

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Parts 260, 264, 265, and 270**

[SWH-FRL 2891-9]

Standards Applicable to Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities; Closure/Post-Closure and Financial Responsibility Requirements**AGENCY:** Environmental Protection Agency.**ACTION:** Final rule.

SUMMARY: On March 19, 1985, the Environmental Protection Agency (EPA) proposed to amend portions of the closure and post-closure care and financial responsibility requirements applicable to owners and operators of hazardous waste treatment, storage, and disposal facilities (TSDFs) (50 FR 11068). EPA is today promulgating the amendments in final form. Many of the amendments conform to a settlement agreement signed by EPA and petitioners in *American Iron and Steel Institute v. U.S. Environmental Protection Agency*, renamed *Atlantic Cement Company Incorporated v. U.S. Environmental Protection Agency* (D.C. Cir., No. 81-1387 and Consolidated Cases). The remainder of the amendments are designed to clarify the regulations and to address issues that have arisen as EPA has implemented the regulations.

DATES: These regulations shall become effective on October 29, 1986, except for § 270.14(b)(14), which shall be effective on May 2, 1986.

Wording changes for financial instruments issued before the effective date of these regulations must be made at the same time changes are required under §§ 264.142(b), 264.144(b), 265.142(b), and 265.144(b).

ADDRESSES: The public docket for this rulemaking is available for public inspection at Room S-212-E, U.S. EPA, 401 M Street SW., Washington, DC. 20460 from 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding holidays. The docket number is F-86-FCPC. Call (202) 475-9327 to make an appointment with the docket clerk. As provided in 40 CFR Part 2, a reasonable fee may be charged for copying services.

FOR FURTHER INFORMATION CONTACT: The RCRA Hotline toll free at (800) 424-9346 or in Washington at (202) 382-3000; or Nancy D. McLaughlin, Office of Solid Waste (WH-502), U.S. Environmental Protection Agency, 401 M Street SW., Washington, D.C. 20460, (202) 475-6677.

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I. Background

A. Subtitle C of the Resource Conservation and Recovery Act (RCRA)

Subtitle C of RCRA creates a "cradle-to-grave" management system to ensure that hazardous wastes are transported, treated, stored, and disposed of in a manner that ensures the protection of human health and the environment. Section 3004 of Subtitle C requires the Administrator of EPA to promulgate regulations establishing such performance standards applicable to owners and operators of hazardous waste treatment, storage, or disposal facilities (TSDFs), as may be necessary to protect human health and the environment. Section 3005 requires the Administrator to promulgate regulations requiring each person owning or operating a TSDF to have a permit, and to establish requirements for permit applications.

Under Section 3005(a), on the effective date of the Section 3004 standards, all treatment, storage and disposal of hazardous waste is prohibited except in accordance with a permit that implements the Section 3004 standards. Recognizing, however, that not all permits would be issued within six months of the promulgation of Section 3004 standards, Congress created "interim status" in Section 3005(e) of RCRA. Owners and operators of existing hazardous waste TSDFs who qualify for interim status will be treated as having been issued a permit until EPA takes final administrative action on their permit application. Interim status does not relieve a facility owner or operator of complying with Section 3004 standards. The privilege of carrying on operations in the absence of a permit carries with it the responsibility of complying with appropriate portions of the Section 3004 standards.

B. Regulations Affected by Today's Amendments

EPA has issued several sets of regulations to implement the various sections of Subtitle C. Part 260 of 40 CFR, among other provisions, includes definitions that apply to all other parts of the regulations. Part 264 provides standards for owners and operators of TSDFs that have been issued RCRA permits. Part 265 provides interim status standards for owners and operators of TSDFs. Part 270 establishes permitting

procedures for TSDFs. These four parts are amended by today's final rule.

C. Atlantic Cement Company, Incorporated (ACCI) Litigation and Settlement

Shortly after EPA promulgated the January 12, 1981 regulations, which, among other requirements, included standards for closure and post-closure care and financial assurance, individual companies and industry trade associations filed 17 separate lawsuits challenging those standards. These cases were consolidated as *American Iron and Steel Institute v. U.S. Environmental Protection Agency* (D.C. Cir. No. 81-1387 and Consolidated Cases). On August 16, 1984, the parties (with the exception of several parties who voluntarily dismissed their lawsuits) filed a settlement agreement with the Court. The American Iron and Steel Institute voluntarily dismissed its lawsuit rather than join in the settlement; the case has been renamed *Atlantic Cement Company Incorporated v. U.S. Environmental Protection Agency* ("ACCI Litigation").

Under the terms of the settlement agreement, EPA agreed to propose and take final action upon certain amendments to the closure and post-closure regulations that were promulgated on January 12, 1981. The rules proposed on March 19, 1985 contained amendments conforming to the ACCI settlement agreement. Among the regulations EPA is promulgating today are amendments to 40 CFR Parts 260, 264, 265, and 270 that are in most cases consistent with the ACCI settlement agreement. In addition, certain of these amendments require conforming amendments to financial responsibility regulations in Subpart H of Parts 264 and 265. Those changes are also being made today.

D. Subparts G and H Implementation Experience

Since January 12, 1981, EPA and authorized states have developed considerable experience with the implementation of Subparts G and H. Based on this implementation experience, EPA is today making additional changes to 40 CFR Parts 260, 264, 265, and 270.

E. Hazardous and Solid Waste Amendments of 1984 Codification Rule

On July 15, 1985, EPA published in 50 FR 28702 final rules implementing provisions included in the Hazardous and Solid Waste Amendments of 1984 (HSWA) (hereinafter referred to as the "codification rule"). Some of today's final rules have been promulgated to

conform to HSWA and to the requirements of the July 15, 1985 codification rule.

II. Analysis of Rules

The following sections of this preamble include discussions of the major issues and summaries of the comments received in response to the March 19, 1985 proposed rule, as well as explanations of EPA's rationale for promulgating the final rules. The preamble is arranged in a section-by-section sequence for ease of reference. Because many of the regulatory amendments to Interim Status Standards (Part 265) are parallel to the Standards for Permitted Facilities (Part 264), only those changes to the Part 265 Interim Status Standards that differ from the Part 264 standards are addressed separately.

A. Definitions (Part 260)

1. Active Life of the Facility (§ 260.10):

In the March 19, 1985 proposed rule, the Agency proposed to redefine "active life" to extend the period from the initial receipt of hazardous wastes until the Regional Administrator receives certification of final closure. Sections 264.112(b) and 265.112(b) previously defined active life of a facility as that period during which wastes are periodically received.

The key concern raised by the commenters was that certain requirements applicable to operating facilities may not be practical or feasible to conduct during the closure period (e.g., inspections, paperwork requirements).

The Agency does not agree that defining the closure period as part of the active life would be burdensome or require activities not otherwise required at the facility. For example, §§ 264.73 and 265.73 now require that the owner or operator maintain the operating record until closure of the facility. The Agency would also expect an owner or operator to conduct inspections as part of a routine closure activities. As discussed in the preamble to the proposed rule, the Agency is primarily concerned with ensuring that all monitoring activities are continued until closure is completed. Therefore, the Agency is promulgating the definition of active life of the facility as proposed.

2. Final Closure (§ 260.10)

In order to clarify the distinction between partial closure and final closure, the Agency proposed to define final closure as closure of all hazardous waste management units at a facility not otherwise covered by the provisions of

§ 262.34 (exemptions from Subpart G requirements for facilities accumulating hazardous wastes for less than 90 days), in accordance with Subpart G requirements. Closure of the last unit of the facility would be defined as final closure of the facility. No comments were received on this proposal, and the Agency is promulgating the definition as proposed.

3. Hazardous Waste Management Unit (§ 260.10)

The Agency proposed to define a new term—"hazardous waste management unit"—as the smallest area of land on or in which hazardous waste is placed, or the smallest structure on or in which hazardous waste is placed, that isolates hazardous waste within a facility. The proposed definition was designed to be consistent with the preamble to the July 26, 1982 land disposal regulations (47 FR 32289), expanded to include storage and treatment tanks and container storage units. The following were defined as hazardous waste management units in the March 19, 1985 proposed rule: a landfill cell, surface impoundment, waste pile, land treatment area, incinerator, tank system (i.e., individual tank and its associated piping and underlying containment system), and a container storage area (i.e., the containers and the land or pad on which they are placed).

A number of commenters were concerned that the proposed definition was still somewhat ambiguous. In particular, the definition did not adequately distinguish between landfill cells, which were defined in the proposed rule as units, and subcells, which are integral subsections of cells and should not be closed separately from the cell as a whole. Another commenter expressed concern that the term "isolates" in the definition implies that all units necessarily isolate wastes, which may not always be the case (e.g., land treatment area).

The Agency agrees that the proposed definition is somewhat ambiguous and not completely consistent with the definition of unit included in the July 26, 1982 preamble. Moreover, the Agency wishes to make the definition consistent with the codification rule. (See 50 FR 28706 and 28712, July 15, 1985). Therefore, today's rule defines hazardous waste management unit as a contiguous area of land on or in which hazardous waste is placed, or the largest area in which there is a significant likelihood of mixing hazardous waste constituents in the same area. Units include: surface impoundments, waste piles, landfill cells, incinerators, land treatment areas, tanks and their

associated piping and underlying containment systems, and container storage areas (i.e., the container and any underlying pad). As discussed in the preamble to the proposed rule, the Agency does not consider each container to be a unit.

4. Partial Closure (§ 260.10)

The March 19, 1985 proposed rule redefined partial closure as closure of a hazardous waste management unit. Partial closures may involve: (1) closing a hazardous waste management unit while another hazardous waste management unit at the facility continues operating (e.g., a surface impoundment or container storage area is closed but a landfill continues to operate), or (2) closing one or more hazardous waste management units while other units associated with the same process remain operational (e.g., one landfill cell of a ten-cell landfill is closed, one tank and its underlying piping is removed from a tank farm). Closure of the *last* hazardous waste management unit at the facility would be considered a *final* closure rather than a partial closure.

The Agency received no substantive comments on the proposed definition of partial closure. The definition is being adopted substantially as proposed, with the following change: In the list of examples, "tank system" has been changed to "tank (including its associated piping and underlying containment system)".

B. Standards for Permitted Facilities (Part 264) and Conforming Changes to Interim Status Standards (Part 265)

1. Closure and Post-Closure Care (Subpart G)

a. *Closure performance standard (§§ 264.111 and 265.111)*. The previous sections 264.111 and 265.111 established general closure performance standards applicable to all TSDFs that specified that a facility must be closed in a manner that (1) minimizes the need for further maintenance, and (2) controls, minimizes or eliminates, to the extent necessary to prevent threats to human health and the environment, post-closure escape of hazardous wastes, hazardous waste constituents, leachate, contaminated rainfall, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere. The language in § 265.111 differed slightly and specified that the facility must be closed in a manner "that . . . controls, minimizes or eliminates, to the extent necessary to *protect* human health and the environment. . . ."

In the March 19, 1985 preamble, the Agency proposed to (1) incorporate into the general standard a reference to the process-specific closure standards included in 40 CFR §§ 264.178, 264.197, 264.228, 264.258, 264.280, 264.310, 264.351, and the parallel interim status provisions; (2) make the language in § 265.111 parallel to that in § 264.111; (3) revise the language to require that hazardous constituents, as well as hazardous waste constituents, be appropriately managed at closure; and (4) make a minor change to the wording of the regulation for purposes of clarification.

The Agency proposed to incorporate reference to the specific technical closure requirements into the performance standard to ensure that owners or operators of TSDFs comply with both the general performance standard and the applicable process-specific standards. No comments were submitted on this proposal. The Agency is promulgating the language of §§ 264.111(c) and 265.111(c) substantially as proposed. The reference to § 265.178 in § 265.111(c) has been dropped because there are no process-specific standards for container storage facilities in interim status; in addition, references to §§ 265.381 and 265.404 which had been inadvertently omitted from the proposed rule, are included in § 265.111(c).

Because the Agency believes that for clarity and consistency the closure performance standard for interim status and permitted facilities should be parallel, the Agency proposed to amend § 265.111(b) to make the language parallel to that in § 264.111(b). One commenter stated that the use of the phrase "prevent threats" could require an owner or operator to conduct closure activities that were not cost-effective and should be replaced by a site-specific risk assessment.

