii) and 265.1086(e)(2)(iii).

#### G. Standards: Containers

The EPA has received comments from the regulated community regarding the inspection requirements for containers; these comments clearly indicate a widespread misinterpretation of the rule requirements relevant to container inspections. Numerous commenters referenced in their statements to the EPA that the language in § 264.1086(c)(4)(i) and (d)(4)(i), and the corresponding paragraphs in 40 CFR part 265, require a visual inspection to occur within 24 hours after acceptance of each regulated container which is transported to a regulated facility and which contains hazardous waste at the time it arrives at the facility. They also noted that the requirement for an inspection to be conducted within a 24-hour time frame is unnecessarily burdensome in some limited and infrequent situations.

The visual container inspection requirement is intended to provide means for the facility owner or operator to ensure that the container has no visible openings or gaps through which organics could be emitted; see Section IV.I.3 of the preamble, 61 FR 59948, November 25, 1996. The amended container regulations published November 25, 1996, did not specify the time frame in which the initial visual inspection must be conducted. The regulation states, "In the case when

\* \* \* 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 \* \* \*". The 24-hour period in the rule language refers to the time limit on emptying the container that triggers the visual inspection; the rule language in § 265.1087(c)(4)(i) and (d)(4)(i), and the corresponding paragraphs in 40 CFR part 265, as published in November 1996, do not specify the time frame in which the visual inspections must be conducted. However, it is the intent of the EPA that the initial inspection be subject to the same time requirements as were set out in the December 6, 1994, final regulation (see 40 CFR 265.1089(f)(1) of the December 6, 1994 published regulation (at 59 FR 62947)). Specifically, the container inspection must be conducted on or before the date that the container is initially subject to the subpart CC container standards. Thus, for a container with hazardous waste that is transported to a regulated facility, the inspection of the container is required on or before the date that the container is accepted at the facility.

In those situations where it would be infeasible to inspect a container on the date it is accepted at the facility, for the purpose of compliance with the subpart CC container standards, it would be acceptable for the container to be inspected prior to that date. For example, if an owner or operator of an affected facility accepts a shipment of containers that arrives at the TSDF on a truck, and the TSDF owner or operator is unable to conduct a visual inspection of the containers at the time of acceptance of the container shipment, it is acceptable under the rule to have the generator or transporter perform the visual inspection of the individual containers before or during loading of the containers onto the truck for transport to the affected facility. The transporter or generator could provide the recipient TSDF with some level of information (e.g., written documentation) to confirm the inspection has been conducted on or before the date that the container is accepted at the facility. It is likely that the TSDF owner or operator would then perform their own visual inspection when possible, (e.g., at the time that the containers are unloaded from the truck at the TSDF). The EPA considers the use of generator or transporter supplied information to comply with the visual inspection requirements similar to owner or operator use of generator



information regarding the organic content of a hazardous waste as a means to comply with the waste determination (i.e., VO concentration determination) requirements of the rule. It should be noted that in either case, it is ultimately the responsibility of the owner or operator of the affected facility to be in compliance with all the applicable regulatory requirements. The EPA is amending the language in § 264.1086(c)(4)(i) and (d)(4)(i), and the corresponding paragraphs in 40 CFR part 265, to clarify that the 24-hour period noted in the rule refers to the time frame for emptying a container, and that this 24-hour criterion then triggers the need for a visual inspection that must be conducted on or before the date that the container is accepted at the facility.

The amendment to §§ 264.1086(c)(4)(i) and (d)(4)(i), and the corresponding language in part 265, also clarify the phrase "accepted at the facility." For the purposes of this inspection requirement for containers, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest of the appendix to 40 CFR part 262 (EPA Form 8700-22), as required under subpart E of this part, at § 264.71 and § 265.71. The instructions to EPA Form 8700-22 at Item 20, Facility Owner or Operator: Certification of Receipt of Hazardous Materials Covered by This Manifest Except as Noted in Item 19, state, "Print or type the name of the person accepting the waste on behalf of the owner or operator of the facility. That person must acknowledge acceptance of the waste described on the Manifest by signing and entering the date of receipt." The EPA considers acceptance of the waste to occur at the time of manifest signature. This has been the EPA's consistent interpretation of this phrase, and is the guidance that EPA has supplied both verbally and in written seminar materials.

The EPA has received questions regarding when the opening of a cover or closure device is allowed on containers. Several of these questions have concerned the opening of the vent on vacuum trucks during loading operations and the opening of containers vents to allow venting of vapors for the purpose of worker safety. With regard to vacuum trucks, the EPA has always intended the subpart CC final rules to allow containers to vent emissions directly to the atmosphere during filling operations. This would include use of a vacuum system to fill a tank truck (i.e., a container under RCRA). Although the December 6, 1994

final rules only allowed the opening through which waste was transferred to be open during waste transfer, this was inadvertent; the EPA intended to allow venting during waste transfer operations, either through the opening through which the waste is transferred, or through a second opening that would serve as a vent. To this effect, the EPA amended the subpart CC rules on February 9, 1996 to clarify this point (see 61 FR 4909). The fact that EPA is not requiring control of vacuum trucks is also discussed in the document *Hazardous Waste Treatment, Storage, and Disposal Facilities—Background Information for Promulgated Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers*; see EPA-453/R-94-076b, November 1994, Section 6.6.5. where it is clear that the EPA is fully aware that a practical means of controlling the exhaust from the vacuum pump on a vacuum truck has not been demonstrated. The EPA is now reiterating that these types of systems are allowed under the subpart CC container rules.

In response to commenters, EPA is providing clarification that venting of containers for worker safety is also allowed under the subpart CC container rules. Provision (iii) of §§ 264.1086(c)(3) and 265.1087(c)(3), which allows opening of a closure device or cover when access inside is needed, would allow the owner or operator to vent a container prior to sending a worker into a tanker or other container for clean-out. This type of venting is necessary to avoid an unsafe condition when entering a confined space. For example, venting both before and during the cleaning operations is needed to reduce the organic vapor concentration below the lower explosive limit (LEL) for worker safety. In addition, provision (v) of §§ 264.1086(c)(3) and 265.1087(c)(3), which allows opening of a safety device at any time clearly shows the EPA intent regarding the implementation measures necessary to avoid an unsafe condition. The EPA considers that the current rule language allows this type of venting for maintenance of worker safety, and is providing this preamble discussion in response to requests from commenters.

An additional interpretive clarification is required, regarding the transfer requirements to, from, and among hazardous waste containers, specifically when transfers occur in conjunction with hazardous waste stabilization operations.

The first clarification addresses whether the addition of sorbent materials is considered to be waste stabilization for the purposes of compliance with subpart CC, and thus,

whether such activities are required to be conducted in containers equipped with level 3 controls. There has been specific inquiry as to whether the subpart CC level 3 container standards apply in situations where an owner or operator "transfers" hazardous waste from one container, such as a bulk container or roll off box, to a second unit, and adds the sorbent to the waste after each scoop of waste is placed in the second unit. The container standards at § 264.1086(b)(2) state that, "\* \* \* 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." In its definition of waste stabilization at 40 CFR 265.1081, the EPA has stated that stabilization includes the elimination of free liquids, but does "not include the adding of absorbent materials to the surface of a waste, without mixing, agitation, or subsequent curing, to absorb free liquid." The associated preamble language clearly defined what activities EPA was excluding from the waste stabilization definition. See 61 FR at 4905, February 9, 1996. That preamble discussion stated, "The EPA is also amending the term 'waste stabilization' to specifically exclude the process of adding non-reactive absorbent material to the surface of a waste. The EPA recognizes that to meet certain criteria under the Land Disposal Restrictions, or to prevent the introduction of liquid into certain combustion devices, owners or operators apply absorbent material to the surface of wastes just prior to disposal. In such procedures, the container is opened, absorbent material is placed on the surface of the waste to absorb a relatively small amount of liquid, and the container is closed. No mixing or agitation is involved in the process."

It is clear from the text of the regulation, as well as the February 9, 1996 preamble discussion, that addition of absorbent, even with very limited mixing or agitation, must be performed in compliance with the container level 3 standards. In fact, this is the literal meaning of the provision—such "transfer" operations result in mixing of the sorbent material with the waste, a condition that qualifies as waste stabilization under subpart CC, and requires container level 3 controls. (See also the discussion of the EPA's intentions regarding requirements for containers in the February 9, 1996

preamble at 61 FR 4903, which makes clear that a hazardous waste transfer operation conducted as described above would not satisfy the EPA's stated intent with regard to the general transfer requirements of the container standards. Therefore, the type of transfer operation described above can only occur if the containers meet the container level 3 requirements. The EPA repeats that this requirement has a sound environmental basis. Containers would remain open to the environment during such operations, and the volatile hazardous constituents will be released. The reaction of the sorbent materials with the hazardous waste would, in fact, be likely to increase the volatilization of the organics in the waste, while the container would remain uncovered as subsequent layers of waste and sorbent were applied. Such a situation would result in organic emissions that the EPA considers most appropriately controlled under the container level 3 requirements, and the rules so require.

The EPA recognizes, however, that there are circumstances where addition of sorbent is not stabilization and therefore will not trigger subpart CC container standards. This is why the rule states that stabilization "does not include the adding of absorbent materials to the surface of a waste, without mixing, agitation, or subsequent curing, to absorb free liquid." The chief example EPA has provided of such an activity is addition of sorbent just prior to the final disposition of the material (the situation given in the February 9, 1996 preamble discussion). Other examples would involve situations where tanks are covered immediately after addition of sorbent and stay covered thereafter.

Examples could occur when sorbent is added to a container at the end of a work day, or at the final completion of a waste transfer. The EPA's technical basis for allowing sorbent material to be placed on the waste surface in these limited situations, we repeat, is that any potential for volatilization to the atmosphere of the organics in the waste would be prevented by the immediate application of the container cover.

A similar issue has come to the attention of EPA, regarding the container standards at § 264.1086(d)(2) and § 265.1087(d)(2), which require that transfer of hazardous waste in or out of a container " \* \* \* be conducted in such a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical \* \* \*." This provision was an amendment to the more extensive transfer requirements that were promulgated in the December 6, 1994

rule. The November 25, 1996 amendment also revised the tank and surface impoundment transfer requirements such that only transfer between and among subpart CC-regulated tanks and surface impoundments are required to be conducted in an enclosed transfer system. This amendment was made in recognition that it is often impractical for waste in containers to be transferred to tanks or surface impoundments through an enclosed system. However, it is the EPA's intent that transfer of hazardous waste among containers, and between containers and surface impoundments or tanks, be conducted in a manner to minimize waste exposure to the atmosphere. See § 264.1084(j), § 264.1085(e), § 264.1086(d)(2) and corresponding paragraphs in part 265.