The Agency believes that the environmental goals of closure should be the same for both interim status and permitted facilities. Although the previous language of the closure performance standard in Parts 264 and 265 differed slightly, as discussed in the preamble to the proposed rule, the Agency interpreted them as having the same meaning. As a result, the Agency proposed to amend § 265.111 to be consistent with the Part 264 standards and included the language "to prevent threats".

For the sake of clarity and to be consistent with the statutory language in RCRA mandating EPA to promulgate standards to *protect* human health and the environment, however, the final rule

amends the language of § 264.111(b) to be consistent with the wording of § 265.111(b). The language in § 264.111(b) now specifies that the facility must be closed in a manner "that . . . controls, minimizes, or eliminates, to the extent necessary to protect human health and the environment" the post-closure escape of hazardous wastes, hazardous constituents, etc.

The Agency also proposed to expand the language in §§ 264.111(b) and 265.111(b) to require that closure must control, minimize or eliminate, to the extent necessary, the post-closure escape of *hazardous constituents* instead of only hazardous waste constituents as the previous regulation required. One commenter opposed the proposal on the grounds that requiring owners and operators to address all Appendix VIII constituents rather than only hazardous waste constituents could have costly implications for closure and post-closure care. Moreover, the commenter argued that the Agency did not provide a rationale for this change in the March 19, 1985 proposed rule.

The Agency believes it is necessary to include hazardous constituents in the closure performance standard to ensure that *all* contamination is adequately addressed at closure. Furthermore, this change is consistent with the HSWA. For example, RCRA Section 3004(u) requires corrective action for all releases of hazardous wastes or *hazardous constituents* from any solid waste management unit. Similarly, Section 3001(f) requires the Agency in evaluating delisting petitions to consider, among other things, constituents other than those for which the waste was listed as hazardous. As a result of these considerations, the Agency is adopting §§ 264.111(b) and 265.111(b) as proposed.

Finally, the Agency proposed to clarify the wording in §§ 264.111(b) and 265.111(b) by replacing the phrase "contaminated rainfall" with "contaminated run-off." No comments were received and this change is being promulgated as proposed. In addition, the phrase "waste decomposition products" was changed to "*hazardous waste decomposition products*." Wastes which are not hazardous are not subject to the closure performance standards.

b. *Requirement to furnish closure and post-closure plans to the Regional Administrator* (§§ 264.112(a), 264.118(c), 265.112(a), 265.118(b)). Sections 264.112(a), 264.118(a), 265.112(a), and 265.118(a) previously required the owner or operator of a TSDF to keep a copy of the closure and post-closure plan and all revisions at the facility until closure is completed and certified. (In the case of

permitted facilities and interim status facilities with approved plans, the approved plans were to be kept on-site.) Post-closure plans were to be retained at the facility until the post-closure care period began. Petitioners in the ACCI litigation argued that a hazardous waste management facility may not be properly equipped to maintain files at the facility and safeguard closure and post-closure plans and that the plans could be kept more efficiently and safely at nearby offices of the owner or operator of the facility. The EPA, however, was concerned that the plans be available on-site to an inspector on the day of inspection.

The Agency proposed to drop the requirement that the closure and post-closure plans be kept at the facility, but to require that they be furnished to the Regional Administrator upon request, including request by mail, and during site inspections, on the day of inspection. This was consistent with the terms of the ACCI settlement.

Most of the commenters focused on the applicability of the requirements to permitted facilities, arguing that if the Agency already has a copy of the plan on file, requiring it to be made available on the day of inspection is unnecessary. Another argued that plans should be kept at the facility during the closure period to make them readily available for an unannounced inspection at that time.

The Agency agrees with those commenters who argued that for facilities with approved closure and post-closure plans on file, it is not necessary to make them available on the day of inspection. For interim status facilities, however, the plans may not have been reviewed and it is important that they be available on the day of inspection. Even in the case of unannounced inspections, it should be possible to deliver a copy of the plan to the facility within the same day. Therefore, the Agency is promulgating §§ 264.112(a) and 264.118(c) to require that the plans be furnished only upon request, including request by mail; §§ 265.112(a) and 265.118(b) require that for interim status facilities with *approved* closure and post-closure plans, the plans must be furnished upon request, including request by mail. For facilities without approved plans, the plans must also be provided during site inspections.

Under the requirements of §§ 264.228 and 264.258, an owner or operator of a surface impoundment or waste pile not designed in accordance with the specified liner design standards must prepare a contingent closure and post-closure plan for closure as a landfill. To

ensure that such owners and operators recognize that these contingent plans are subject to the requirements of Part 264 Subpart G, the final rule modifies the proposed rule slightly. The final rule clarifies that if a facility is required to have a contingent closure and post-closure plan under § 264.228 or § 264.258, these plans are also subject to the requirements of §§ 264.112 and 264.118.

In some cases, owners or operators of surface impoundments or waste piles not otherwise required to prepare contingent closure and post-closure plans may be required to close their units or facilities as landfills. To clarify that these facilities also must have post-closure plans, the final rule specifies in §§ 264.118(a) and 265.118(a) that an owner or operator must prepare a post-closure plan within 90 days of the date that the owner or operator or Regional Administrator determines that the facility must be closed as a landfill.

c. *Clarification of contents of closure plan* (§§ 264.112(b), 265.112(b)). The Agency proposed a number of changes to §§ 264.112(a) and 265.112(a) to make explicit the level of detail that must be included in the closure plan to eliminate potential ambiguities in the closure plan requirements. First, the proposed rule clarified that the plan must address explicitly the activities to be conducted at all partial closures as well as final closure. The proposed rule also stated in §§ 264.112(b)(6) and 265.112(b)(6) that a schedule for closure activities must be provided for closure of each unit as well as for final closure. In addition, the proposed rule also elaborated on the types of information that should be included in the plan.

For example, the owner or operator must include in the plan not only an estimate of the maximum inventory over the life of the facility, but also a detailed description of the procedures that will be used to handle the hazardous wastes during partial and final closure (e.g., all proposed methods for removing, transporting, treating, or disposing of hazardous wastes at partial and final closure). The plan must also address all ancillary activities necessary during the partial and final closure periods, such as ground-water monitoring, leachate collection, and run-on and run-off control, as applicable.

The Agency received a number of comments supporting increased level of detail in the plans. Most of these commenters favored including even more specificity in the closure plan regulations (e.g., criteria for "how clean is clean"). A number of commenters however, also disagreed with the

Agency's proposed amendments, arguing that the level of detail proposed is unnecessary and burdensome, especially if the plan must be changed several times to reflect future changes in technology. One commenter expressed concern that the level of detail specified, combined with the permit modification procedures required to make changes to the plan, could lock an owner or operator into an outmoded closure plan.

The Agency believes that it is necessary to require detailed closure and post-closure plans to ensure accurate cost estimates and adequate financial assurance. Implementation experience has shown that poorly detailed plans have been accompanied by inadequate cost estimates. The plans should include sufficient detail to allow a third party to conduct closure or post-closure care in accordance with the plan if the owner or operator fails to do so. Therefore, the Agency is promulgating the final rule as proposed.

The Agency disagrees with those commenters who contend that requiring a greater level of detail will force owners or operators to revise their plans frequently. The types of changes that would require a revision to the closure plan are likely to be the result of a change in facility design or routine operations (e.g., a change in the cover design, off-site vs. on-site management of wastes at closure, closure of a surface impoundment or waste pile as a landfill). These types of changes are unlikely to occur frequently. The Agency does not intend that the owner or operator should revise the plan for insignificant changes (e.g., a change in the particular off-site facility used to handle wastes at closure or the contractor used to install the final cover). The Agency also does not intend this requirement to preclude an owner or operator from revising the plan as appropriate to incorporate technological innovations or to lock owners or operators into outmoded closure plans.

A number of commenters requested that the Agency address "how clean is clean" and include this standard as part of the closure requirements. The Agency is currently developing a policy on this broad issue outside the scope of this rulemaking.

d. Description of removal or decontamination of facility structures and soils in closure plan (§§ 264.112(b)(4), 265.112(b)(4)). Sections 264.112(a)(3) and 265.112(a)(3) previously required owners or operators to include a description of the steps needed to decontaminate facility equipment at closure. The proposed amendment expanded this provision to require that the closure plan also must include a

description of steps necessary to decontaminate or remove contaminated facility structures, containment systems, and soils in a manner that satisfies the closure performance standard. The plan must include, but not be limited to, a description of the methods for decontaminating the facility, sampling and testing procedures, and criteria to be used for evaluating contamination levels.

Because responsible owners or operators will clean up drips and spills associated with hazardous waste management activities as they occur (see, e.g., 40 CFR § 264.175), many of the activities described in the closure plan for removing or decontaminating soils should be similar to those conducted during the operating life of the facility as part of routine operations. For some types of units (e.g., tanks or container storage), soil testing may not be a routine operating activity and may not be conducted until closure. For these types of units it is especially important that the plan address how the owner or operator intends to determine the extent of soil contamination at closure. The Agency's intent is that the plan should address cleanup of the maximum extent of contamination (including contaminated soil) resulting from the facility's hazardous waste operations that the owner or operator expects to be on-site anytime over the active life of the facility.

While most commenters agreed with the proposal to address contaminated soils, some suggested clarifications. Some commenters were concerned about the ambiguity of the terms "contaminated" and "containment systems." The language might be construed to require decontamination or removal of leachate collection systems and liners. It was suggested that the regulation identify the equipment and structures subject to the decontamination requirement. Another commenter stated that the preamble to the proposed rule implied that the plan must address soil contamination from production activities, which is outside the scope of RCRA.

The Agency agrees that the plan must address soil contamination *only* from hazardous waste management operations. The Agency also does not intend this rule to require that an owner or operator remove structures otherwise required by process-specific requirements to be maintained and used after closure. For example, if an owner or operator closes a surface impoundment as a landfill, the Agency does not intend that the owner or operator remove the containment system as part of closure

decontamination procedures. (Similarly, the overlying hazardous wastes are not removed when a disposal facility is closed.) The Agency believes that the language of the proposed rule can be interpreted reasonably and it is not necessary to list in the regulation every piece of equipment and facility that must be decontaminated at every type of facility. As a result, the Agency is promulgating the final rule as proposed.

e. Requirements to estimate the expected year of closure (§§ 264.112(b)(7) and 265.112(b)(7)). Sections 264.112(a)(4) and 265.112(a)(4) previously required each owner or operator of a TSDF to include in its written closure plan an estimate of the expected year of closure. Petitioners in the *ACCI* litigation argued that compliance with that provision was unnecessarily burdensome for owners or operators of on-site TSDFs, such as storage and treatment facilities associated with industrial processes. In the case of those facilities, the expected date of closure may not be determined by the hazardous waste management activities but by the primary industrial activity with which the facility is associated, the closure date of which, in many cases, may be difficult to predict.

The Agency was concerned that in the case of owners or operators using trust funds to provide financial assurance, an estimate of the expected year of closure is necessary to enable both the owners or operators and EPA to determine whether appropriate payments have been made into the trust fund. In addition, for interim status facilities without approved closure plans, an estimate of the year of closure is important to allow the Agency the opportunity to conduct facility inspections near the end of the facility's life and ensure that closure will be performed in a manner that will protect human health and the environment. Therefore, the Agency proposed to amend the regulation to require only those owners or operators of permitted facilities who use trust funds to establish financial assurance under § 264.143 and whose facilities are expected to close prior to expiration of their initial permit to estimate the expected year of closure. For owners or operators of interim status facilities, those without approved closure plans or those who use trust funds to demonstrate financial assurance and whose remaining operating life is less than 20 years, would be required to estimate the year of closure.

Most commenters agreed with the Agency's proposed amendment to limit the requirement to owners or operators

using trust funds; some questioned retaining the requirement for all interim status facilities without approved closure plans. Those commenters who opposed the proposal argued that it is difficult to predict closure and a date should not be required. Consistent with the discussion in the March 19, 1985 preamble, the Agency feels that a date of closure is imperative for owners or operators using trust funds and for facilities without approved plans and is promulgating the rule as proposed.

f. *Amendments to closure and post-closure plans* (§§ 264.112(c), 264.118(d), 265.112(c) and 265.118(d)). Sections 264.112(b) and 265.112(b) previously allowed an owner or operator to amend the closure plan at any time during the active life of the facility if there was a change in operating plans or facility design which affected the closure plan or if there was a change in the expected year of closure. The Agency proposed amendments to make this regulation consistent with other proposed regulatory amendments. In addition, the proposed amendments established procedures and deadlines for requesting modifications to closure and post-closure plans.

The definition of active life now includes the closure period. Therefore, the language of the previous regulation would have allowed an owner or operator to request modifications to the closure plans during the operating life of the facility through the closure period. To minimize threats to human health and the environment, the Agency considers it important to avoid undue delays in the completion of closure once activities have begun. Therefore, the Agency proposed §§ 264.112(c) and 265.112(c) allowing an owner or operator to modify the closure plans only *prior* to the notification of partial or final closure, or during closure only if unexpected events occur during the closure period that affect the closure plan (e.g., adverse weather conditions, fire, or more extensive soil contamination than anticipated resulting in the need to close the unit as a disposal unit rather than as a storage unit). Consistent with the proposed amendment to §§ 264.112(b)(7) and 265.112(b)(7), the Agency also proposed that the closure and post-closure plans must be amended if there is a change in the expected year of closure *only* for those facilities required to include an expected year of closure in the plan.

One commenter argued that allowing owners or operators to revise their closure plans during closure only to account for "unexpected events" is too restrictive and would preclude the

owner or operator from changing the plan to reflect optimum closure methods identified after notification of closure. While the Agency wishes to provide flexibility to owners or operators in developing closure plans and implementing closure, it does not want to prolong the closure period unnecessarily once the unit has ceased operating and is prepared to close. Therefore, the Agency believes that changes in the plan that the owner or operator could reasonably have anticipated should be made *prior* to the beginning of closure. For example, owners or operators should have sufficient time prior to the notification of closure to revise the closure plan to reflect optimum closure methods. Therefore, the Agency believes that changes made during the closure period should be limited only to those events that the owner or operator reasonably could not have expected.

Another commenter was concerned that allowing the plan to be modified during closure *only if unexpected events* occur during the closure period could preclude owners or operators of surface impoundments or waste piles required to close as landfills but not otherwise required to have contingent closure plans from amending their plans. The Agency does not agree with this interpretation. The Agency believes that if the owner or operator or Regional Administrator determines *prior* to closure that the unit or facility must be closed as a landfill, this determination would qualify as a change in facility operation or design. Therefore, the owner or operator must amend the closure plan as required by §§ 264.112(c)(2)(i) and 265.112(c)(1)(i) to reflect the fact that the facility is now a disposal facility. If the determination was not foreseen prior to the time of partial or final closure, this determination could be considered an "unexpected" event requiring a modification to the closure plan as specified in §§ 264.112(c)(2)(iii) and 265.112(c)(1)(iii).

To clarify this requirement and avoid potential ambiguities, the final rule specifies in §§ 264.112(c)(3), 264.118(d)(3), 265.112(c)(2), and 265.118(d)(2) that an owner or operator of a surface impoundment or waste pile not otherwise required to prepare a contingent closure or post-closure plan, must revise the closure plan and prepare a post-closure plan following a determination that the unit or facility must be closed as a landfill.

Another commenter stated that modifications to the closure plan during the closure period should be required

only if the unexpected event adversely affects human health and the environment. The Agency disagrees on the grounds that the purpose of the closure plan is to describe the activities that will be conducted at closure in the event that a third party is required to conduct closure and to serve as a basis for cost estimates for financial responsibility. In addition, because the purpose of the closure certification is to ensure that closure has been performed in accordance with the approved closure plan, the plan should be modified to reflect the activities that are performed.

In light of the above considerations, the Agency is promulgating today's final rule as proposed to require that plans be modified *prior* to the notification of closure or approval of the plans, whichever is later, or during closure if unexpected events occur during the closure period that affect the plans.

The Agency also proposed a number of procedural changes to the Parts 264 and 265 regulations for modifying closure and post-closure plans. First, the proposed §§ 264.112(c) and 264.118(e) clarified that an owner or operator of a permitted facility must use the permit modification procedures specified in Parts 124 and 270 to amend the closure or post-closure plans. Second, proposed §§ 265.112(c) and 265.118(g) required owners or operators of interim status facilities with approved plans to submit a request to the Regional Administrator to amend the plan. The proposed rule gave the Regional Administrator the discretion to provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments and/or to hold a public hearing on the amendment to the plan.

Many commenters were concerned with the procedural requirements proposed for modifying the plans. Several argued that the Part 270 permit modification requirements are too cumbersome for minor changes in the plan. Another was concerned that modifications to interim status plans should be subject to public participation and should not be left to the Regional Administrator's discretion.

The Agency agrees with many of the commenters that the minor modification procedures in Part 270 are too limited in scope. As part of a forthcoming rulemaking on permit modifications, the Agency will expand the provisions of § 270.42 to identify the types of plan amendments that would be considered minor modifications.

The Agency also believes that the modification procedures for interim status facilities with approved closure

and post-closure plans should be consistent with those for permitted facilities. Therefore, the final rule specifies in §§ 265.112(c)(3) and 265.118(d)(3) that the criteria of §§ 270.41 and 270.42 must be used to determine if a change to the approved closure plan is a "major" or "minor" change. Major changes to the plans are subject to the public participation procedures of §§ 265.112(d)(4) and 265.118(f); minor changes to the plans are not subject to public participation, which is consistent with the procedures of § 270.42.

Another commenter suggested that the Agency establish deadlines for acting upon written requests to modify closure and post-closure plans, after which time, if no action had been taken, the modification would be automatically approved (the commenter suggested 60 days from the day of request). The Agency agrees that it should act expeditiously in approving or disapproving amendments to the plan. However, the Agency cannot agree that the amendment should be considered automatically approved if the Regional Administrator fails to make a determination within the allotted time frame. As a result, §§ 264.112(c), 265.112(c), 264.118(d), 265.118(d) and 265.118(g) have been revised to adopt deadlines for reviewing requests for modifications but do not provide for automatic approval of modifications when the Regional Administrator fails to meet a deadline. For permitted facilities, the Regional Administrator must comply with the procedures established in Parts 124 and 270; for interim status facilities, the deadlines of §§ 265.112(d)(4) and 265.118(f) will apply.

The proposed amendments to the Parts 264 and 265 regulations also specified deadlines for requesting closure and post-closure plan modifications, to ensure that all requests are made in a timely fashion and that the level of financial assurance is adjusted, as necessary, to reflect any approved changes. The proposed rule stated that an owner or operator of a permitted facility or an interim status facility with an approved closure or post-closure plan must submit a written request to the Regional Administrator for approval of a closure or post-closure plan modification within 60 days prior to the change in facility design or operation that resulted in a change in the plan, or within 60 days after an unexpected event has occurred that requires a change to the plans. If an unexpected event occurs during partial or final closure that will affect the closure plan, a request to modify the

closure plan must be made within 30 days. As discussed above, requirements applicable to amending plans also apply to owners or operators of surface impoundments or waste piles not otherwise required to prepare contingent plans. Consistent with these requirements, §§ 264.112(c)(3) and 265.112(c)(3) now specify that an owner or operator of a surface impoundment or waste pile not otherwise required to prepare contingent plans must submit a revised closure plan to the Regional Administrator for approval no later than 60 days after the determination is made that the unit or facility must be closed as a landfill. If the determination is made during partial or final closure, the revised plan must be submitted no later than 30 days after the determination is made. For interim status facilities without approved closure plans, owners or operators must prepare a revised closure plan and maintain it at the facility and submit it to the Regional Administrator upon request.

Owners or operators of surface impoundments or waste piles not otherwise required to prepare contingent post-closure plans must submit them to the Regional Administrator for approval no later than 90 days after the determination that the unit or facility must be closed as a landfill. Owners or operators of interim status facilities without approved plans are not required to submit the plan.

The final rule also modifies slightly the language in the proposed rule to make explicit that under § 264.112(c)(3) and 264.118(d), the owner or operator must submit a copy of the revised plan with the written request for a permit application. Similarly, for interim status facilities with approved plans, the revised plan must be submitted to the Regional Administrator for approval.

In analyzing the procedures for modifying the closure and post-closure plans, the Agency also considered whether the Regional Administrator should be given the authority to amend the closure or post-closure plan, especially in circumstances where unexpected events require plan modifications. The Agency believes that the Regional Administrator should be granted the authority to request modifications of the plans. Modifications that are considered "major" under the criteria of §§ 270.41 and 270.42 are subject to Parts 124 and 270 requirements for permitted facilities and to the provisions of §§ 265.112 and 265.118 for interim status facilities.

Consistent with deadlines in §§ 264.112(c)(3), 264.118(d)(3), 265.112(c)(3) and 265.118(d)(3), an owner

or operator must submit the modified plan no later than 60 days after the Regional Administrator's request or 30 days if the request is made during partial or final closure. These provisions are included in today's final rule in §§ 264.112(c)(4), 264.118(d)(4), 265.112(c)(4), and 265.118(d)(4).

g. *Notification of partial closure and final closure* (§§ 264.112(d), 265.112(d)). Sections 264.112(c) and 265.112(c) formerly required owners or operators of TSDFs to notify the Regional Administrator at least 180 days prior to the date they expected to begin closure. The following changes were proposed: (1) clarification that the notification requirements apply to partial closures of hazardous waste disposal units and final closure of all TSDFs; (2) modification of some deadlines for notifying the Regional Administrator of partial and final closures, and (3) definition of the "expected date of closure."

The ACCI petitioners were concerned that subjecting partial closures of non-land disposal facilities to notification requirements would disrupt routine business operations. The Agency wishes to encourage partial closures and at the same time ensure that partial closures are conducted in accordance with an approved plan. The Agency believes that for permitted facilities and interim status facilities with approved closure plans, it should be possible at the time of final closure to evaluate whether previous closures of non-disposal units have been in accordance with the approved plan. In the case of interim status facilities that do not have approved closure plans, the owner or operator will still be responsible for ensuring that all partial closure activities of incinerators, tanks, and container storage areas are consistent with the closure performance standard of § 265.111 and any process-specific closure standards.

Moreover, all previous partial closure activities will be subject to review when the plans are subsequently approved. For example, if at the time of final closure the Agency determines that additional soil decontamination is required at units that were previously partially closed, the owner or operator will be responsible for completing this activity. In light of these requirements, the Agency proposed to limit the notification requirement to partial closures of hazardous waste disposal units and final closure of non-disposal units. This provision is consistent with the provisions of § 265.112(e) discussed below. No comments were submitted on

this proposal and the Agency is promulgating the final rule as proposed.

The proposed rule also amended the deadlines for notification of partial closure for disposal units and final closure, in response to the concerns of petitioners in the *ACCI* litigation. The petitioners argued that the 180-day notice period is unreasonable for many types of facilities and unnecessary for the Agency's purposes (i.e., adequate time to schedule facility inspections). The Agency agreed that for facilities with approved closure plans 180 days prior notice of closure may be unnecessary. The Agency therefore proposed § 264.112(d)(1), which would require the owner or operator to notify the Regional Administrator at least 60 days prior to the date he expects to begin closure of a landfill, land treatment, surface impoundment, or waste pile unit, or final closure of a facility with these types of units. An owner or operator must notify the Regional Administrator at least 45 days prior to the date he expects to begin final closure of a facility with only an incinerator, container storage, or tank units remaining to be closed.

For interim status facilities *without* approved closure plans, the Agency proposed a 180-day notification requirement for partial closure of a landfill, land treatment facility, surface impoundment, or waste pile unit, or final closure of a facility with such units to allow sufficient time to review the plans. For interim status land disposal facilities with approved closure plans (i.e., those that received approval of the entire plan prior to a previous partial closure), the Agency proposed to reduce the notification period to 60 days to be consistent with the deadlines applicable to permitted facilities.