Members of the regulated community have questioned whether it is possible to evade these less extensive transfer requirements by including an intervening non-subpart CC unit when performing a transfer of hazardous waste. Specifically, certain regulated facilities have discussed transferring waste from a subpart CC-regulated unit (e.g., a tank or container) to a unit not subject to subpart CC (e.g., the floor of a containment building), then subsequently transferring the waste to a second subpart CC-regulated unit. Since the containment building is not a unit regulated by subpart CC, the subpart CC standards do not impose transfer requirements to or from containment buildings; thus, the facilities suggest that the subpart CC transfer requirements would be met. As noted above, the subpart CC container requirements state that transfer of hazardous waste to and from a regulated container shall be conducted in a manner which minimizes the waste's exposure to the atmosphere, considering practical factors. The EPA considers an unnecessary and open-air transfer of waste to or from a container, conducted in whole or in part, to avoid the subpart CC container (or tank) requirements, to not meet the obvious intent of the container transfer requirement (e.g., see 264.1086(d)(2)). The EPA is aware of waste transfer methods that would be more effective in minimizing exposure of the waste to the atmosphere—the owner or operator is responsible for conducting waste transfer in such a manner as to minimize exposure of the hazardous waste to the atmosphere. Rather than leaving this issue open to interpretation, the EPA will instruct permit writers to invoke omnibus authority under RCRA section 3005(c)(3) to assure control of such

transfers where necessary to protect human health and the environment.

There are other aspects of the container standards that also require some further clarification; one point that needs some additional explanation is in regard to the Department of Transportation (DOT) compliance demonstration option for containers. The subpart CC container standards, as amended November 25, 1996, allow three options for compliance demonstration, one of which is through compliance with certain applicable DOT regulations for packaging of hazardous materials for transportation. Commenters have stated that they consider the specification in subpart CC, as to which DOT packaging requirements qualify for that compliance option, to have resulted in an overly stringent requirement. However, the EPA has clarified that demonstration of compliance through the use of certain DOT packagings is only one approach to demonstrating compliance with the container standards. The regulated industry has indicated to EPA that the vast majority of hazardous waste that is shipped in DOT transport packagings meets the requirements for container level 1 standards. Thus, if a facility owner or operator is using a DOT packaging which is not among those specified under the subpart CC container standards, the facility owner or operator must conduct a visual inspection to determine that there are no visible openings, cracks, etc. in the container. See § 265.1087(c)(1)(ii). The EPA considers the existing regulatory language to adequately convey this intent, and is including this preamble discussion in response to commenters' requests.

The container option to comply with applicable DOT packaging regulations, described at 40 CFR 265.1087(f) and 264.1086(f), includes four requirements which must all be met to comply with the subpart CC compliance demonstration. The regulatory language of that paragraph clearly indicates (in fact, literally indicates) that compliance with all four of the subparagraphs at § 265.1087(f)(1) through § 265.1087(f)(4) is required, since the requirements are not presented as alternatives. The following paragraphs provide a detailed description of each of the four requirements found at § 265.1087(f).

The first requirement, found at 40 CFR 265.1087(f)(1), specifies that the container must meet the applicable requirements specified in 40 CFR part 178 or part 179. It is EPA's intent to require that in order to comply with 40 CFR part 265.1087(f), a container must

be subject to 49 CFR part 178 or part 179; it is also the EPA's intent to require that such a container be in compliance with all the requirements of 49 CFR parts 178 and 179 that are applicable. (Again, this is the direct and literal reading of the provision.) In developing the final rule, the EPA determined that containers subject to and in compliance with these requirements would achieve the appropriate level of air emission control; see the preamble discussion at Section IV.I.1, 61 FR 59947, November 25, 1996. The Agency could not make that finding for containers not subject to these provisions. A container not subject to 49 CFR part 178 or 179 is thus not eligible to comply with the subpart CC rule through the requirements of 40 CFR 265.1087 (c)(1)(i) or (d)(1)(i), nor the corresponding paragraphs in 40 CFR part 264; it would have to comply with the subpart CC rule through the requirements of 40 CFR 265.1087 (c)(1)(ii), (c)(1)(iii), (d)(1)(ii) or d(1)(iii), or the corresponding paragraphs in 40 CFR part 264, as appropriate.

The second requirement within 40 CFR 265.1087(f) for DOT-compliant containers stipulates that the hazardous waste must be managed in the DOT container in accordance with all the requirements contained in 49 CFR part 107 subpart B, part 172, part 173, and part 180 that are applicable to that container and the waste managed in that container. The EPA listed these regulatory parts because they were characterized by the industry and by DOT as the parts which describe the requirements for management of hazardous waste, for the types of containers that are specified in 49 CFR parts 178 and 179. The reference to 49 CFR part 107 subpart B is included to recognize the exemptions for containers that have been determined by DOT to be equivalent or superior to those required within 49 CFR part 178 and 179 standards.

The third and fourth requirements, listed in 40 CFR 265.1087(f)(3) and (f)(4) and their corresponding paragraphs in 40 CFR part 264, state that, " \* \* \* For the purpose of complying with this subpart, no exceptions to the 40 CFR part 178 and part 179 regulations are allowed except as provided for in paragraph (f)(4) of this section," and "For a lab pack that is managed in accordance with the requirements of 40 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 40 CFR 173.12(b)." These requirements indicate that the DOT-authorized container must be in compliance with all applicable

requirements in 49 CFR parts 178 and 179. Paragraph 265.1087(f)(3) of the subpart CC rule specifically means that for the purposes of the subpart CC rule provisions, compliance with 49 CFR parts 178 and 179 is required, and no exceptions to those provisions are allowed (unless the container were a lab pack, as described in § 265.1087(f)(4)). As with the earlier provisions discussed above, this is the literal meaning of the provision. There are many exceptions, both explicit and implicit, to the 49 CFR part 178 and 179 standards which are contained in other sections of the DOT standards. The EPA's intent in 40 CFR 265.1087(f)(3) is to disallow any regulatory provision which removes or alters a requirement contained in 49 CFR parts 178 or 179, regardless of where that disallowing regulatory provision is codified, or whether that provision is specifically described as an "exception." For instance, 49 CFR 173.28(e) states that a non-reusable container may be reused for certain circumstances; however, the allowance of that paragraph would not be recognized for compliance with the subpart CC container standards at 40 CFR 265.1087(f) or 40 CFR 264.1086(f). As another example, 49 CFR 173.204 contains an implicit exception for certain hazardous materials that states, "packaging need not conform to the requirements of part 178." However, if that packaging were used to manage a hazardous waste subject to the container regulations of the subpart CC rule, the effect of 40 CFR 265.1087(f)(3) would be to require that, for compliance with the subpart CC rule, such packaging must comply with the requirements of 49 CFR part 178. In this example, 40 CFR 265.1087(f) and 264.1086(f) would disallow the exception to 49 part 178 provided by 49 CFR 173.204. Thus, as a general matter, 40 CFR 265.1087(f) and 264.1086(f) have the intended effect of requiring strict compliance with all applicable requirements of 49 CFR parts 178 and 179 (other than the exception for lab packs at 49 CFR 173.12(b)), for the purpose of the DOT compliance option within the subpart CC container standards. Strict compliance with these provisions is necessary to ensure that the emission reduction intended by the rule is achieved.

Today's action also corrects two typographical errors in § 264.1086. In § 264.1086(c)(2), " \* \* \* Organic vapor permeability, the effects of the contact with the hazardous waste \* \* \*" is revised to read as follows, "Organic vapor permeability; the effects of the contact with the hazardous waste \* \* \*" and in § 264.1086(d)(2), " \* \* \*

any one of the following: a submerged-fill pipe \* \* \*" is revised to read as follows, " \* \* \* any one of the following: A submerged-fill pipe \* \* \*"

For containers required to use Level 2 controls under the subpart CC standards, one option under the final rules requires that the hazardous waste be managed in a "container that operates with no detectable organic emissions." (See §§ 264.1086(d)(ii) and 265.1087(d)(ii).) The test for conducting no detectable organic emissions for the purpose of complying with this requirement must be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. However, under subpart CC, there are no requirements for periodic Method 21 leak monitoring of containers. (See Section IV.I.3 of the preamble to the final rule, 61 FR 59948, November 25, 1996.) Any Method 21 monitoring to determine if the containers operate with no detectable organic emissions is conducted at the owner's or operator's discretion. In order to clarify this point, the EPA has amended the language in paragraph (g) of the container standards.

#### *H. Standards: Closed-Vent Systems and Control Devices*

The inspection and monitoring requirements under paragraph (c) of § 264.1087 and § 265.1088 are being amended to clarify that the inspection and monitoring procedures specifically cited in paragraph (c)(7) are applicable to closed-vent systems as well as to the control devices. The reference to closed-vent system in paragraph (c)(7) was inadvertently left out of the sentence specifying what shall be inspected and monitored; however, the procedures specified in the paragraph did cite the requirements applicable to closed-vent systems, and it was thus the EPA's intent that closed-vent systems be included.

The EPA has received several comments concerning how a TSDF owner or operator would demonstrate compliance with the 95 percent removal requirement (see § 265.1088(c)(1)(i)) for a vent stream with low concentration organic vapor entering an organic air emission control device. The commenters contended that the 95 percent removal or destruction performance demonstration is not feasible for low concentration organic streams. However, the EPA has not at this time found adequate technical reasons to change the 95 percent control requirement. Similar requirements have been included in other regulations controlling air emissions from process vents on hazardous and non-hazardous

waste management operations (e.g., subpart DD in 40 CFR part 63) and guidance regarding compliance with the 95 percent control requirement has been published by the EPA, see EPA-450/3-89-021, *Hazardous Waste TSDF—Technical Guidance Document for RCRA Air Emission Standards for Process Vents and Equipment Leaks*; or EPA-450/3-91-007, *Alternative Control Technology Document—Organic Waste Process Vents*. The EPA has also published guidance regarding the control of low concentration organic vapor streams; see EPA-450/R-95-003, *Survey of Control Technologies for Low concentration Organic Vapor Gas Streams*.

It has been suggested that the EPA include the use of an activated carbon adsorption control system as a specified technology and/or use of surrogate compounds to demonstrate compliance. Again, the EPA does not have an adequate technical basis to revise the control device requirements to include a carbon adsorption control equipment specification. Carbon adsorption systems require considerable constituent and other site-specific information for proper control device design, unlike combustion systems, for which organic control efficiency is less dependent on the particular organic constituent present in the gas stream. Therefore, the EPA has not included a carbon adsorption equipment specification in the rule as an alternative to the 95 percent organic removal efficiency demonstration.

Commenters also have requested that the EPA amend the control device requirements of the rule to allow that the temperature sensor for condensers be placed in the coolant exhaust rather than in the exhaust vent stream from the condenser exit. The EPA selected this monitoring location because it was judged that monitoring the exhaust gas provided a better and more direct characterization of the performance of the condenser. In addition, the standards for closed-vent systems and control devices in subpart AA (see § 264.1033(i)) allow that "an alternative operational or process parameter may be monitored if it can be demonstrated that another parameter will ensure that the control device is operated in conformance with these standards and the control devices's design specifications." This same allowance is not contained in the part 265 standards for interim status facilities because the rules do not have provisions for reporting and thus there is no direct mechanism for Agency review of the appropriateness of the alternative parameter. The EPA did not seek to

burden the owner or operator of interim status facilities with the additional reporting requirements associated with the technical demonstration of equivalent characterization of performance. For those facilities that are monitoring an alternative parameter, e.g., condenser coolant exhaust rather than the condenser vent stream exhaust, in compliance with provisions of a Clean Air Act regulation such as the HON, the owner or operator of the unit may be able to comply with the RCRA air rules through one of the Clean Air Act applicability exemptions contained in the RCRA air rules at §§ 264.1030(d) and 265.1030(d) of subpart AA and §§ 264.1080(b)(7) and 265.1080(b)(7) of subpart CC. The EPA continues to believe that the monitoring requirements specified in the 40 CFR part 265 rules are reasonable, and the EPA does not consider it appropriate to allow alternative parameters to be monitored without a mechanism for Agency review of the alternative approach (e.g., a Clean Air Act or RCRA permit). Therefore, the EPA is not amending the rule in this regard.

As previously noted in Section III.C of this preamble, the November 25, 1996, amendments to the subpart CC standards for control devices and closed vent systems (at § 265.1088(c)(2)(i)), added provisions 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. The EPA has received comments that control devices such as boilers, industrial furnaces, and incinerators often require routine maintenance that takes longer than 10 days per year. In connection with this, the commenters also requested that the EPA provide an extension to the repair period so long as the owner or operator documents the decision to use an extension by including certain material in the operating record. The EPA considers the emissions from hazardous waste to be a significant source of nationwide organic air emissions, and does not consider it appropriate to lengthen the time that a control device may be out of service for routine maintenance, while hazardous waste is being managed in the unit. As promulgated in December 1994, the subpart CC standards did not allow provisions for planned maintenance time, because the modeled emission reductions attributed to the implementation of these standards were based on control device operation at all times that affected waste is managed in

a unit requiring a control device. In the November 1996 amendments, the EPA revised the control device provisions in recognition that planned or routine maintenance of control devices, within reason, would limit the unplanned malfunctions. However, the EPA continues to consider that 240 hours per year is an appropriate maximum amount of time for hazardous waste to be managed in units without the required control device operating. Thus, the EPA is not amending this provision. Instances of control device down time beyond the allowed 240 hours for maintenance would be considered periods in which the facility is not in compliance with the control requirements of the rule.

The EPA is today clarifying that the requirements for management of spent carbon, at § 264.1088(c)(3)(ii) and § 265.1089(c)(3)(ii) apply only to carbon that is a hazardous waste. This clarification has been made in both the February 9, 1996 technical amendments (see 61 FR at 4910) and the November 25, 1996 final rule amendments (see 61 FR at 59936). When amending the regulatory text at § 264.1087(c)(3)(ii) and § 265.1088(c)(3)(ii) in the November 25, 1996 action, the EPA inadvertently omitted the phrases that state the requirement applies to carbon that is a hazardous waste, and the requirement applies regardless of the VO concentration of the carbon. These statements had been included in the regulatory text prior to that November 25 **Federal Register** document; today's amendment clarifies the EPA's intent by correcting that omission.

#### *I. Recordkeeping and Reporting Requirements*

In the November 25, 1996 final rule amendments (61 FR 59952 and 59971) to parts 264 and 265, the subpart CC applicability was 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. Though the requirement for owner or operator certification was established at § 264.1080(b)(7), the EPA inadvertently failed to add the associated recordkeeping requirement to the recordkeeping sections of subpart CC. In order to establish minimum recordkeeping requirements for those units that are exempted from the subpart because the unit is in compliance with control requirements under a Clean Air Act regulation, the subpart CC recordkeeping requirements are being amended by today's action. A

new paragraph (j) is being added to § 264.1089 and § 265.1090 that requires the owner or operator to record and maintain: (1) a certification that the waste management unit is equipped with and operating air emission controls in accordance with the requirements of an applicable Clean Air Act regulation codified in 40 CFR parts 60, 61, or 63; and (2) identification of the specific requirements with which the unit is in compliance.

Adding these requirements also necessitated a change to paragraph (a) of § 264.1089 and § 265.1090 in order to include paragraph (j) in the list of information specified for recordkeeping under the subpart.

In addition, today's action corrects typographical errors in § 264.1089(a) and § 265.1090(a). In the last sentence of § 264.1089(a), "\* \* \* 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." is revised to read as follows, "\* \* \* air emission controls specified in §§ 264.1084 through 264.1087 of this subpart in accordance with the conditions specified in § 264.1080(d) or § 264.1080(b)(7), respectively, of this subpart." Similarly, in the last sentence of § 265.1090(a), "\* \* \* 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" is revised to read as follows, "\* \* \* air emission controls specified in §§ 265.1085 through 265.1088 of this subpart in accordance with the conditions specified in § 265.1080(d) or § 265.1080(b)(7), respectively, of this subpart."

Also in the recordkeeping sections of subpart CC, paragraph (f) of § 264.1089 and § 265.1090 are being amended to provide the full citation referenced in the paragraph; the references to § 264.1082(c)(2) and § 265.1083(c)(2) are being expanded to state (c)(2)(i) through (c)(2)(vi) in paragraph (f) to cover specifically each of the exemption options, for which a waste determination for a treated hazardous waste is required.

In a further correction, paragraph (b)(1)(ii)(B) of § 264.1089 and § 265.1090 is being amended to correct the sentence structure and eliminate the redundant phrase "the following information."

#### *J. Appendix VI to Part 265*

Appendix VI to part 265 is revised and reprinted in total. The revisions made by today's action correct printing errors in the November 25, 1996, final rule amendments (61 FR 59993),

reformat the list to be alphabetical, correct typographical errors in compound names (for example, dimethyl hydrazine (1.) is corrected to read 1,1-dimethyl hydrazine), and add CAS numbers that were not available in the November 25, 1996, final rule amendments.

There has been some uncertainty among the regulated community with respect to whether or not cyanide (CN) is classified as an "organic" compound. For purposes of subpart CC, cyanide is listed in Appendix VI to Part 265 as one of the compounds with a Henry's Law Constant less than 0.1 Y/X and as such it is not necessary to quantify CN as a part of the volatile organic concentration determination.

### **VI 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*

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*

This rule is not subject to notice and comment rulemaking requirements and therefore is not subject to the Regulatory Flexibility Act. However, 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 Act*

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.

#### *F. Immediate Effective Date*

The EPA has determined to make today's action effective immediately. The EPA believes that the corrections being made in today's action are either interpretations of existing regulations which do not require prior notice and opportunity for comment, or are technical corrections of obvious errors in the published rules (for example, corrections to regulations inconsistent with or not carrying out statements in the preamble or Background Information Document). Comment on such changes is unnecessary, within the meaning of 5 U.S.C. 553(b)(3)(B). In addition, the EPA notes that many of these clarifications result from the public meeting process, so that the Agency has provided a measure of opportunity for comment.

#### **VII. 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 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*

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

Dated: November 28, 1997.

**Richard D. Wilson,**

*Acting Assistant Administrator for Air and Radiation.*

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

#### **PART 264—STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES**

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

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

#### **Subpart B—General Facility Standards**

2. Section 264.15 is amended by revising paragraph (b)(4), and leaving the "COMMENT" at the end of the paragraph to read as follows:

##### **§ 264.15 General inspection requirements.**

\* \* \* \* \*

(b) \* \* \*

(4) The frequency of inspection may vary for the items on the schedule. However, the frequency should be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule must include the items and frequencies called for in §§ 264.174, 264.193, 264.195, 264.226, 264.254, 264.278, 264.303, 264.347, 264.602, 264.1033, 264.1052, 264.1053, 264.1058, and 264.1083 through 264.1089 of this part, where applicable.

\* \* \* \* \*

#### **Subpart E—Manifest System, Recordkeeping, and Reporting**

3. Section 264.73 is amended by revising paragraph (b)(6) to read as follows:

##### **§ 264.73 Operating record.**

\* \* \* \* \*

(b) \* \* \*

(6) Monitoring, testing or analytical data, and corrective action where required by subpart F of this part and §§ 264.19, 264.191, 264.193, 264.195, 264.222, 264.223, 264.226, 264.252–264.254, 264.276, 264.278, 264.280, 264.302–264.304, 264.309, 264.347, 264.602, 264.1034(c)–264.1034(f), 264.1035, 264.1063(d)–264.1063(i), 264.1064, and 264.1082 through 264.1090 of this part.

\* \* \* \* \*

#### **Subpart AA—Air Emission Standards for Process Vents**

4. Section 264.1030 is amended by revising paragraphs (b)(3) and (c), leaving the "NOTE" at the end of paragraph (c), and adding paragraph (e), to read as:

##### **§ 264.1030 Applicability.**

\* \* \* \* \*

(b) \* \* \*

(3) A unit that is exempt from permitting under the provisions of 40

CFR 262.34(a) (i.e., a "90-day" tank or container) and is not a recycling unit under the provisions of 40 CFR 261.6.