The Agency also proposed, consistent with the interim status deadlines in the *ACCI* settlement agreement, that an owner or operator of an interim status facility without an approved closure plan provide at least 45 days notice prior to the date he expects to begin final closure of a facility with only tanks, incinerators, or container storage areas remaining to be closed.

Several commenters objected to the changes in deadlines, arguing that the same deadlines should apply to all TSDFs. Some argued that a 45-day notice period for tanks, container storage areas, and incinerators does not allow sufficient time for public participation, while others contended that 45 or 90 days is adequate notice for all types of facilities.

The Agency considered these comments and is promulgating the deadlines as proposed. The Agency

believes that review of the plans for interim status land disposal units without approved plans is likely to be complex and a 180-day notification requirement is appropriate. Although the Agency recognizes that it may not always be possible to complete the review process for interim status facilities that include only tanks, container storage, and incinerators within 45 days, the provisions of § 265.112(e) allow the owner or operator to remove all hazardous wastes and decontaminate the equipment prior to the completion of the approval process. However, the owner or operator will not be discharged from all obligations or be released from financial responsibility until the closure plan has been approved and a certification of compliance with the approved plan has been submitted.

The third proposed change clarified the definition of the "expected date of closure." The previous regulation stated in a comment to §§ 264.112(c) and 265.112(c) that the expected date of closure should be interpreted as within 30 days of receipt of the "final volume of wastes." The Agency proposed to require explicitly in §§ 264.112(d)(2) and 265.112(d)(2) that an owner or operator notify the Regional Administrator within 30 days after the date on which a hazardous waste management unit received the known final volume of hazardous waste, or, if it is likely that the unit will receive additional hazardous wastes, within one year of receipt of the most recent volume of hazardous waste. To provide flexibility to long-term storage operations, the Agency also proposed to allow an owner or operator of a tank or container storage facility the opportunity to request an extension to the one-year limit if he can demonstrate that he has the capacity to receive additional hazardous wastes and is taking all steps necessary to protect human health and the environment in the interim, including compliance with all applicable permit conditions or interim status requirements.

Several comments were submitted on the proposed requirement. Although an extension to the one-year deadline was proposed for tank and container storage facilities, some commenters felt the requirement still imposed unnecessary burdens on other types of facilities that infrequently handled hazardous wastes (e.g., a storage facility used for hazardous wastes generated as a result of a spill or for off-specification commercial products). Commenters also questioned the need for owners or operators of facilities otherwise in compliance with all applicable regulations to close if hazardous wastes

have not been accepted within a year. One commenter suggested that tank and container storage units be exempt from the requirements rather than be required to request extensions to the deadlines. Another commenter was concerned that the variance provisions may discourage resource recovery by requiring owners or operators to close their facilities if additional capacity is not available at their facility and technologies are not available within the allotted deadlines.

The Agency agrees that if hazardous waste management units have the capacity to receive additional hazardous wastes and are otherwise in compliance with all operating requirements they should not necessarily be required to close if hazardous wastes have not been received within a year.

If the Agency is concerned that a particular unit or facility may pose a threat to human health and the environment, if it remains open, a number of other authorities exist to allow the Agency to force a facility to close. For example, the Agency may call in the Part B of a facility in interim status, and require that the facility close if it does not satisfy permitting criteria. Moreover, a number of land disposal facilities may be required to close in response to HSWA provisions. In addition, because the owner or operator is required to maintain financial assurance for closure until final closure has been certified, funds will be available if the owner or operator fails to cover the costs when he does close the facility. In light of these considerations, the final rule extends the variance provisions to all hazardous waste management units.

The Agency does not believe, however, that facilities should be *exempt* from the deadline requirements. To ensure that the owner or operator does not use the variance provision as a way to prolong unnecessarily the commencement of closure, the Agency is allowing the variance *only* if the facility has additional capacity available and the owner or operator demonstrates compliance with all applicable regulations. In the case of a storage facility filled to capacity but intending to employ resource recovery that is not yet on-line, the Agency would extend the one-year variance on the closure deadlines if the owner or operator could demonstrate that on-site resource recovery capacity would be available to handle these hazardous wastes. If the wastes were intended to be sent to an off-site facility that was not yet in operation, unless the owner or operator could demonstrate that the off-site services would be available within a

year, he would be required to use alternate technologies to handle the hazardous wastes to avoid prolonging the closure period unnecessarily.

h. *Removal of hazardous wastes and decontamination or dismantling of equipment* (§§ 264.112(e) and 265.112(e)). Sections 264.112 and 265.112 previously did not address whether activities such as removing hazardous waste and decontaminating or dismantling equipment could be undertaken prior to closure. The proposed amendment clarified this issue.

Petitioners in the *ACCI* litigation argued that requiring 180-day notification and, in the case of interim status facilities, requiring the completion of all closure plan approval procedures before any hazardous wastes can be removed or facility equipment can be dismantled, unreasonably interferes with routine business operations. In addition, the petitioners argued that postponing the removal of wastes for 180 days or until the approval of the closure plan, whichever is later, might be environmentally unsound.

Consistent with these two concerns, EPA proposed new subsections §§ 264.112(e) and 265.112(e) providing that nothing in §§ 264.112 or 265.112 shall preclude the owner or operator from removing hazardous wastes and decontaminating or dismantling equipment in accordance with the approved closure plan at any time before or after notification of partial or final closure. Because the approved closure plan is part of the permit conditions, all such activities at permitted facilities, regardless of when they are undertaken, must be in accordance with the approved closure plan. In the case of interim status facilities, the activities must be in accordance with the subsequently approved closure plan.

The Agency received several comments in response to this Section. Many petitioners objected to the requirement that the removal of hazardous wastes and dismantling of equipment at interim status facilities be in accordance with the approved closure plan, arguing that it was contrary to the intent of the *ACCI* settlement agreement. They contended that this requirement either forced an owner or operator of an interim status facility to submit the plan for approval prior to these activities, or subjected him to *post hoc* judgments if the subsequently approved plan differed from the activities previously undertaken. Other commenters opposed allowing owners or operators of interim status facilities to remove hazardous wastes or dismantle equipment without prior

approval on the grounds that the provision could be subject to abuse, resulting in potential environmental threats. Others suggested that, at a minimum, the Agency should be notified of such actions so that an inspection can be scheduled.

The Agency does not agree that requiring the removal of hazardous wastes or decontamination of equipment to be in accordance with the approved closure plan is inconsistent with the provisions of the settlement agreement. The Agency agreed with the petitioners in the *ACCI* litigation that, under the previous rules challenged by the petitioners, the owner or operator is not precluded from removing wastes and decontaminating and/or dismantling equipment at any time without providing notice to EPA and, for interim status facilities, prior to submission of a closure plan. Moreover, the Agency agreed with petitioners that it is environmentally sound to remove hazardous wastes as quickly as possible to minimize threats. As a result, the Agency agreed to make this point explicit in the regulations and proposed §§ 264.112(e) and 265.112(e).

The Agency, however, never intended nor agreed that the Agency should be precluded from ensuring that such activities meet the closure standards. The Agency believes that any such activities, like any other hazardous waste management activities, must be in accordance with the regulatory requirements established under RCRA. The Agency does not believe that this requirement will result in an undue burden on owners or operators, even for interim status facilities without approved closure plans. As long as the removal of hazardous wastes and the dismantling or decontamination of equipment conducted prior to the submission of the closure plan are consistent with the closure requirements set forth in the Part 265 regulations, these activities would be approved in the subsequent closure plan and would not render unacceptable activities previously undertaken. Activities would only be rendered unacceptable if they are inconsistent with the closure regulations.

Moreover, the Agency believes that the types of activities that would be included in removing hazardous wastes or dismantling or decontaminating equipment can easily be handled in an environmentally responsible manner that does not give rise to the need for any second-guessing by a regulatory agency. In the infrequent situations where the adequacy of such an activity may be open to serious question, prior Agency review is appropriate and the

facility is encouraged to submit its closure plan for approval prior to the commencement of the activity to ensure that the activity satisfies the closure performance standard. In any event, the choice is left to the owner or operator whether to seek approval prior to conducting the activity or to proceed without Agency review and approval.

The Agency does not agree with those commenters who criticized the provision on the grounds that it may allow owners or operators undue discretion in conducting closure activities prior to notification. The language in §§ 264.112(e) and 265.112(e) explicitly limits the types of activities that can be undertaken prior to notification of the removal of hazardous wastes and decontamination/dismantling of equipment. It thus precludes the possibility that an owner or operator could conduct other types of activities that must be subject to EPA notice (e.g., cover installation).

The Agency considered whether to require explicitly in §§ 264.112(e) and 265.112(e) that documentation be prepared to support activities conducted prior to notification. The Agency decided that such a requirement is not necessary for a number of reasons. First, for hazardous wastes sent off-site, the owner or operator is required under § 262.40 to maintain copies of the manifests accompanying the shipments. Second, for wastes handled on-site, information on how it was managed must be included in the operating record as specified in §§ 264.73 and 265.73. Finally, because an independent registered professional engineer must certify that the entire facility has been closed in accordance with the approved closure plan, the owner or operator will need to provide the engineer with appropriate documentation demonstrating that all previous activities have been performed in accordance with the approved closure plan. Therefore, this section is promulgated as proposed.

i. *Time allowed for closure* (§§ 264.113 and 265.113). Sections 264.113(a) and 265.113(a) previously required the owner or operator to treat, remove from the site, or dispose of all hazardous wastes in accordance with the approved closure plan within 90 days after receiving the final volume of hazardous wastes. The Regional Administrator was authorized to extend the deadline if the owner or operator demonstrated, among other things, that there was a reasonable likelihood that a person other than the owner or operator would recommence operation of the facility, and the owner or operator had taken and would

continue to take all steps necessary to prevent threats to human health and the environment. Sections 264.113(b) and 265.113(b) required the owner or operator to complete closure activities within 180 days after receiving the final volume of wastes unless the Regional Administrator granted a longer period.

Petitioners in the *ACCI* litigation argued that the deadlines imposed by §§ 264.113 and 265.113 might preclude the *original* owner or operator from temporarily suspending operations as a result of fluctuations in the market or economic conditions. The Agency agreed with these concerns and proposed to amend §§ 264.113(a)(1)(ii)(B), 265.113(a)(1)(ii)(B), 264.113(b)(1)(ii)(B), and 265.113(b)(1)(ii)(B) to allow an owner or operator two one-year extensions to the deadlines for removing hazardous wastes and completing closure. These extensions may be granted if the owner or operator can demonstrate that the partial or final closure will take longer than 90 days (for removal of hazardous wastes) or 180 days (to complete closure) *or*: (1) the facility has the capacity to receive additional hazardous wastes; (2) there is a reasonable likelihood that the owner or operator or another person will recommence operation of the facility; (3) closure would be incompatible with continued operation of the facility; and (4) the necessary steps have been and will be taken to ensure protection of human health and the environment, including compliance with all applicable permit conditions or interim status requirements.

The proposed rule specified that requests for extensions must be made at least 30 days prior to the expiration of the 90-day period established in §§ 264.113(a) and 265.113(a) and the 180-day period established in §§ 264.113(b) and 265.113(b), or within 90 days of the effective date of the regulation, whichever is later. In addition, for interim status facilities the proposed rule stated that extensions must be granted in accordance with the procedures of § 265.112(d).

One commenter correctly noted that the proposed rule was inconsistent with the terms of the *ACCI* settlement. First, in § 265.113(a), the proposal inadvertently omitted the language in the agreement which specified that the 90-day period would be triggered by the approval of the closure plan, if that is later than the final receipt of hazardous wastes. Second, the 180-day period for completing closure was inadvertently shortened to 90 days in § 265.113(b). Third, requiring owners or operators to

follow the elaborate procedures in § 265.112(d) to extend the time for completion of interim status closure activities would be burdensome and contrary to the parties' intent. Fourth, the settlement did not specify the maximum length of the time extension; the proposed rule included a maximum time period of 2½ years for the completion of closure. (A number of commenters also contended that, to avoid imposing unnecessary burdens on owners or operators, no deadlines should be specified.)