(c) For the owner and operator of a facility subject to this subpart and who received a final permit under RCRA section 3005 prior to December 6, 1996, the requirements of this subpart shall be incorporated into the permit when the permit is reissued in accordance with the requirements of 40 CFR 124.15 or reviewed in accordance with the requirements of 40 CFR 270.50(d). Until such date when the owner and operator receives a final permit incorporating the requirements of this subpart, the owner and operator is subject to the requirements of 40 CFR 265, subpart AA.

\* \* \* \* \*

(e) The requirements of this subpart do not apply to the process vents at a facility where the facility owner or operator certifies that all of the process vents that would otherwise be subject to this subpart are equipped with and operating air emission controls in accordance with the process vent requirements of an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63. The documentation of compliance under regulations at 40 CFR part 60, part 61, or part 63 shall be kept with, or made readily available with, the facility operating record.

\* \* \* \* \*

5. Section 264.1031 is amended by revising the definition of "In light liquid service" to read as follows:

**§ 264.1031 Definitions.**

\* \* \* \* \*

*In light liquid service* means that the piece of equipment contains or contacts a waste stream where the vapor pressure of one or more of the organic components in the stream is greater than 0.3 kilopascals (kPa) at 20°C, the total concentration of the pure organic components having a vapor pressure greater than 0.3 kilopascals (kPa) at 20°C is equal to or greater than 20 percent by weight, and the fluid is a liquid at operating conditions.

\* \* \* \* \*

6. Section 264.1033 is amended by revising paragraph (a)(2) to read as follows:

**§ 264.1033 Standards: Closed-vent systems and control devices.**

(a) \* \* \*

(2)(i) The owner or operator of an existing facility who cannot install a closed-vent system and control device to comply with the provisions of this subpart on the effective date that the facility becomes subject to the

provisions of this subpart must prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to this subpart for installation and startup.

(ii) Any unit that begins operation after December 21, 1990, and is subject to the provisions of this subpart when operation begins, must comply with the rules immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 30-month implementation schedule does not apply.

(iii) The owner or operator of any facility in existence on the effective date of a statutory or EPA regulatory amendment that renders the facility subject to this subpart shall comply with all requirements of this subpart as soon as practicable but no later than 30 months after the amendment's effective date. When control equipment required by this subpart can not be installed and begin operation by the effective date of the amendment, the facility owner or operator shall prepare an implementation schedule that includes the following information: Specific calendar dates for award of contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment installation, and performance of any testing to demonstrate that the installed equipment meets the applicable standards of this subpart. The owner or operator shall enter the implementation schedule in the operating record or in a permanent, readily available file located at the facility.

(iv) Owners and operators of facilities and units that become newly subject to the requirements of this subpart after December 8, 1997, due to an action other than those described in paragraph (a)(2)(iii) of this section must comply with all applicable requirements immediately (i.e., must have control devices installed and operating on the date the facility or unit becomes subject to this subpart; the 30-month implementation schedule does not apply).

\* \* \* \* \*

**Subpart BB—Air Emission Standards for Equipment Leaks**

7. Section 264.1050 is amended by revising paragraphs (b)(3), (c) and (f) to read as follows:

**§ 264.1050 Applicability.**

\* \* \* \* \*

(b) \* \* \*

(3) A unit that is exempt from permitting under the provisions of 40 CFR 262.34(a) (i.e., a "90-day" tank or container) and is not a recycling unit under the provisions of 40 CFR 261.6.

(c) For the owner or operator of a facility subject to this subpart and who received a final permit under RCRA section 3005 prior to December 6, 1996, the requirements of this subpart shall be incorporated into the permit when the permit is reissued in accordance with the requirements of 40 CFR 124.15 or reviewed in accordance with the requirements of 40 CFR 270.50(d). Until such date when the owner or operator receives a final permit incorporating the requirements of this subpart, the owner or operator is subject to the requirements of 40 CFR part 265, subpart BB.

\* \* \* \* \*

(f) Equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for 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.

\* \* \* \* \*

8. Section 264.1060 is revised to read as follows:

**§ 264.1060 Standards: Closed-vent systems and control devices.**

(a) Owners and operators of closed-vent systems and control devices subject to this subpart shall comply with the provisions of § 264.1033 of this part.

(b)(1) The owner or operator of an existing facility who cannot install a closed-vent system and control device to comply with the provisions of this subpart on the effective date that the facility becomes subject to the provisions of this subpart must prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to this subpart for installation and startup.

(2) Any unit that begins operation after December 21, 1990, and is subject to the provisions of this subpart when operation begins, must comply with the rules immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 30-month implementation schedule does not apply.



(3) The owner or operator of any facility in existence on the effective date of a statutory or EPA regulatory amendment that renders the facility subject to this subpart shall comply with all requirements of this subpart as soon as practicable but no later than 30 months after the amendment's effective date. When control equipment required by this subpart can not be installed and begin operation by the effective date of the amendment, the facility owner or operator shall prepare an implementation schedule that includes the following information: Specific calendar dates for award or contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment installation, and performance of any testing to demonstrate that the installed equipment meets the applicable standards of this subpart. The owner or operator shall enter the implementation schedule in the operating record or in a permanent, readily available file located at the facility.

(4) Owners and operators of facilities and units that become newly subject to the requirements of this subpart after December 8, 1997, due to an action other than those described in paragraph (b)(3) of this section must comply with all applicable requirements immediately (i.e., must have control devices installed and operating on the date the facility or unit becomes subject to this subpart; the 30-month implementation schedule does not apply).

9. Section 264.1062 is amended by revising paragraphs (b)(2) and (b)(3) to read as follows:

**§ 264.1062 Alternative standards for valves in gas/vapor service or in light liquid service: skip period leak detection and repair.**

\* \* \* \* \*

(b) \* \* \*

(2) After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 percent, an owner or operator may begin to skip one of the quarterly leak detection periods (i.e., monitor for leaks once every six months) for the valves subject to the requirements in § 264.1057 of this subpart.

(3) After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 percent, an owner or operator may begin to skip three of the quarterly leak detection periods (i.e., monitor for leaks once every year) for

the valves subject to the requirements in § 264.1057 of this subpart.

\* \* \* \* \*

10. Section 264.1064 is amended by revising paragraphs (g)(6) and (m) 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 less than 300 hours per calendar year.

\* \* \* \* \*

(m) The owner or operator of a facility with equipment that is subject to this subpart and to regulations at 40 CFR part 60, part 61, or part 63 may elect to determine compliance with this subpart either by documentation pursuant to § 264.1064 of this subpart, or by documentation of compliance with the regulations at 40 CFR part 60, part 61, or part 63 pursuant to the relevant provisions of the regulations at 40 part 60, part 61, or part 63. The documentation of compliance under regulations at 40 CFR part 60, part 61, or part 63 shall be kept with or made readily available with the facility operating record.

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

11. Section 264.1080 is amended by revising paragraphs (b)(1) and (c) to read as follows:

**§ 264.1080 Applicability.**

\* \* \* \* \*

(b) \* \* \*

(1) A waste management unit that holds hazardous waste placed in the unit before December 6, 1996, and in which no hazardous waste is added to the unit on or after December 6, 1996.

\* \* \* \* \*

(c) For the owner and operator of a facility subject to this subpart who received a final permit under RCRA section 3005 prior to December 6, 1996, the requirements of this subpart shall be incorporated into the permit when the permit is reissued in accordance with the requirements of 40 CFR 124.15 of this chapter or reviewed in accordance with the requirements of 40 CFR 270.50(d) of this chapter. Until such date when the permit is reissued in accordance with the requirements of 40 CFR 124.15 or reviewed in accordance with the requirements of 40 CFR 270.50(d), the owner and operator is

subject to the requirements of 40 CFR part 265, subpart CC.

\* \* \* \* \*

12. Section 264.1082 is amended by revising paragraphs (b), (c)(2)(ix)(A), (c)(2)(ix)(B), (c)(3) and (c)(4)(ii) to read as follows:

**§ 264.1082 Standards: General.**

\* \* \* \* \*

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

(c) \* \* \*

(2) \* \* \*

(ix) \* \* \*

(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 at section 4.4 of Method 25D in 40 CFR part 60, appendix A, or a value of 25 ppmw, whichever is less.

(B) If any other analytical method is used, one-half the sum of the limits of detection established for each organic constituent in the waste that has a Henry's law constant value 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  $1.8 \times 10^{-6}$  atmospheres/gram-mole/m<sup>3</sup>] at 25 degrees Celsius.

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

(4) \* \* \*

(ii) The organic hazardous constituents in the waste have been treated by the treatment technology established by the EPA for the waste in 40 CFR 268.42(a), or have been removed or destroyed by an equivalent method of treatment approved by EPA pursuant to 40 CFR 268.42(b).

\* \* \* \* \*

13. Section 264.1083 is amended by revising paragraphs (a)(2) and (b)(1) to read as follows:

**§ 264.1083 Waste determination procedures.**

(a) \* \* \*

(2) For a waste determination that is required by paragraph (a)(1) of this section, the average VO concentration of a hazardous waste at the point of waste origination shall be determined in accordance with the procedures specified in 40 CFR 265.1084(a)(2) through (a)(4).

(b) \* \* \*

(1) An owner or operator shall perform the applicable waste determinations for each treated hazardous waste placed in waste management units exempted under the provisions of § 264.1082(c)(2)(i) through (c)(2)(vi) 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.

\* \* \* \* \*

14. Section 264.1084 is amended by revising paragraph (c)(2)(iii) introductory text and paragraph (c)(2)(iii)(B), adding paragraph (e)(4), revising paragraph (f)(3)(i)(D)(4) and paragraph (f)(3)(iii) introductory text, adding paragraph (f)(4), and adding paragraph (j)(2)(iii) to read as follows:

**§ 264.1084 Standards: Tanks.**

\* \* \* \* \*

(c) \* \* \*

(2) \* \* \*

(iii) Each opening in the fixed roof, and any manifold system associated with the fixed roof, shall be either:

\* \* \* \* \*

(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 shall be operating whenever hazardous waste is managed in the tank, except as provided for in paragraphs (c)(2)(iii)(B) (1) and (2) of this section.

(1) During periods when it is necessary to provide access to the tank for performing the activities of paragraph (c)(2)(iii)(B)(2) of this section, venting of the vapor headspace underneath the fixed roof to the control device is not required, opening of closure devices is allowed, and removal of the fixed roof is allowed. 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, and resume operation of the control device.