The Agency is making a number of changes from the proposal that will result in a final rule that is consistent with the *ACCI* settlement language. First, the final rule includes the language inadvertently omitted from the proposed rule. The specified 90-day period in § 265.113(a) will begin only after the approval of the closure plan, if that is later than the final receipt of hazardous waste. This will ensure that a reasonable compliance period is provided after the closure requirements are fixed in an approved plan. Second, § 265.113(b) retains the previous period of 180 days to complete closure.

The Agency also agrees with some commenters that including the phrase "using the procedures of § 265.112(d)" in § 265.113 (a) and (b) would have required overly elaborate procedures for what is essentially a minor change to the closure activities. Under the provisions of § 270.42, an extension to the closure period is considered a minor modification for permitted facilities. EPA believes the requirements for interim status facilities should be consistent with the Part 264 standards. As a result, an extension of the closure period for interim status facilities is not subject to the detailed procedures of § 265.112(d).

The Agency also agrees that limiting the length of the closure period to a maximum of 2½ years may be inconsistent with the settlement provisions. Moreover, if the unit or facility has additional capacity to receive additional hazardous wastes and the owner or operator is in compliance with all applicable operating requirements, an owner or operator should not be restricted to the 2½ years for completing closure. Consistent with the discussion above for allowing variances to the expected date of closure for all types of hazardous waste management units, the Agency has a number of authorities already available to ensure that a unit or facility does not pose a threat to human health and the environment. Therefore, the final rule states that the Regional Administrator

may approve an extension to the 90- or 180-day periods subject to the conditions of §§ 264.113 and 265.113.

The Agency received a number of other comments applicable to schedules for closing the facility. One commenter noted that a request to extend the closure period should be an option in the permit application. This option, however, is already available to the owner or operator under § 270.32.

Another commenter expressed concern that the requirement to request an extension to the closure period within 90 days of the effective date of the final rule would not provide adequate time to make the required demonstration. In general, the Agency believes that owners and operators should be able to anticipate the likelihood that an extension will be necessary. Moreover, the effective date of today's promulgation is six months from today which should provide more than adequate notice to owners or operators. Because the effective date is six months after promulgation, the final rule drops the provision allowing the owner or operator to request an extension within 90 days of the effective date of the regulation if that is later than the deadlines for removing all hazardous wastes upon completing closure.

In the March 19, 1985 proposed rule, the Agency also proposed to require that closure be completed within 180 days after the final receipt of hazardous wastes rather than after the final receipt of wastes. The change makes §§ 264.113(b) and 265.113(b) consistent with §§ 264.113(a) and 265.113(a). Paragraph (a) requires that owners or operators treat, remove from the site, or dispose of on-site, all hazardous wastes in accordance with the approved closure plan within 90 days after receiving the final volume of hazardous wastes. Paragraph (b) requires that the owner or operator complete those activities within 180 days of receiving the final volume of wastes. The Agency was concerned that owners or operators might misinterpret paragraph (b) and delay compliance with the closure performance standards by ceasing to handle hazardous wastes but continuing to manage non-hazardous wastes. The change to §§ 264.113(b) and 265.113(b) is also consistent with the language in §§ 264.112(d)(2) and 265.112(d)(2). These latter sections explain that the date, when the owner or operator expects to begin closure, is no later than 30 days after the date on which a hazardous waste management unit receives the final volume of hazardous wastes (or under certain circumstances, one year

after receipt of the most recent volume of hazardous wastes). It is only logical that if the expected date to begin closure is after the receipt of the final volume of hazardous wastes, the date to complete closure would also be after the final receipt of hazardous waste.

One commenter challenged this proposed change, contending that this is inconsistent with the Congressional intent evidenced in the HSWA legislative history regarding closure of surface impoundments. The Agency disagrees with the commenter's reading of HSWA and its legislative history. HSWA contains no provisions addressing the question of whether disposal surface impoundments that cease to accept hazardous waste should be required to close or allowed to stay open to receive non-hazardous waste. HSWA merely addresses retrofitting requirements for surface impoundments by adding Section 3005(j) of RCRA, which requires interim status surface impoundments that receive, store or treat hazardous waste after November 1, 1988 to retrofit to install double liners and leachate collection systems. The legislative history contains a brief discussion that indicates that this provision does not require the closure of an impoundment that ceases to receive hazardous waste but continues to receive non-hazardous wastes, and that requiring such closure would not be proper if the management of the impoundment is protective of human health and the environment.

The legislative history of Section 3005(j) of RCRA merely evidences the fact that Section 3005(j) itself does not mandate closure of interim status surface impoundments that cease to receive hazardous waste. It leaves unimpaired EPA's pre-existing authority to establish by regulation appropriate closure requirements for interim status surface impoundments as necessary to protect human health and the environment. EPA's analysis, set forth below, concludes that the expeditious closure of hazardous waste disposal surface impoundments after they are no longer receiving hazardous waste for disposal would significantly improve protection of human health and the environment. Requiring such closure is thus consistent with Section 3005(j) of RCRA and its legislative history.

The hazardous waste regulations incorporate a two-part "prevention and care" system whose overall goal is to minimize the formation and migration of leachate to the adjacent subsurface soil, ground water, or surface water. The regulatory goal of minimizing the formation and migration of leachate is

achieved through the design and operating standards that require (1) the use of a liner that is designed and installed to prevent any migration of waste out of the unit to the adjacent subsurface soil or ground water or surface water throughout the active life of the unit; (2) the installation of leachate collection and removal systems and run-on controls for waste piles and landfills, and the removal or solidification of hazardous wastes and hazardous waste residues at closure for surface impoundments; and (3) the placement of a final cover (cap) placed on top to minimize the percolation of liquids into the unit. EPA is relying principally on the final cover (cap) rather than the bottom liner to provide post-closure protection of ground water.

While the regulations contain provisions for waivers from the liner and leachate collection and removal requirements, no such waivers were allowed for the closure provisions. In addition to providing ground-water protection, the final cover also: (a) Prevents the "bathtub" effect (i.e., filling with leachate and over-flowing); (b) protects surface water from run-off; and (c) discourages direct access to the hazardous waste.

EPA guidance calls for placing final covers at closure or for landfills, preferably, as filling of the cell ends. The purpose of the cover is to minimize infiltration of rain water and the subsequent formation and migration of leachate from the unit. Because liners are intended to perform during the active life of the unit and are not expected to provide long term protection, final covers play a particularly important role in long-term protection of human health and the environment. In addition, many older units are not lined, so early placement of the final cover may be the only way to reduce leachate generation from the unit.

While some units may have liners and leachate collection systems, the expected life of these systems is limited, leachate collection systems can become clogged, and all liners will eventually leak. Therefore, the cap is critical for the long term control of the unit. In addition, while new surface impoundments are required to have leak detection systems; most existing units do not and, therefore, it is often not known whether the unit is leaking until it is detected by ground-water monitoring. Therefore, the cap should be applied to these as soon as possible to minimize infiltration.

In light of these considerations, the final rule retains the proposed requirements to require that closure be

completed within 180 days of the final receipt of hazardous waste.

In the proposed rule, the Agency requested comments on the desirability of defining a "reasonable likelihood" for purposes of §§ 264.113 (a) and (b) and 265.113 (a) and (b). One commenter was concerned that the proposed language allowed too much discretion on the part of the permitting agency and the permittee, and that a more objective standard, such as a purchase agreement, should be applied. Another commenter stated that the Agency should wait to develop the "reasonable likelihood" standard until it has accumulated experience with the provision. In the absence of additional information, the Agency is not establishing standards for determining what constitutes a "reasonable likelihood."

j. Disposal or decontamination of equipment, structures, and soils (§§ 264.114 and 265.114). Sections 264.114 and 265.114 previously required owners and operators to dispose of or decontaminate all facility equipment and structures. The proposed rule required owners or operators to remove all contaminated soils as part of partial and final closure, as needed.

The comments made concerning these proposed changes were similar to those made on §§ 264.112(b) and 265.112(b). One commenter was concerned that the requirements could be interpreted to require that if it was not possible to remove all contaminated soil from a tank facility, the tank would have to be demolished and the facility converted into a landfill. The Agency believes that at most tank facilities it should be possible to remove all the contamination. In those cases where soil contamination is so extensive as to preclude its removal, stringent closure requirements would indeed be appropriate. HSWA clearly contemplates that contamination remaining at closure must be corrected in a manner that protects human health and the environment (e.g., Section 206 of HSWA, 3004(u) of RCRA). Therefore, the Agency is promulgating §§ 264.114 and 265.114 substantially as proposed. The final rule also clarifies that if the owner or operator removes any hazardous wastes or hazardous constituents during partial or final closure, he may become a generator subject to additional regulations.

k. Certification of closure (§§ 264.115 and 265.115). Sections 264.115 and 265.115 previously provided that when closure is completed, an owner or operator must submit certifications from himself and from an independent registered professional engineer that the

facility has been closed in accordance with the specifications in the approved closure plan. Petitioners in the *ACCI* litigation challenged the need for an independent engineer on the grounds that an in-house engineer would be in the best position to observe closure activities. As agreed to in the *ACCI* settlement, the Agency proposed to drop the requirement that the registered professional engineer be independent.

Some commenters supported the proposal to drop the "independent" requirement while others favored retaining the existing rule. The Agency has reconsidered the issue and is dropping the proposed rule to allow an in-house registered professional engineer to certify closure. Because certification of final closure is the final step in the closure process and triggers the release of the owner or operator from financial responsibility requirements for closure and the third-party liability coverage requirements of §§ 264.147 and 265.147, the Agency believes that the certification should be made by a person who is least subject to conscious or subconscious pressures to certify to the adequacy of a closure that in fact is not in accordance with the approved closure plan. The Agency's position in this regard is consistent with other types of certification programs which require certifications to be made by independent parties. For example, the Securities and Exchange Commission requires that all publicly-traded companies provide independent audits of financial information. Similarly, grants issued under the Clean Water Act must be accompanied by independent audits.

The Agency also proposed a requirement that owners and operators certify partial closures for the closure of each hazardous waste surface impoundment, waste pile, land treatment, and landfill unit; certification of incinerators, tanks, and container storage units could be submitted any time prior to, or at final closure. Deadlines were also proposed for submitting certifications—45 days after the completion of each partial closure, if applicable, and 30 days after final closure. Documentation supporting the certification must be furnished to the Regional Administrator upon request.

The Agency received several comments on the proposed rule to certify, as they are performed, partial closures of all units except tanks, incinerators, and container storage. Most commenters agreed that partial closures should be certified. Some supported the proposal that certification of tanks, containers, and incinerators

should not be required until final closure on the grounds that this is consistent with the provisions of §§ 264.112(e) and 265.112(e), which allows an owner or operator to remove wastes or decontaminate equipment without prior notification. Moreover, unlike land disposal units, it should be easy to certify these types of units at final closure. Others, however, argued that all partial closures must be certified as soon as they are performed to ensure protection of human health and the environment. The Agency does not consider it necessary to certify these types of units as they are closed and, consistent with the provisions of §§ 264.112(d) and (e) and 265.112(d) and (e), the final rule does not require certification of tanks, container storage, and incinerators until final closure.

A number of commenters disagreed with the proposed deadlines for submitting certifications, arguing that no distinctions should be made between partial and final closure, and that 45 days may be too short. The Agency agrees and is amending the final rule to require certifications for partial and final closures to be submitted within 60 days of the completion of partial or final closure, as applicable.

One commenter also was concerned about the lack of a deadline for maintaining documentation supporting the independent registered professional engineer's certification. The Agency agrees and is requiring that documentation be furnished upon request to the Regional Administrator until the owner or operator is released from financial assurance requirements under §§ 264.143(i) and 265.143(h).

In the proposed rule, the Agency requested comments on three issues relating to closure certification: (1) should the regulations specify the qualifications of engineers who may certify closure; (2) what types of supporting documentation should be required for certification and should they be submitted to the Agency; and (3) should the Regional Administrator formally approve the certification.

A number of comments were submitted on these issues. Most commenters opposed specifying the type of engineer that would be qualified to certify closure, although one commenter suggested that the language in the certification should state explicitly that the engineer has the appropriate qualifications to certify closure. The Agency generally agrees with these commenters and is not specifying qualifications for engineers.