(2) During periods of routine inspection, maintenance, or other activities needed for normal operations, and for removal of accumulated sludge or other residues from the bottom of the tank.

\* \* \* \* \*

(e) \* \* \*

(4) Safety devices, as defined in 40 CFR 265.1081, may be installed and operated as necessary on any tank complying with the requirements of paragraph (e) of this section.

(f) \* \* \*

(3) \* \* \*

(i) \* \* \*

(D) \* \* \*

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

\* \* \* \* \*

(iii) Prior to each inspection required by paragraph (f)(3)(i) or (f)(3)(ii) 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:

\* \* \* \* \*

(4) Safety devices, as defined in 40 CFR 265.1081, may be installed and operated as necessary on any tank complying with the requirements of paragraph (f) of this section.

\* \* \* \* \*

(j) \* \* \*

(2) \* \* \*

(iii) The hazardous waste meets the requirements of § 264.1082(c)(4) of this subpart.

\* \* \* \* \*

15. Section 264.1085 is amended by revising paragraphs (b)(2), (d)(1)(iii), and (d)(2)(i)(B) and adding paragraph (e)(2)(iii) to read as follows:

**§ 264.1085 Standards: Surface impoundments.**

\* \* \* \* \*

(b) \* \* \*

(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 section.

\* \* \* \* \*

(d) \* \* \*

(1) \* \* \*

(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 of construction 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.

\* \* \* \* \*

(2) \* \* \*

(i) \* \* \*

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

\* \* \* \* \*

(e) \* \* \*

(2) \* \* \*

(iii) The hazardous waste meets the requirements of § 264.1082(c)(4) of this subpart.

\* \* \* \* \*

16. Section 264.1086 is amended by revising paragraphs (c)(2), (c)(4)(i), (d)(2), (d)(4)(i), and paragraph (g) introductory text to read as follows:

**§ 264.1086 Standards: Containers.**

\* \* \* \* \*

(c) \* \* \*

(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 the container 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.

\* \* \* \* \*

(4) \* \* \*

(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 within 24 hours after the container is accepted at the facility (i.e., does not meet the conditions for an empty container as specified in 40 CFR 261.7(b)), 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. The container visual inspection shall be conducted on or before the date that the

container is accepted at the facility (i.e., the date the container becomes subject to the subpart CC container standards). For purposes of this requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest in the appendix to 40 CFR part 262 (EPA Forms 8700-22 and 8700-22A), as required under subpart E of this part, at 40 CFR 264.71. 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.

\* \* \* \* \*

(d) \* \* \*

(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.

\* \* \* \* \*

(4) \* \* \*

(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 within 24 hours after the container is accepted at the facility (i.e., does not meet the conditions for an empty container as specified in 40 CFR 261.7(b)), 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. The container visual inspection shall be conducted on or before the date that the container is accepted at the facility (i.e., the date the container becomes subject to the subpart CC container standards). For purposes of this requirement, the

date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest in the appendix to 40 CFR part 262 (EPA Forms 8700-22 and 8700-22A), as required under subpart E of this part, at 40 CFR 264.71. 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.

\* \* \* \* \*

(g) To determine compliance with the no detectable organic emissions requirement of paragraph (d)(1)(ii) of this section, the procedure specified in § 264.1083(d) of this subpart shall be used.

\* \* \* \* \*

17. Section 264.1087 is amended by revising paragraphs (c)(3)(ii) and (c)(7) to read as follows:

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

\* \* \* \* \*

(c) \* \* \*

(3) \* \* \*

(ii) All carbon that is a hazardous waste and that is removed from the control device shall be managed in accordance with the requirements of 40 CFR 264.1033(n), regardless of the average volatile organic concentration of the carbon.

\* \* \* \* \*

(7) The closed-vent system and 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.

18. Section 264.1089 is amended by revising paragraphs (a), (b)(1)(ii)(B), and (f)(1) and adding paragraph (j) to read as follows:

**§ 264.1089 Recordkeeping requirements.**

(a) Each owner or operator of a facility subject to requirements of this subpart shall record and maintain the information specified in paragraphs (b) through (j) of this section, as applicable to the facility. Except for air emission control equipment design documentation and information required by paragraphs (i) and (j) 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 paragraphs (i) and (j) of this section shall be maintained in the operating record for as long as the waste management unit is 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) or § 264.1080(b)(7) of this subpart, respectively.

(b) \* \* \*

(1) \* \* \*

(ii) \* \* \*

(B) For each defect detected during the inspection: 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 requirements 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.

\* \* \* \* \*

(f) \* \* \*

(1) For tanks, surface impoundments, and containers exempted under the hazardous waste organic concentration conditions specified in § 264.1082(c)(1) or §§ 264.1082(c)(2)(i) through (c)(2)(vi) 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.

\* \* \* \* \*

(j) For each hazardous waste management unit not using air emission controls specified in §§ 264.1084 through 264.1087 of this subpart in accordance with the requirements of § 264.1080(b)(7) of this subpart, the owner and operator shall record and maintain the following information:

(1) Certification that the waste management unit 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.

(2) Identification of the specific requirements codified under 40 CFR

part 60, part 61, or part 63 with which the waste management unit is in compliance.

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

19. The authority citation for part 265 continues to read as follows:

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

#### **Subpart B—General Facility Standards**

20. Section 265.15 is amended by revising paragraph (b)(4) to read as follows:

##### **§ 265.15 General inspection requirements.**

\* \* \* \* \*

(b) \* \* \*

(4) The frequency of inspection may vary for the items on the schedule. However, the frequency should be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule must include the items and frequencies called for in §§ 265.174, 265.193, 265.195, 265.226, 265.260, 265.278, 265.304, 265.347, 265.377, 265.403, 265.1033, 265.1052, 265.1053, 265.1058, and 265.1084 through 265.1090 of this part, where applicable.

\* \* \* \* \*

#### **Subpart E—Manifest System, Recordkeeping, and Reporting**

21. Section 265.73 is amended by revising paragraph (b)(6), and leaving the "COMMENT" at the end of the paragraph, to read as follows:

##### **§ 265.73 Operating record.**

\* \* \* \* \*

(b) \* \* \*

(6) Monitoring, testing or analytical data, and corrective action where required by subpart F of this part and by §§ 265.19, 265.90, 265.94, 265.191, 265.193, 265.195, 265.222, 265.223, 265.226, 265.255, 265.259, 265.260, 265.276, 265.278, 265.280(d)(1), 265.302 through 265.304, 265.347, 265.377, 265.1034(c) through 265.1034(f), 265.1035, 265.1063(d) through 265.1063(i), 265.1064, and 265.1083 through 265.1090 of this part.

\* \* \* \* \*

#### **Subpart AA—Air Emission Standards for Process Vents**

22. Section 265.1030 is amended by revising paragraph (b)(3), leaving the "NOTE" at the end of paragraph (b)(3), and adding paragraph (d), to read as follows:

##### **§ 265.1030 Applicability.**

\* \* \* \* \*

(b) \* \* \*

(3) A unit that is exempt from permitting under the provisions of 40 CFR 262.34(a) (i.e., a "90-day" tank or container) and is not a recycling unit under the requirements of 40 CFR 261.6.

(d) The requirements of this subpart do not apply to the process vents at a facility where the facility owner or operator certifies that all of the process vents that would otherwise be subject to this subpart are equipped with and operating air emission controls in accordance with the process vent requirements of an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63. The documentation of compliance under regulations at 40 CFR part 60, part 61, or part 63 shall be kept with, or made readily available with, the facility operating record.

23. Section 265.1033 is amended by revising paragraphs (a)(2) and (f)(2)(vi)(B) to read as follows:

##### **§ 265.1033 Standards: Closed-vent systems and control devices.**

(a) \* \* \*

(2)(i) The owner or operator of an existing facility who cannot install a closed-vent system and control device to comply with the provisions of this subpart on the effective date that the facility becomes subject to the requirements of this subpart must prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to this subpart for installation and startup.

(ii) Any unit that begins operation after December 21, 1990, and is subject to the requirements of this subpart when operation begins, must comply with the rules immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 30-month implementation schedule does not apply.

(iii) The owner or operator of any facility in existence on the effective date of a statutory or EPA regulatory amendment that renders the facility

subject to this subpart shall comply with all requirements of this subpart as soon as practicable but no later than 30 months after the amendment's effective date. When control equipment required by this subpart can not be installed and begin operation by the effective date of the amendment, the facility owner or operator shall prepare an implementation schedule that includes the following information: Specific calendar dates for award of contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment installation, and performance of any testing to demonstrate that the installed equipment meets the applicable standards of this subpart. The owner or operator shall enter the implementation schedule in the operating record or in a permanent, readily available file located at the facility.

(iv) Owners and operators of facilities and units that become newly subject to the requirements of this subpart after December 8, 1997, due to an action other than those described in paragraph (a)(2)(iii) of this section must comply with all applicable requirements immediately (i.e., must have control devices installed and operating on the date the facility or unit becomes subject to this subpart; the 30-month implementation schedule does not apply).

\* \* \* \* \*

(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  $\pm 1$  percent of the temperature being monitored in degrees Celsius ( $^{\circ}\text{C}$ ) or  $\pm 0.5$   $^{\circ}\text{C}$ , 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).

\* \* \* \* \*

#### **Subpart BB—Air Emission Standards for Equipment Leaks**

24. Section 265.1050 is amended by revising paragraphs (b)(3) and (e) to read as follows:

##### **§ 265.1050 Applicability.**

\* \* \* \* \*

(b) \* \* \*

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

container) and is not a recycling unit under the provisions of 40 CFR 261.6.

\* \* \* \* \*

(e) Equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for 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.

\* \* \* \* \*

25. Section 265.1060 is revised to read as follows:

**§ 265.1060 Standards: Closed-vent systems and control devices.**

(a) Owners and operators of closed-vent systems and control devices subject to this subpart shall comply with the provisions of § 265.1033 of this part.

(b)(1) The owner or operator of an existing facility who can not install a closed-vent system and control device to comply with the provisions of this subpart on the effective date that the facility becomes subject to the provisions of this subpart must prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to this subpart for installation and startup.

(2) Any units that begin operation after December 21, 1990, and are subject to the provisions of this subpart when operation begins, must comply with the rules immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 30-month implementation schedule does not apply.