In response to the Agency's request for comments on the appropriateness of

requiring that supporting documentation be submitted with the closure certification, one commenter argued that the submission of documentation was unnecessary, while another was concerned that unless the documentation was submitted, it would not be available for public review.

The Agency recognizes the concern of the commenter for ensuring that the documentation be readily available to the public for review. However, rather than requiring that all documentation be submitted, the Regional Administrator may request submission of the documentation if there is a request from the public for review or if the Regional Administrator determines that there is a need for the Agency to review it. Therefore, all interested parties will have access to documentation upon request. In addition, the Regional Administrator may request that documentation be submitted at any other time under the provisions of §§ 264.74 and 265.74.

The Agency received one comment supporting Agency approval of the certification. The Agency has considered this issue further and, in light of the burdens and costs associated with developing criteria and procedures for formally approving the certification, the Agency is not promulgating such procedures at this time. However, the Regional Administrator has the discretion under the authority of §§ 264.143(i) and 265.143(h) not to release the owner or operator from financial responsibility requirements if he has reason to believe that partial or final closure has not been in accordance with the approved closure plan.

1. *Survey plat* (§§ 264.116 and 265.116). Sections 264.119 and 265.119 required the owner or operator of a disposal facility to submit to the local zoning authority, or the authority with jurisdiction over local land use, within 90 days after closure is completed, a survey plat indicating the location and dimensions of landfill cells or other disposal areas with respect to permanently surveyed benchmarks. Because the survey plat must note the location and dimensions of each disposal area, it must be prepared prior to the completion of closure of that unit. Therefore, the Agency proposed to require that the survey plat be submitted to the appropriate local land use authority no later than the certification of closure of each hazardous waste disposal unit. The Agency also added a requirement that the plat must be prepared and certified by a professional land surveyor, to ensure that the surveyor is licensed by a State and can

be held legally responsible for the survey work.

One commenter questioned the applicability of the survey plat requirement to injection wells. Another challenged the need to submit a plat after each partial closure, arguing that as long as the plat is submitted prior to final closure, adequate protection will be provided. Another commenter was concerned that the deadline for filing the plat was inadequate.

The Agency agrees that the survey plat requirement is not applicable to injection wells. Injection wells are not subject to the requirements of Subparts G and H and therefore are not required to comply with the survey plat provisions (see §§ 264.1(d) and 265.430(a)).

The Agency disagrees with the argument that the plat need not be filed until final closure. First, the Agency is concerned that the local land authority should have information on closed units in a timely fashion in the event that a closed portion of a facility is sold prior to final closure. Second, since the plat must be prepared prior to the completion of the partial closure, the Agency does not consider it burdensome to require it to be submitted at that time. Therefore, the Agency is promulgating §§ 264.116 and 265.116 to require that the survey plat be filed after closure of each hazardous waste disposal unit.

The Agency agrees that the proposed 45-day deadline may not always be adequate. The proposed regulation used the certification date as the deadline for submission of the survey plat. Since the certification date has been extended from 45 days to 60 days, the deadline for filing the survey plat is now within 60 days after completion of partial or final closure. No changes were required to the proposed language of §§ 264.116 and 265.116.

m. Post-closure care and use of property (§§ 264.117 and 265.117). Sections 264.117(a) and 265.117(a) previously required post-closure care to continue for 30 years after the date of completing closure. In addition, the regulation allowed requests to reduce or extend the period based on cause to be submitted during the post-closure care period. The previous regulations did not specify whether the period began with closure of a single unit or of the entire facility. Because of the importance of beginning post-closure monitoring and maintenance activities as soon as a hazardous waste management unit has been closed, the Agency proposed to require that the post-closure care period for each hazardous waste management unit subject to post-closure care

requirements begin after the closure of each unit.

In determining when the 30-year post-closure care period should begin, the Agency proposed that the 30-year care period apply to each unit (i.e., partial closure) rather than to the entire facility to reduce the burden on an owner or operator who partially closes units prior to closure. The Regional Administrator, however, still retained the authority under the proposed §§ 264.117 and 265.117 to extend the length of the post-closure care period as necessary to protect human health and the environment. Moreover, if the Regional Administrator extended the post-closure care period for any unit during the active life of the facility (i.e., prior to receipt of certification of final closure), the post-closure cost estimate and level of financial assurance must also be adjusted.

The Agency did not receive many comments on the proposal to trigger the beginning of the 30-year post-closure care period with partial closure. Two commenters were concerned that it would be difficult to correlate monitoring results with specific units and, as a result, the 30-year period should be triggered at final closure of the facility. The Agency agrees that at some facilities it may be difficult or impossible to differentiate monitoring results for different units. Therefore, unless the owner or operator can demonstrate that separate monitoring systems are established for each unit, the Regional Administrator may decide to extend the post-closure period for that unit to be consistent with the post-closure care period for the remainder of the units. In developing the final rule, the Agency reconsidered the provisions for requesting reductions or extensions of the post-closure period. Although the Agency believes that in many cases, sufficient data may not be available prior to the beginning of the post-closure care period to support a petition to reduce or extend the period, the Agency does not wish to impose unnecessary requirements. Therefore, §§ 264.117(a)(2), 265.117(a)(2) and 264.118(g) of the final rule allow the Regional Administrator to reduce or extend the post-closure care period based on cause at any time.

n. Post-closure plans (§§ 264.118, and 265.118). Sections 264.118(a) and 265.118(a) required owners or operators of hazardous waste disposal facilities to have post-closure plans. In addition, under §§ 264.228(c) and 264.258(c), storage and treatment surface impoundments and waste piles that do not meet the liner design standards are required to prepare contingent closure

and post-closure plans in the event that they are closed as landfill facilities.

Because the Agency was concerned that interim status impoundments and waste piles and permitted impoundments and waste piles that meet the design standard may still be required to close as landfills, the Agency proposed in §§ 264.118(b) and 265.118(a) that *these* facilities must prepare post-closure plans if they become subject to post-closure care.

One commenter noted that for interim status surface impoundments and waste piles that do not meet the liner design standard, owners or operators should be able to anticipate prior to the time of closure that they will be unable to remove all contaminated soils, and will be required to close their facilities as landfills. Under the proposed rule, such owners or operators would not be required to prepare revised closure plans or post-closure plans until the time of closure, thus delaying the closure process. This commenter suggested that the regulations require owners and operators of interim status surface impoundments and waste piles that do not meet the design standard of §§ 264.228 and 264.258 to prepare contingent closure and post-closure plans. This would be consistent with the requirements of §§ 264.228 and 264.258 applicable to permitted facilities.

The Agency agrees that it may not be possible to remove *all* contamination at interim status surface impoundments and waste piles not designed in accordance with the liner design standards of §§ 264.228 or 264.258. Requiring that such facilities revise closure plans and prepare post-closure plans would ensure that the owners or operators have adequately planned for closure of the facility as a landfill.

However, owners and operators of interim status facilities with surface impoundments or waste piles were required to make certain certifications and submissions as specified in Section 213 of the Hazardous and Solid Waste Amendments (HSWA, the "Loss of Interim Status" provision), or the facility's interim status would be terminated. Approximately two-thirds of such facilities failed to meet those requirements, and thus had their interim status terminated. Consequently, those owners and operators were required to submit their closure plans by November 23, 1985 and begin closure. The Agency expects that most of the remaining third of these land-based facilities will continue to operate and become subject to the Part 264 standards through the permitting process.

Today's final rule specifies in §§ 265.118(a) and 264.118(a) that an owner or operator of an interim status facility with a surface impoundment or waste pile or a permitted facility with a surface impoundment or waste pile which is *not* required to prepare a contingent plan must submit a post-closure plan to the Regional Administrator for approval within 90 days of the determination that the unit must be closed as a landfill. This is consistent with the proposed rule. In addition, these facilities must submit revised closure plans in accordance with the requirements of §§ 264.112(c) and 265.112(c).

The Agency is also now clarifying in §§ 264.118(a) and 265.118(d) that owners or operators of permitted facilities must comply with all Parts 124 and 270 procedures applicable to modifying the conditions of their permit. Owners or operators of interim status facilities must submit their post-closure plans in accordance with the provisions of § 265.118(d).

The Agency also has clarified in the final rule in §§ 264.118(b) and 265.118(c) that the post-closure plan must explicitly address the post-closure care activities and the frequency of these activities applicable to each disposal unit.

c. Post-closure notices (§§ 264.119 and 265.119). Sections 264.119 and 265.119 previously required the owner or operator of a facility subject to post-closure care to submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Regional Administrator a record of the wastes disposed of within each cell or area of a land disposal facility within 90 days after final closure. Sections 264.120 and 265.120 required that a notation be filed on the deed to the property indicating its use as a disposal facility and indicating that the plat and record of wastes had been filed with the appropriate local land use authority.

The Agency proposed to (1) extend the requirements to partial closure activities; and (2) require owners or operators to request permission from the Regional Administrator if they wish to remove hazardous wastes during the post-closure care period and to remove the notice from the deed.

The Agency considers the deed notation to be an important means of ensuring that prospective and subsequent owners of the property are informed of the presence of hazardous wastes, the existence of federal restrictions on land use, and the availability of the survey plat and waste record from the local land use authority. Therefore, the Agency proposed to require that no later than 60 days after

the certification of closure of each hazardous waste disposal unit, the owner or operator record the notation on the deed and submit to the Regional Administrator both the certification stating that the notation has been recorded and a copy of the recorded document. Consistent with this requirement, the Agency proposed that the record of waste also be filed with the local land authority and the Regional Administrator within 60 days after closure of each hazardous waste disposal unit.

A number of comments were received on the deadlines for submitting the record of waste to the local land authority and for filing the notices in the deed. Suggestions included: submitting notices and the record of wastes to the local land authority at final closure only; filing the notice in the deed after the first partial closure and verifying its accuracy at final closure; and filing a notice in the deed prior to transfer of ownership. One commenter expressed concern, that, in many jurisdictions, filing a notice in the deed after each partial closure may be especially burdensome because of the need to transact a dummy "sale" as a condition of filing a deed notation.

The Agency disagrees that submitting the record of hazardous waste to the local land authority and Regional Administrator within 60 days after each partial closure of a hazardous waste disposal unit would be burdensome. Under §§ 264.73 and 265.73, an owner or operator must record, as it becomes available, and maintain in the facility operating record information on the types and quantities of hazardous wastes handled at the facility and the location of hazardous waste within each disposal area. Therefore, the owner or operator would simply be required to submit a copy of readily available records to the local land authority and the Regional Administrator. In light of these considerations, the final rule retains the requirement that within 60 days after the certification of closure of each hazardous waste disposal unit the owner or operator must submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Regional Administrator, a record of the type, location, and quantity of hazardous wastes disposed of within that disposal cell or unit.

The Agency agrees with those commenters who argued that filing a notice in the deed after closure of each hazardous waste disposal unit could impose significant burdens, especially if "dummy" sales were required, and would not be necessary to ensure that future purchasers of the land were

aware of the land's prior uses. Filing a notice after the first partial closure of a hazardous waste disposal unit and verification of the accuracy of the notice after closure of the last disposal unit should adequately alert all future owners of the land's prior use. Therefore §§ 264.119(b) and 265.119(b) are revised to require that the notice in the deed, as well as the certification to Regional Administrator that the notice has been filed, be filed within 60 days after certification of closure of the first hazardous waste disposal unit. Sixty days after closure of the last disposal unit, the deed and notice to the local land authority must be amended, as necessary. It should be noted that these post-closure notice requirements do not affect the partial closure certification requirements of §§ 264.115 and 265.115; all partial closures of hazardous waste disposal units must be certified as they are performed.

Section 264.120(b) previously provided that if the owner or operator of a hazardous waste facility subsequently removed all hazardous wastes and waste residues, the liner (if any), and all contaminated underlying and surrounding soils, he could either remove the deed notation required by § 264.120(a), or add a notation indicating that the hazardous wastes have been removed. No similar provisions were allowed for interim status facilities.

The Agency proposed in § 264.119(c) that an owner or operator of a permitted facility must request a modification to the post-closure permit in accordance with Part 270 requirements prior to removing hazardous wastes. For interim status facilities, the proposed language of § 265.119(c), specified that if an owner or operator wishes to remove hazardous wastes, he must request the approval of the Regional Administrator prior to the removal of the hazardous wastes to amend the approved post-closure plan. In addition, the owner or operator must demonstrate compliance with the criteria in §§ 264.117(c) and 265.117(c) for post-closure use of property. Moreover, because the owner or operator would be conducting hazardous waste management activities, he must comply with all applicable generator requirements and with all post-closure permit conditions, if applicable.

One commenter suggested that a subsequent owner or operator who wishes to remove hazardous wastes should notify the previous owner or operator as well as the generators of the wastes in order to alert them of activities of the facility which could subsequently result in future Superfund

liabilities. The Agency has refrained from adopting this approach because it is not relevant to the standards in Section 3004 of RCRA of protecting human health and the environment.

Finally, the proposed rule required the owner or operator to seek Regional Administrator approval before deleting the deed notation or placing a new notation in the deed regarding removal of the wastes. One commenter argued that this requirement could delay future sales of TSDFs. Because the Agency wishes to ensure that all hazardous wastes have been adequately removed prior to removal of the notice to the deed, the Agency is promulgating the rule as proposed.

In the preamble to the proposed rule, the Agency requested comments on notifying parties with rights-of-way on property used to dispose of hazardous wastes of its prior use. One commenter suggested that TSDF owners or operators should be responsible for notifying such parties, including parties with subsurface rights. While the Agency agrees that it is important to ensure that all interested parties are aware of the prior uses of land used to dispose of hazardous wastes, it does not want to impose unnecessary burdens on owners or operators. The Agency therefore investigated whether state laws currently require notice to the holders of rights-of-way, easements, or subsurface rights of changes to the land by the owner that could affect their interests or safety.

It appears that in most States there is no duty to inform, but there is a duty not to take actions that render the exercise of the right unreasonable or burdensome. Private rules of property and tort, however, will vary concerning notice. In addition, it is likely that the facility will be subject to security measures as specified by §§ 264.117(b) and §§ 265.117(b) and that these security measures will provide notice to parties who have rights-of-way on land used to dispose of hazardous wastes or subsurface rights on the land. Therefore, the Agency is continuing to analyze options for ensuring that all parties are provided adequate notice of hazardous waste disposal activities. This does not, however, relieve the owner or operator of potential liabilities with respect to such parties.

p. *Certification of completion of post-closure care (§§ 264.120 and 265.120).* The previous regulations did not require that the owner or operator certify that post-closure care activities have been conducted in accordance with the approved post-closure plan. Because of the importance of ensuring that post-closure care has been conducted

properly prior to releasing the owner or operator from these obligations (including post-closure care financial responsibility), the Agency proposed that an owner or operator submit to the Regional Administrator within 30 days after completing the established post-closure care period for each disposal unit, a certification signed by him stating that all post-closure care activities have been conducted in accordance with the approved post-closure plan. The Agency also requested comments on the desirability of requiring post-closure certifications on an annual or periodic basis (e.g., every five years) rather than only at the end of the 30-year post-closure care period.

Some commenters questioned the need for any post-closure care certification, arguing that the information provided would duplicate data already available to the Agency (e.g., monitoring results Agency inspection reports). Most of the commenters focused on the appropriate frequency of these certifications. Suggestions included: once at the end of the post-closure care period associated with each unit; every five years; and annually. One commenter requested that an extension to the 30-day period for submitting certifications be provided. Finally, it was suggested that the certification be performed by an independent registered professional engineer consistent with the closure certification.

The Agency remains convinced that certification of post-closure care is necessary both to ensure that the post-closure care activities are conducted in accordance with the approved plan, and to trigger the release of the owner or operator from financial assurance obligations under §§ 264.145(i) and 265.145(h). The Agency agrees with some commenters that annual or periodic certifications may not be necessary and thus is requiring that the certification be submitted at the end of the post-closure care period of each unit. The Agency is also extending the deadline for submitting the certification to 60 days after the completion of the established post-closure care period for each unit. In developing the final rule, the Agency made two other changes to the proposed rule. First, the Agency added a requirement that the certification be submitted by registered mail, to ensure that a dated record of the submission is available. This requirement is consistent with the closure certification which must be submitted by registered mail. Second, the Agency is convinced that an independent registered professional engineer should also certify the

completion of the post-closure care period. This requirement would parallel the closure certification requirement in §§ 264.115 and 265.115. Therefore, §§ 264.120 and 265.120 require that an owner or operator submit a certification prepared by himself and an independent professional engineer stating that the post-closure care activities have been conducted in accordance with the approved post-closure plan.

2. Financial Assurance Requirements (Subpart H)

a. *Cost estimates for closure and post-closure care (§§ 264.142(a), 264.144(a), 265.142(a) and 265.144(a)).* The previous provisions in §§ 264.142(a), 264.144(a), 265.142(a) and 265.144(a) required owners or operators to prepare written estimates of the costs of closure and post-closure care. The previous regulations did not specify the level of detail and did not indicate whether cost estimates should be based on the cost to the owner or operator of supplying his own labor and equipment (first-party costs) or the cost of hiring contractor labor and renting equipment (third-party costs). The previous regulations also did not address whether credit for salvage value from hazardous waste equipment and the like would be credited toward the cost estimate.

In developing the final rules, the Agency has been made aware of confusion over the level of detail required in the cost estimates. The previous regulations stated that the owner or operator must prepare a written cost estimate but did not specify the level of detail. As a result, some have argued that a bottom line estimate should be sufficient. Because the cost estimates are based directly upon the closure and post-closure plans and serve as the basis for financial assurance, the cost estimates must contain sufficient detail to allow them to be evaluated. The Agency expects the detailed cost estimates to support the detailed activities described in the closure and post-closure plans. The Agency is today amending §§ 264.142(a), 265.142(a), 264.144(a), and 265.144(a) to clarify that a detailed cost estimate is required.

In the March 19, 1985 proposed rule, the Agency specified that closure and post-closure cost estimates be based on the costs to the owner or operator of hiring a third party to perform closure or post-closure care activities. The Agency reasoned that use of third-party costs would ensure that if an owner or operator failed to conduct closure or post-closure care, adequate funds would be available to hire a third party to do so. The Agency also proposed to specify explicitly that salvage value may not be

incorporated into the closure cost estimate.

A number of commenters supported the Agency's proposal to require third-party costs. Other commenters opposed the proposed change on three separate grounds: use of third-party costs will increase the cost estimates considerably; cost estimates generated by a third party will not be as accurate as estimates prepared by the owner or operator; and third-party costs will be difficult to generate due to the limited number of contractors available. It also was argued that parties using the financial test should not be required to use third-party costs.

The Agency firmly believes that the cost estimates must be based on third-party costs to ensure that adequate funds are available to cover the costs of closure and post-closure care in the event that the owner or operator fails to cover the costs. The Agency recognizes, however, that in some cases, using third-party costs could increase the size of the estimate. This is especially likely with respect to the costs of on-site vs. off-site disposal of hazardous wastes. Because the objective is to ensure that sufficient funds are available to cover the costs of closure if the owner or operator fails to do so, the Agency will allow the cost estimate to incorporate the costs of on-site disposal of hazardous wastes by a third party if the owner or operator can demonstrate that on-site capacity will always be available over the life of the facility. This will minimize the additional costs of a third-party requirement. Aside from these on-site vs. off-site disposal costs, basing the cost estimate on first or third-party costs will not make much difference for land disposal units. The cost estimates will be similar because many of the activities required for closure will be done by a third party whether or not the cost estimate is first or third-party based. For example, firms may not have the expertise to place a final cover on a landfill themselves or they may not wish to do so because the company selling the materials for the cover normally will not guarantee its impermeability unless it (or its authorized representative) installs it. Certification costs will also be similar whether the cost estimate is based on first or third-party costs as EPA requires that an independent registered professional engineer must certify closure.

The Agency does not agree with commenters who argued that contractor estimates will not be as accurate as estimates made by the owner or operator or that it will be difficult to develop third-party cost estimates

because of a lack of contractors. The proposed rule did not require that the cost estimate be prepared by a contractor, but rather required that the cost estimate incorporate the costs incurred if a contractor performed the work. Therefore, the owner or operator may develop the cost estimate using costs estimating manuals or personal experience (e.g., prices charged for off-site management of hazardous wastes). Furthermore, the Agency has found, in developing cost estimates for closure and post-closure care, that standard cost estimating manuals as well as information from contractors are readily available to develop third-party estimates. The Agency believes, therefore, that cost estimates based on third-party costs will be *more* accurate as general information exists on contractor costs which does not exist for first-party costs.

The Agency also remains convinced that eligibility to use the financial test as demonstration of financial assurance should be based on third-party costs. First, the third-party cost estimates are likely to be more accurate than those based on first-party costs. Second, the financial test is intended to ensure that an owner or operator who passes the test has the financial capability to establish one of the alternative forms of assurance should he later fail the test. The criteria of the test that are dependent on the size of the cost estimates are intended to provide an adequate margin of safety so that the alternative mechanisms can be established before any potential insolvency occurs. Because the other forms of financial assurance will be based on third-party costs, the multiples must also be based on third-party costs.

In light of these considerations, the Agency is promulgating a third-party cost estimate requirement in today's final rule. The final rule specifies explicitly that the cost estimate may incorporate the costs of on-site disposal of hazardous wastes by a third party if the owner or operator can demonstrate that capacity will always be available over the life of the facility.

The final rule adds a definition of a third party to Subpart H. For purposes of Subpart H, §§ 264.142(a)(2), 264.144(a)(1), 265.142(a)(2) and 265.144(a)(1) state that a third party is a party who is neither a parent nor a subsidiary of the owner or operator.

On the issue of salvage value, the Agency proposed to disallow salvage value as a credit when calculating cost estimates on the grounds that the Agency cannot be assured that the hazardous wastes will be saleable or

that a third party will take them at no charge at closure. One commenter supported the proposal while one argued that salvage value should be allowed if brokers or dealers for used equipment can be identified. The Agency still is convinced that allowing salvage value to be credited towards the cost estimate is inconsistent with the goal of ensuring that adequate funds are available in the event that the owner or operator fails to cover the costs. As a result, in the final rule, §§ 264.142(a)(3) and 265.142(a)(3) prohibit the incorporation of salvage value in the closure cost estimates.

In addition to disallowing a credit for salvage value for hazardous wastes, the Agency also is specifying explicitly in the final rule that an owner or operator cannot assume that at closure a third party will take hazardous wastes at no charge. Consistent with the arguments above, the Agency cannot be assured that if an owner or operator fails to close the facility, a third-party would take the hazardous waste at no charge. To avoid potential ambiguities in the regulatory language, the Agency is explicitly stating in §§ 264.142(a)(4) and 265.142(a)(4) that an owner or operator may not incorporate in the closure cost estimate a zero cost for handling hazardous wastes with potential value.

b. *Anniversary date for updating cost estimates for inflation* (§§ 264.142(b), 264.144(b), 265.142(b) and 265.144(b)). The previous regulations required owners or operators to update their closure and post-closure cost estimates for inflation within 30 days after the anniversary of the date that the first cost estimates were prepared. To ensure that the financial assurance instrument accounts for the most recent cost estimate (including updates to inflation), the Agency proposed to require owners or operators to revise their cost estimates within 60 days *prior* to the anniversary date of the establishment of their financial assurance instrument. For firms using the financial test, the cost estimate should be updated within 30 days of the end of the firm's fiscal year and before submission of updated information to the Regional Administrator as specified in §§ 264.143(f)(3) and 265.143(e)(3).

Most commenters supported the proposal to update the cost estimates prior to the anniversary date of the establishment of the financial instrument and, as a result, the Agency is promulgating the rule as proposed.

The Agency also proposed in the March 19, 1985 promulgation to allow owners or operators the option of recalculating the cost estimates based on current costs as an alternative to

using the Implicit Price Deflator for GNP published in the *Survey of Current Business*. In addition, the Agency proposed to require that owners or operators use the most recently published annual Implicit Price Deflator in order to reflect the most recent inflation.