(3) The owner or operator of any facility in existence on the effective date of a statutory or EPA regulatory amendment that renders the facility subject to this subpart shall comply with all requirements of this subpart as soon as practicable but no later than 30 months after the amendment's effective date. When control equipment required by this subpart can not be installed and begin operation by the effective date of the amendment, the facility owner or operator shall prepare an implementation schedule that includes the following information: Specific calendar dates for award of contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment installation, and performance of any testing to demonstrate that the installed

equipment meets the applicable standards of this subpart. The owner or operator shall enter the implementation schedule in the operating record or in a permanent, readily available file located at the facility.

(4) Owners and operators of facilities and units that become newly subject to the requirements of this subpart after December 8, 1997 due to an action other than those described in paragraph (b)(3) of this section must comply with all applicable requirements immediately (i.e., must have control devices installed and operating on the date the facility or unit becomes subject to this subpart; the 30-month implementation schedule does not apply).

26. Section 265.1062 is amended by revising paragraphs (b)(2) and (b)(3) to read as follows:

**§ 265.1062 Alternative standards for valves in gas/vapor service or in light liquid service: skip period leak detection and repair.**

\* \* \* \* \*

(b) \* \* \*

(2) After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 percent, an owner or operator may begin to skip one of the quarterly leak detection periods (i.e., monitor for leaks once every six months) for the valves subject to the requirements in § 265.1057 of this subpart.

(3) After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 percent, an owner or operator may begin to skip three of the quarterly leak detection periods (i.e., monitor for leaks once every year) for the valves subject to the requirements in § 265.1057 of this subpart.

\* \* \* \* \*

27. Section 265.1064 is amended by revising paragraphs (g)(6) and (m) 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 less than 300 hours per calendar year.

\* \* \* \* \*

(m) The owner or operator of any facility with equipment that is subject to this subpart and to leak detection, monitoring, and repair requirements under regulations at 40 CFR part 60, part 61, or part 63 may elect to determine compliance with this subpart

either by documentation pursuant to § 265.1064 of this subpart, or by documentation of compliance with the regulations at 40 CFR part 60, part 61, or part 63 pursuant to the relevant provisions of the regulations at 40 part 60, part 61, or part 63. The documentation of compliance under regulation at 40 CFR part 60, part 61, or part 63 shall be kept with or made readily available with the facility operating record.

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

28. Section 265.1080 is amended by revising paragraphs (b)(1) and the introductory paragraph of (c) to read as follows:

**§ 265.1080 Applicability.**

\* \* \* \* \*

(b) \* \* \*

(1) A waste management unit that holds hazardous waste placed in the unit before December 6, 1996, and in which no hazardous waste is added to the unit on or after December 6, 1996.

\* \* \* \* \*

(c) For the owner and operator of a facility subject to this subpart who has received a final permit under RCRA section 3005 prior to December 6, 1996, the following requirements apply:

\* \* \* \* \*

29. Section 265.1081 is amended by revising the definition of "In light material service" to read as follows:

**§ 265.1081 Definitions.**

\* \* \* \* \*

*In light material service* 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.

\* \* \* \* \*

30. Section 265.1082 is revised to read as follows:

**§ 265.1082 Schedule for implementation of air emission standards.**

(a) Owners or operators of facilities existing on December 6, 1996 and subject to subparts I, J, and K of this part shall meet the following requirements:

(1) Install and begin operation of all control equipment or waste management units required to comply with this subpart and complete modifications of production or

treatment processes to satisfy exemption criteria in accordance with § 265.1083(c) of this subpart by December 6, 1996, except as provided for in paragraph (a)(2) of this section.

(2) When control equipment or waste management units required to comply with this subpart cannot be installed and in operation or modifications of production or treatment processes to satisfy exemption criteria in accordance with § 265.1083(c) of this subpart cannot be completed by December 6, 1996, the owner or operator shall:

(i) Install and begin operation of the control equipment and waste management units, and complete modifications of production or treatment processes as soon as possible but no later than December 8, 1997.

(ii) Prepare an implementation schedule that includes the following information: specific calendar dates for award of contracts or issuance of purchase orders for control equipment, waste management units, and production or treatment process modifications; initiation of on-site installation of control equipment or waste management units, and modifications of production or treatment processes; completion of control equipment or waste management unit installation, and production or treatment process modifications; and performance of testing to demonstrate that the installed equipment or waste management units, and modified production or treatment processes meet the applicable standards of this subpart.

(iii) For facilities subject to the recordkeeping requirements of § 265.73 of this part, the owner or operator shall enter the implementation schedule specified in paragraph (a)(2)(ii) of this section in the operating record no later than December 6, 1996.

(iv) For facilities not subject to § 265.73 of this part, the owner or operator shall enter the implementation schedule specified in paragraph (a)(2)(ii) of this section in a permanent, readily available file located at the facility no later than December 6, 1996.

(b) Owners or operators of facilities and units in existence on the effective date of a statutory or EPA regulatory amendment that renders the facility subject to subparts I, J, or K of this part shall meet the following requirements:

(1) Install and begin operation of control equipment or waste management units required to comply with this subpart, and complete modifications of production or treatment processes to satisfy exemption criteria of § 265.1083(c) of this subpart by the effective date of the amendment,

except as provided for in paragraph (b)(2) of this section.

(2) When control equipment or waste management units required to comply with this subpart cannot be installed and begin operation, or when modifications of production or treatment processes to satisfy exemption criteria of § 265.1083(c) of this subpart cannot be completed by the effective date of the amendment, the owner or operator shall:

(i) Install and begin operation of the control equipment or waste management unit, and complete modification of production or treatment processes as soon as possible but no later than 30 months after the effective date of the amendment.

(ii) For facilities subject to the recordkeeping requirements of § 265.73 of this part, enter and maintain the implementation schedule specified in paragraph (a)(2)(ii) of this section in the operating record no later than the effective date of the amendment, or

(iii) For facilities not subject to § 265.73 of this part, the owner or operator shall enter and maintain the implementation schedule specified in paragraph (a)(2)(ii) of this section in a permanent, readily available file located at the facility site no later than the effective date of the amendment.

(c) Owners and operators of facilities and units that become newly subject to the requirements of this subpart after December 8, 1997 due to an action other than those described in paragraph (b) of this section must comply with all applicable requirements immediately (i.e., must have control devices installed and operating on the date the facility or unit becomes subject to this subpart; the 30-month implementation schedule does not apply).

(d) 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 this subpart.

31. Section 265.1083 is amended by revising paragraphs (b), (c)(2)(i), (c)(2)(ix)(A), (c)(2)(ix)(B), (c)(3), and (c)(4)(ii) to read as follows:

**§ 265.1083 Standards: General.**

\* \* \* \* \*

(b) The owner or operator shall control air pollutant emissions from each hazardous waste management unit in accordance with standards specified

in §§ 265.1085 through 265.1088 of this subpart, as applicable to the hazardous waste management unit, except as provided for in paragraph (c) of this section.

(c) \* \* \*

(2) \* \* \*

(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<sub>e</sub>) 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.

\* \* \* \* \*

(ix) \* \* \*

(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 at section 4.4 of Method 25D in 40 CFR part 60, appendix A, or a value of 25 ppmw, whichever is less.

(B) If any other analytical method is used, one-half the sum of the limits of detection established for each organic constituent in the waste that has a Henry's law constant value 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  $1.8 \times 10^{-6}$  atmospheres/gram-mole/m<sup>3</sup>] at 25 degrees Celsius.

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

(4) \* \* \*

(ii) The organic hazardous constituents in the waste have been treated by the treatment technology established by the EPA for the waste in 40 CFR 268.42(a), or have been removed or destroyed by an equivalent method of treatment approved by EPA pursuant to 40 CFR 268.42(b).

\* \* \* \* \*

32. Section 265.1084 is amended by adding paragraphs (a)(3)(v) and (b)(3)(v) and by revising paragraphs (a)(2), (a)(3)(ii)(B), (a)(3)(iii) introductory text, (a)(3)(iii)(A), (a)(3)(iii)(F) introductory text, (a)(3)(iii)(G), (a)(3)(iii)(G)(I), (a)(3)(iv), (a)(4)(iv), (b)(1), (b)(3)(ii)(B), (b)(3)(iii) introductory text, (b)(3)(iii)(F) introductory text, (b)(3)(iii)(G) introductory text, (b)(3)(iv), (b)(8)(iii), (b)(9)(iv), and (d)(5)(ii) to read as follows:

**§ 265.1084 Waste determination procedures.**

(a) \* \* \*

(2) For a waste determination that is required by paragraph (a)(1) of this section, 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) \* \* \*

(ii) \* \* \*

(B) A sufficient number of samples, but no less than four samples, shall be collected and analyzed for a hazardous waste determination. The average of the four or more sample results constitutes a waste determination for the waste stream. One or more waste determinations may be required to represent the complete range of waste 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.

\* \* \* \* \*

(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  $1.8 \times 10^{-6}$  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) 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 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 136.4 and 136.5 must be followed. If an owner or operator uses EPA Method 8260 or 8270 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, (incorporated by reference—refer to § 260.11(a) 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) of this section must be followed. At the owner 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.

\* \* \* \* \*

(F) Method 8260 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (incorporated by reference—refer to § 260.11(a) of this chapter). Maintain a formal quality assurance program consistent with the requirements of Method 8260. The quality assurance program shall include the following elements:

\* \* \* \* \*

(G) Method 8270 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (incorporated by reference—refer to § 260.11(a) of this chapter). Maintain a formal quality assurance program consistent with the requirements of Method 8270. 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.

\* \* \* \* \*

(iv) Calculations.

(A) The average VO concentration ( $\bar{C}$ ) on a mass-weighted basis shall be calculated by using the results for all waste determinations conducted in accordance with paragraphs (a)(3)(ii) and (iii) of this section and the following equation:

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

where:

$\bar{C}$  = Average VO concentration of the hazardous waste at the point of waste origination on a mass-weighted basis, ppmw.

$i$  = Individual waste determination "i" of the hazardous waste.

$n$  = Total number of waste determinations of the hazardous waste conducted 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 waste determination "i" as determined in accordance with the

requirements of paragraph (a)(3)(iii) of this section (i.e. the average of the four or more samples specified in paragraph (a)(3)(ii)(B) of this section), ppmw.

(B) For the purpose of determining  $C_i$ , for individual waste samples analyzed in accordance with paragraph (a)(3)(iii) 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:

(1) If Method 25D in 40 CFR part 60, Appendix A is used for the analysis, one-half the blank value determined in the method at section 4.4 of Method 25D in 40 CFR part 60, appendix A.

(2) If any other analytical method is used, one-half the sum of the limits of detection established for each organic constituent in the waste that has a 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  $1.8 \times 10^{-6}$  atmospheres/gram-mole/ $m^3$ ] at 25 degrees Celsius.

(v) Provided that the test method is appropriate for the waste as required under paragraph (a)(3)(iii) of this section, the EPA will determine compliance based on the test method used by the owner or operator as recorded pursuant to § 265.1090(f)(1) of this subpart.



(4) \* \* \*

(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. The owner or operator may choose one or more appropriate methods to analyze each collected sample in accordance with the requirements of paragraph (a)(3)(iii) of this section.

(b) \* \* \*

(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)(i) through (c)(2)(vi) 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.

\* \* \* \* \*

(3) \* \* \*

(ii) \* \* \*

(B) A sufficient number of samples, but no less than four samples, shall be collected and analyzed for a hazardous waste determination. The average of the four or more sample results constitutes a waste determination for the waste stream. One or more waste determinations may be required to represent the complete range of waste 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.

\* \* \* \* \*

(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. When the owner or operator is making a waste determination for a treated hazardous waste that is to be compared to an average VO concentration at the point of waste origination or the point of waste entry to the treatment system, to determine if the conditions of § 264.1082(c)(2)(i) through (c)(2)(vi) of this part, or § 265.1083(c)(2)(i) through (c)(2)(vi) of this subpart are met, then the waste samples shall be prepared and analyzed using the same method or methods as were used in making the initial waste determinations at the point of waste origination or at the point of entry to the treatment system. 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  $1.8 \times 10^{-6}$  atmospheres/gram-mole/m<sup>3</sup>] 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 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 136.4 and 136.5 must be followed. If an owner or operator uses Method 8260 or 8270 in "Test Methods for Evaluating Solid Waste, Physical/

Chemical Methods," EPA Publication SW-846, (incorporated by reference—refer to § 260.11(a) 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 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 (b)(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.

\* \* \* \* \*

(F) Method 8260 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (incorporated by reference—refer to § 260.11(a) of this chapter). Maintain a formal quality assurance program consistent with the requirements of Method 8260. The quality assurance program shall include the following elements:

\* \* \* \* \*

(G) Method 8270 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (incorporated by reference—refer to § 260.11(a) of this chapter). Maintain a formal quality assurance program consistent with the requirements of Method 8270. The quality assurance program shall include the following elements:

\* \* \* \* \*

(iv) *Calculations.* The average VO concentration (C) on a mass-weighted basis shall be calculated by using the results for all waste determinations conducted in accordance with paragraphs (b)(3)(ii) and (iii) of this section and the following equation:

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

where:

$\bar{C}$ =Average VO concentration of the hazardous waste at the point of waste treatment on a mass-weighted basis, ppmw.

i=Individual waste determination "i" of the hazardous waste.

n=Total number of waste determinations of the hazardous waste conducted 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 waste determination "i" as determined in accordance with the requirements of paragraph (b)(3)(iii) of this

section (i.e. the average of the four or more samples specified in paragraph (b)(3)(ii)(B) of this section), ppmw.

(v) Provided that the test method is appropriate for the waste as required under paragraph (b)(3)(iii) of this section, compliance shall be determined based on the test method used by the owner or operator as recorded pursuant to § 265.1090(f)(1) of this subpart.

(8) \* \* \*

(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) \* \* \*

(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) of this section, respectively, 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.

(d) \* \* \*

(5) \* \* \*

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

33. Section 265.1085 is amended by revising the introductory text of paragraph (c)(2)(iii), revising (c)(2)(iii)(B), adding paragraph (e)(4), revising paragraph (f)(3)(i)(D)(4), adding

paragraph (f)(4), and adding paragraph (j)(2)(iii) to read as follows:

**§ 265.1085 Standards: Tanks.**

(c) \* \* \*

(2) \* \* \*

(iii) Each opening in the fixed roof, and any manifold system associated with the fixed roof, shall be either:

(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 shall be operating whenever hazardous waste is managed in the tank, except as provided for in paragraphs (c)(2)(iii)(B)(1) and (2) of this section.

(1) During periods it is necessary to provide access to the tank for performing the activities of paragraph (c)(2)(iii)(B)(2) of this section, venting of the vapor headspace underneath the fixed roof to the control device is not required, opening of closure devices is allowed, and removal of the fixed roof is allowed. 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, and resume operation of the control device.

(2) During periods of routine inspection, maintenance, or other activities needed for normal operations, and for the removal of accumulated sludge or other residues from the bottom of the tank.

(e) \* \* \*

(4) Safety devices, as defined in § 265.1081 of this subpart, may be installed and operated as necessary on any tank complying with the requirements of paragraph (e) of this section.

(f) \* \* \*

(3) \* \* \*

(i) \* \* \*

(D) \* \* \*

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

(4) Safety devices, as defined in 40 CFR 265.1081, may be installed and operated as necessary on any tank

complying with the requirements of paragraph (f) of this section.

(j) \* \* \*

(2) \* \* \*

(iii) The hazardous waste meets the requirements of § 265.1083(c)(4) of this subpart.

34. Section 265.1086 is amended by revising paragraphs (b)(2), (d)(1)(iii), and (d)(2)(i)(B) and adding paragraph (e)(2)(iii) to read as follows:

**§ 265.1086 Standards: Surface impoundments.**

(b) \* \* \*

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

(d) \* \* \*

(1) \* \* \*

(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 of construction 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.

(2) \* \* \*

(i) \* \* \*

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

(e) \* \* \*

(2) \* \* \*

(iii) The hazardous waste meets the requirements of § 265.1083(c)(4) of this subpart.

35. Section 265.1087 is amended by revising paragraphs (c)(4)(i), (d)(4)(i), and the introductory text of paragraph (g) to read as follows:

**§ 265.1087 Standards: Containers.**

(c) \* \* \*

(4) \* \* \*

(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 within 24 hours after the container is accepted at the facility (i.e., does not meet the conditions for an empty container as specified in 40 CFR 261.7(b)), 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. The container visual inspection shall be conducted on or before the date that the container is accepted at the facility (i.e., the date the container becomes subject to the subpart CC container standards). For purposes of this requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest in the appendix to 40 CFR part 262 (EPA Forms 8700-22 and 8700-22A), as required under subpart E of this part, at 40 CFR 265.71. 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.

\* \* \* \* \*

(d) \* \* \*

(4) \* \* \*

(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 within 24 hours after the container is accepted at the facility (i.e., does not meet the conditions for an empty container as specified in 40 CFR 261.7(b)), 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. The container visual inspection shall be conducted on or before the date that the container is accepted at the facility (i.e., the date the container becomes subject to the subpart CC container standards). For purposes of this requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest in the appendix to 40 CFR part 262 (EPA Forms 8700-22 and 8700-22A), as required under subpart E of this part, at § 265.71. 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.

\* \* \* \* \*

(g) To determine compliance with the no detectable organic emissions requirements of paragraph (d)(1)(ii) of this section, the procedure specified in § 265.1084(d) of this subpart shall be used.

\* \* \* \* \*

36. Section 265.1088 is amended by revising paragraphs (c)(3)(ii) and (c)(7) to read as follows:

**§ 265.1088 Standards: Closed-vent systems and control devices.**

\* \* \* \* \*

(c) \* \* \*

(3) \* \* \*

(ii) All carbon that is a hazardous waste and that is removed from the control device shall be managed in accordance with the requirements of 40 CFR 265.1033(m), regardless of the average volatile organic concentration of the carbon.

\* \* \* \* \*

(7) The closed-vent system and 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.

37. Section 265.1090 is amended by revising paragraphs (a), (b)(1)(ii)(B), and (f)(1) and adding paragraph (j) 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 (j) of this section, as applicable to the facility. Except for air emission control equipment design documentation and information required by paragraphs (i) and (j) 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 paragraphs (i) and (j) of this section shall be maintained in the operating record for as long as the waste management unit is

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) or § 265.1080(b)(7) of this subpart, respectively.

(b) \* \* \*

(1) \* \* \*

(ii) \* \* \*

(B) For each defect detected during the inspection: 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.

\* \* \* \* \*

(f) \* \* \*

(1) For tanks, surface impoundments, or containers exempted under the hazardous waste organic concentration conditions specified in § 265.1083(c)(1) or § 265.1084(c)(2)(i) through (c)(2)(vi) 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.

\* \* \* \* \*

(j) For each hazardous waste management unit not using air emission controls specified in §§ 265.1085 through 265.1088 of this subpart in accordance with the provisions of § 265.1080(b)(7) of this subpart, the owner and operator shall record and maintain the following information:

(1) Certification that the waste management unit 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.

(2) Identification of the specific requirements codified under 40 CFR part 60, part 61, or part 63 with which the waste management unit is in compliance.

\* \* \* \* \*

38. Part 265, Appendix VI is revised to read as follows:

## Appendix VI to Part 265—Compounds With Henry's Law Constant Less Than 0.1 Y/X

Compound name	CAS No.
Acetaldol .....	107-89-1
Acetamide .....	60-35-5
2-Acetylaminofluorene .....	53-96-3
3-Acetyl-5-hydroxypiperidine .....	
3-Acetylpyridine .....	618-42-8
1-Acetyl-2-thiourea .....	591-08-2
Acrylamide .....	79-06-1
Acrylic acid .....	79-10-7
Adenine .....	73-24-5
Adipic acid .....	124-04-9
Adiponitrile .....	111-69-3
Alachlor .....	15972-60-8
Aldicarb .....	116-06-3
Ametryn .....	834-12-8
4-Aminobiphenyl .....	92-67-1
4-Aminopyridine .....	504-24-5
Aniline .....	62-53-3
o-Anisidine .....	90-04-0
Anthraquinone .....	84-65-1
Atrazine .....	1912-24-9
Benzeneearsonic acid .....	98-05-5
Benzenesulfonic acid .....	98-11-3
Benzidine .....	92-87-5
Benzo(a)anthracene .....	56-55-3
Benzo(k)fluoranthene .....	207-08-9
Benzoic acid .....	65-85-0
Benzo(g,h,i)perylene .....	191-24-2
Benzo(a)pyrene .....	50-32-8
Benzyl alcohol .....	100-51-6
gamma-BHC .....	58-89-9
Bis(2-ethylhexyl)phthalate .....	117-81-7
Bromochloromethyl acetate .....	
Bromoxynil .....	1689-84-5
Butyric acid .....	107-92-6
Caprolactam (hexahydro-2H-azepin-2-one) .....	105-60-2
Catechol (o-dihydroxybenzene) .....	120-80-9
Cellulose .....	9004-34-6
Cell wall .....	
Chlorhydrin (3-Chloro-1,2-propanediol) .....	96-24-2
Chloroacetic acid .....	79-11-8
2-Chloroacetophenone .....	93-76-5
p-Chloroaniline .....	106-47-8
p-Chlorobenzophenone .....	134-85-0
Chlorobenzilate .....	510-15-6
p-Chloro-m-cresol (6-chloro-m-cresol) .....	59-50-7
3-Chloro-2,5-diketopyrrolidine .....	
Chloro-1,2-ethane diol .....	
4-Chlorophenol .....	106-48-9
Chlorophenol polymers (2-chlorophenol & 4-chlorophenol) .....	95-57-8 & 106-48-9
1-(o-Chlorophenyl)thiourea .....	5344-82-1
Chrysene .....	218-01-9
Citric acid .....	77-92-9
Creosote .....	8001-58-9
m-Cresol .....	108-39-4
o-Cresol .....	95-48-7
p-Cresol .....	106-44-5
Cresol (mixed isomers) .....	1319-77-3
4-Cumylphenol .....	27576-86
Cyanide .....	57-12-5
4-Cyanomethyl benzoate .....	
Diazinon .....	333-41-5
Dibenzo(a,h)anthracene .....	53-70-3
Dibutylphthalate .....	84-74-2
2,5-Dichloroaniline (N,N'-dichloroaniline) .....	95-82-9
2,6-Dichlorobenzonitrile 11 .....	1194-65-6
2,6-Dichloro-4-nitroaniline .....	99-30-9
2,5-Dichlorophenol .....	333-41-5
3,4-Dichlorotetrahydrofuran .....	3511-19
Dichlorvos (DDVP) .....	62737
Diethanolamine .....	111-42-2
N,N-Diethylaniline .....	91-66-7

Compound name	CAS No.
Diethylene glycol .....	111-46-6
Diethylene glycol dimethyl ether (dimethyl Carbitol) .....	111-96-6
Diethylene glycol monobutyl ether (butyl Carbitol) .....	112-34-5
Diethylene glycol monoethyl ether acetate (Carbitol acetate) .....	112-15-2
Diethylene glycol monoethyl ether (Carbitol Cellosolve) .....	111-90-0
Diethylene glycol monomethyl ether (methyl Carbitol) .....	111-77-3
N,N'-Diethylhydrazine .....	1615-80-1
Diethyl (4-methylumbelliferyl) thionophosphate .....	299-45-6
Diethyl phosphorothioate .....	126-75-0
N,N'-Diethylpropionamide .....	15299-99-7
Dimethoate .....	60-51-5
2,3-Dimethoxystrychnidin-10-one .....	357-57-3
4-Dimethylaminoazobenzene .....	60-11-7
7,12-Dimethylbenz(a)anthracene .....	57-97-6
3,3-Dimethylbenzidine .....	119-93-7
Dimethylcarbamoyl chloride .....	79-44-7
Dimethyldisulfide .....	624-92-0
Dimethylformamide .....	68-12-2
1,1-Dimethylhydrazine .....	57-14-7
Dimethylphthalate .....	131-11-3
Dimethylsulfone .....	67-71-0
Dimethylsulfoxide .....	67-68-5
4,6-Dinitro-o-cresol .....	534-52-1
1,2-Diphenylhydrazine .....	122-66-7
Dipropylene glycol (1,1'-oxydi-2-propanol) .....	110-98-5
Endrin .....	72-20-8
Epinephrine .....	51-43-4
mono-Ethanolamine .....	141-43-5
Ethyl carbamate (urethane) .....	5-17-96
Ethylene glycol .....	107-21-1
Ethylene glycol monobutyl ether (butyl Cellosolve) .....	111-76-2
Ethylene glycol monoethyl ether (Cellosolve) .....	110-80-5
Ethylene glycol monoethyl ether acetate (Cellosolve acetate) .....	111-15-9
Ethylene glycol monomethyl ether (methyl Cellosolve) .....	109-86-4
Ethylene glycol monophenyl ether (phenyl Cellosolve) .....	122-99-6
Ethylene glycol monopropyl ether (propyl Cellosolve) .....	2807-30-9
Ethylene thiourea (2-imidazolidinethione) .....	9-64-57
4-Ethylmorpholine .....	100-74-3
3-Ethylphenol .....	620-17-7
Fluoroacetic acid, sodium salt .....	62-74-8
Formaldehyde .....	50-00-0
Formamide .....	75-12-7
Formic acid .....	64-18-6
Fumaric acid .....	110-17-8
Glutaric acid .....	110-94-1
Glycerin (Glycerol) .....	56-81-5
Glycidol .....	556-52-5
Glycinamide .....	598-41-4
Glyphosate .....	1071-83-6
Guthion .....	86-50-0
Hexamethylene-1,6-diisocyanate (1,6-diisocyanatohexane) .....	822-06-0
Hexamethyl phosphoramidate .....	680-31-9
Hexanoic acid .....	142-62-1
Hydrazine .....	302-01-2
Hydrocyanic acid .....	74-90-8
Hydroquinone .....	123-31-9
Hydroxy-2-propionitrile (hydracrylonitrile) .....	109-78-4
Indeno (1,2,3-cd) pyrene .....	193-39-5
Lead acetate .....	301-04-2
Lead subacetate (lead acetate, monobasic) .....	1335-32-6
Leucine .....	61-90-5
Malathion .....	121-75-5
Maleic acid .....	110-16-7
Maleic anhydride .....	108-31-6
Mesityl oxide .....	141-79-7
Methane sulfonic acid .....	75-75-2
Methomyl .....	16752-77-5
p-Methoxyphenol .....	150-76-5
Methyl acrylate .....	96-33-3
4,4'-Methylene-bis-(2-chloroaniline) .....	101-14-4
4,4'-Methylenediphenyl diisocyanate (diphenyl methane diisocyanate) .....	101-68-8
4,4'-Methylenedianiline .....	101-77-9
Methylene diphenylamine (MDA) .....	
5-Methylfurfural .....	620-02-0

Compound name	CAS No.
Methylhydrazine .....	60-34-4
Methyliminoacetic acid.	
Methyl methane sulfonate .....	66-27-3
1-Methyl-2-methoxyaziridine.	
Methylparathion .....	298-00-0
Methyl sulfuric acid (sulfuric acid, dimethyl ester) .....	77-78-1
4-Methylthiophenol .....	106-45-6
Monomethylformamide (N-methylformamide) .....	123-39-7
Nabam .....	142-59-6
alpha-Naphthol .....	90-15-3
beta-Naphthol .....	135-19-3
alpha-Naphthylamine .....	134-32-7
beta-Naphthylamine .....	91-59-8
Neopentyl glycol (dimethylolpropane) .....	126-30-7
Niacinamide .....	98-92-0
o-Nitroaniline .....	88-74-4
Nitroglycerin .....	55-63-0
2-Nitrophenol .....	88-75-5
4-Nitrophenol .....	100-02-7
N-Nitrosodimethylamine .....	62-75-9
Nitrosoguanidine .....	674-81-7
N-Nitroso-n-methylurea .....	684-93-5
N-Nitrosomorpholine (4-nitrosomorpholine) .....	59-89-2
Oxalic acid .....	144-62-7
Parathion .....	56-38-2
Pentaerythritol .....	115-77-5
Phenacetin .....	62-44-2
Phenol .....	108-95-2
Phenylacetic acid .....	103-82-2
m-Phenylene diamine .....	108-45-2
o-Phenylene diamine .....	95-54-5
p-Phenylene diamine .....	106-50-3
Phenyl mercuric acetate .....	62-38-4
Phorate .....	298-02-2
Phthalic anhydride .....	85-44-9
alpha-Picoline (2-methyl pyridine) .....	109-06-8
1,3-Propane sulfone .....	1120-71-4
beta-Propiolactone .....	57-57-8
Proporur (Baygon).	
Propylene glycol .....	57-55-6
Pyrene .....	129-00-0
Pyridinium bromide .....	39416-48-3
Quinoline .....	91-22-5
Quinone (p-benzoquinone) .....	106-51-4
Resorcinol .....	108-46-3
Simazine .....	122-34-9
Sodium acetate .....	127-09-3
Sodium formate .....	141-53-7
Strychnine .....	57-24-9
Succinic acid .....	110-15-6
Succinimide .....	123-56-8
Sulfanilic acid .....	121-47-1
Terephthalic acid .....	100-21-0
Tetraethyldithiopyrophosphate .....	3689-24-5
Tetraethylenepentamine .....	112-57-2
Thiofanox .....	39196-18-4
Thiosemicarbazide .....	79-19-6
2,4-Toluenediamine .....	95-80-7
2,6-Toluenediamine .....	823-40-5
3,4-Toluenediamine .....	496-72-0
2,4-Toluene diisocyanate .....	584-84-9
p-Toluic acid .....	99-94-5
m-Toluidine .....	108-44-1
1,1,2-Trichloro-1,2,2-trifluoroethane .....	76-13-1
Triethanolamine .....	102-71-6
Triethylene glycol dimethyl ether.	
Tripropylene glycol .....	24800-44-0
Warfarin .....	81-81-2
3,4-Xylenol (3,4-dimethylphenol) .....	95-65-8

**PART 270—EPA ADMINISTERED  
PERMIT PROGRAMS: THE  
HAZARDOUS WASTE PERMIT  
PROGRAM**

39. The authority citation for part 270 continues to read as follows:

**Authority:** 42 U.S.C. 6905, 6912, 6924, 6925, 6927, 6939, and 6974.

**Subpart B—Permit Application**

40. 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) of this part. Include where applicable, as part of the inspection schedule, specific requirements in §§ 264.174, 264.193(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 of this part.

\* \* \* \*

[FR Doc. 97-31792 Filed 12-5-97; 8:45 am]

BILLING CODE 6560-50-P