One commenter suggested that owners or operators be required to recalculate annually the cost estimate based on current costs on the grounds that the Implicit Price Deflator will not account for increases in costs due to reasons other than inflation (e.g., increases in costs of landfilling). While the Agency agrees that requiring owners or operators to recalculate the cost estimate annually based on current costs may result in the most accurate estimate, the Agency recognizes that this could impose a significant burden on owners or operators and would not always be necessary. Therefore, the Agency is promulgating the rule as proposed.

c. Revisions to the cost estimates (§§ 264.142(c), 264.144(c), 265.142(c) and 265.144(c)). The previous regulations required the owner or operator to revise the closure and post-closure cost estimates during the operating life of the facility whenever a change in the plans increases the costs of closure or post-closure care. No deadlines were imposed for revising the estimates.

The Agency proposed to require that owners or operators with approved plans adjust their cost estimates within 30 days after the Regional Administrator has approved the modification if the change increases the costs of closure or post-closure care. For interim status facilities without approved closure or post-closure plans, the adjustment must be made within 30 days of the change in the plans if the change increases the cost estimates. Section 264.142(c) of the proposed regulations inadvertently required that the revision be made if the change in the closure plan affects the cost of closure. The final rule has been revised to correct this inconsistency. It now reads as it did originally, that the revision is required if the change in the closure plan increases the cost of closure.

d. Post-closure cost estimates (§§ 264.144(c) and 265.144(c)). Sections 264.144(c) and 265.144(c) previously required the owner or operator to revise the post-closure cost estimates during the operating life of the facility whenever a change in the post-closure plan increased the cost of post-closure care. The previous rules did not define operating life.

The Agency intended that post-closure financial assurance be adjusted

as necessary until the facility was closed. Consistent with the new definition of active life, the Agency proposed to require that the post-closure cost estimate be revised as necessary during the active life of the facility. The Agency received no comments to this proposed change and is promulgating §§ 264.144(c) and 265.144(c) as proposed.

e. Trust fund pay-in period (§§ 264.143(a)(3) and 265.143(a)(3)). The existing language of § 264.143(a)(3) requires the payments to the trust fund to be made over the term of the initial permit or over the remaining life of the facility, whichever is shorter. For interim status facilities, the pay-in period is 20 years or the remaining operating life of the facility, whichever is shorter. Although the trust fund may cover a number of units with different operating lives, the current regulation ties the pay-in period to the life of the facility rather than to particular units. In the March 19, 1985 proposal, the Agency requested comments on approaches to handling the trust fund pay-in period for multiple process facilities.

Some commenters argued that the pay-in period should be based on the shortest operating life of any unit at a multiple process facility; others suggested retaining the existing requirements. One commenter recommended that, within three years, the trust fund should contain enough funds to close the unit likely to incur the highest closure costs.

As discussed in the preamble to the January 12, 1981 Subpart H regulations, the Agency allowed a 20-year pay-in period to minimize the potential adverse economic impacts on smaller firms most likely to be using trust funds (See 46 FR 2823). The Agency is concerned that if the trust fund pay-in period is based on the shortest operating life of a unit of the facility, owners or operators intending to partially close facilities in the near future would face very high costs. For example, if an owner or operator closed a landfill cell after one year rather than at the end of the facility's operating life, he would be required to fully fund the trust fund much earlier than originally intended. Moreover, the Agency is concerned that such an accelerated pay-in period could discourage owners or operators from partially closing their facilities. Therefore, the Agency intends to examine further such questions as the cost effects and enforcement implications of changing the trust fund pay-in period for such facilities before proposing any changes to the current requirements.

f. Reimbursement for closure and post-closure expenditures from trust fund and insurance (§§ 264.143(a)(10),

264.143(e)(5), 264.145(a)(11), 264.145(e)(5), 265.143(a)(10), 265.143(d)(5), 265.145(a)(11) and 265.145(d)(5)). The previous closure/post-closure trust fund and insurance provisions allowed an owner or operator, or any other person authorized to conduct closure or post-closure care, to request reimbursement for expenditures from the trust fund or insurance policy by submitting itemized bills to the Regional Administrator. Within 60 days, the Regional Administrator would instruct the trustee or insurer to make reimbursements, if he determined that the activities were in accordance with the approved plans or were otherwise justified. The Regional Administrator could withhold reimbursements if he determined that the total costs of closure would exceed the value of the trust or insurance policy.

In response to a concern from the ACCI petitioners that a decision to withhold reimbursements should be supported by a written explanation that can serve as a record for review, the proposed rule required the Regional Administrator to provide a detailed written statement of reasons to the owner or operator if he does not instruct the trustee or insurer to make requested reimbursements. The proposed rule also specified provisions for handling reimbursements for partial closure activities. Under the proposed rule, an owner or operator could be reimbursed for partial closure activities if the partial closure reduced the maximum extent of operation of the facility and the Regional Administrator found that the activities had been in accordance with the approved plan or were otherwise justified.

Commenters generally supported the proposal to require a detailed written statement of reasons why the Regional Administrator was withholding reimbursement. A few commenters were concerned that the Regional Administrator should not be allowed to withhold reimbursements for minor violations of the closure or post-closure plan and/or permit requirements. Other commenters argued that the Regional Administrator should not be allowed to withhold more than 20 percent of the funds, and that reimbursements should be automatic unless, within a specified time, the Regional Administrator provides a statement of reasons for refusing the reimbursements.

It was also suggested that reimbursements for partial closures should be allowed if there are adequate funds remaining in the trust fund or insurance policy to cover the maximum

costs of closing the facility over its remaining life.

The Agency agrees with commenters that the regulations should not preclude reimbursements for minor paperwork violations. The Agency believes, however, that the proposed regulatory language provides the necessary flexibility to the Regional Administrator by allowing reimbursements if the activities are in accordance with the approved plan, or if the activities are otherwise justified. Therefore, the final rule specifies that an owner or operator is eligible for reimbursements if the activities have been performed in accordance with the approved plans or are otherwise justified. As discussed below, reimbursements will be made only if sufficient funds are remaining in the trust fund or insurance policy.

The Agency does not agree that the Regional Administrator should be allowed to withhold only up to 20 percent of the value of the trust fund or insurance policy. As discussed in the preamble to the April 7, 1982 rules, (See 47 FR 15040), the Agency is concerned that in some instances where the cost estimate is found to be seriously inadequate, more than 20 percent should be held in reserve. The Agency also disagrees with the suggestion that reimbursements should be made automatically if the Regional Administrator does not act upon the request within a specified length of time. Because of the complexity of certain closure activities and the importance of ensuring that the activities protect human health and the environment, the Agency considers it inappropriate to establish such deadlines. Therefore, the Agency is promulgating the rule substantially as proposed.

The Agency is making a clarifying change to the language in the final rule. The proposed rule allowed reimbursements if partial closure reduced the maximum extent of operation. In developing the final rule for reimbursement provisions, the Agency considered it more appropriate to examine the amount of funds remaining in the fund than the maximum extent of operation. As a result, the final rule specifies that an owner or operator may request reimbursements only if sufficient funds, exclusive of future inflation adjustments, are remaining in the trust fund or insurance policy to cover the maximum costs of closing the facility at any time over its remaining life.

g. *Final administrative order required* (§§264.143(b)(4)(ii), 264.145(b)(4)(ii), 265.143(b)(4)(ii) and 265.145(b)(4)(ii)). The previous regulations provided that an owner or operator may satisfy the

financial assurance requirements for closure and/or post-closure care by obtaining a financial guarantee surety bond. The bond provides that if the owner or operator fails to fund a standby trust fund in an amount equal to the penal sum of the bond within 15 days after an order to begin closure or post-closure care is issued by the Regional Administrator or by a court, the surety will become liable. In response to the ACCI petitioners, the Agency proposed to provide additional procedural protections to owners or operators by requiring that a *final* administrative order is necessary before action can be required by the surety. EPA wishes to emphasize that only *final administrative* action, not judicial review, is required in all these cases.

No comments were received concerning this amendment, and the Agency is promulgating the rule as proposed.

h. *Final administrative determination required* (§§264.143(c)(5) and (d)(8), 264.145(c)(5) and (d)(9), 265.143(c)(8), 265.145(b)(5) and 265.145(c)(9)). The Part 264 regulations provide that an owner or operator may demonstrate financial assurance for closure and/or post-closure care by obtaining a surety bond guaranteeing performance. Under Parts 264 and 265, an owner or operator also could satisfy the financial assurance requirements by obtaining a letter of credit. Under the terms of the performance bond and letter of credit, the surety or bank issuing the letter of credit would become liable on the bond or letter of credit obligation when the owner or operator fails to perform closure or post-closure care as guaranteed by the bond or letter of credit. The previous regulations provided that such a failure was indicated by a determination made pursuant to Section 3008 of RCRA that the owner or operator has failed to perform final closure or post-closure care in accordance with the closure or post-closure plan and other applicable requirements. In response to concerns of the ACCI petitioners, the Agency proposed to require that a "final" administrative determination under Section 3008 of RCRA be required before the surety must perform closure or post-closure care or deposit the penal sum of the bond into a trust fund or the Regional Administrator may draw on a letter of credit.

No comments were received concerning this amendment. However, as explained above, the final rule specifies that the determination must be a final determination.

i. *Cost estimates for owners or operators using the financial test or*

corporate guarantee must include UIC cost estimates for Class I wells (§§264.143(f)(1)(i) (B) and (D) and (f)(1)(ii) (B) and (D), 264.145(f)(1)(i) (B) and (D) and (f)(1)(ii) (B) and (D), 265.143(e)(1)(i) (B) and (D) and (e)(1)(ii) (B) and (D), 265.145(e)(1)(i) (B) and (D), and 265.145(e)(1)(ii) (B) and (D)). On March 19, 1985, the Agency proposed a requirement that an owner or operator seeking to use the financial test to demonstrate financial responsibility must include the most current cost estimates of the plugging and abandonment costs of Class I underground injection control (UIC) facilities, if applicable, when calculating the sum of closure and post-closure cost estimates for the financial test. EPA has established in 40 CFR Part 144 financial responsibility requirements for the owners or operators of Class I UIC facilities paralleling those established in 40 CFR Parts 264 and 265, including the same set of criteria for passing the financial test. Neither the UIC financial test nor the RCRA financial test, however, currently requires inclusion of the most current cost estimates for the other program. EPA was concerned that a firm able to pass the UIC and RCRA financial tests separately might not have the financial strength to take the required actions if UIC plugging and abandonment and RCRA closure and/or post-closure care activities were required simultaneously. Therefore, the Agency proposed that the most current cost estimates prepared as part of the Part 144 requirements be included in the total cost estimate required under 40 CFR Subpart H to evaluate whether a firm is able to pass the financial test.

Commenters generally favored the inclusion of UIC plugging and abandonment cost estimates in the Subpart H financial test requirements, and the Agency is promulgating the rule as proposed. In addition, the Agency is promulgating the proposed language in §§264.141 and 265.141 which defines the "current plugging and abandonment cost estimate" as the most recent cost estimates prepared under §144.62.

j. *Cost estimates must account for all facilities covered by the financial test and corporate guarantee* (§§264.143(f)(2), 264.145(f)(2), 265.143(e)(2) and 265.145(e)(2)). The previous regulations specified that the phrase "current closure and post-closure cost estimates" as used in paragraph (f)(1) of §§264.143 and 264.145, and paragraph (e)(1) of §§265.143 and 265.145, refers to the cost estimates required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer (See

§ 264.151(f)). The Agency proposed a minor change to include by reference the UIC cost estimates.

No comments were received concerning this proposal, and the Agency is adopting the rule as proposed.

K. Release of the owner or operator from the requirements of financial assurance for closure and post-closure care (§§ 265.143(i), 264.145(i), 265.143(h) and 265.145(h)). Previously, §§ 265.143(i) and 265.143(h) required the owner or operator to submit certification to the Regional Administrator from himself and from an independent registered professional engineer that closure had been accomplished in accordance with the closure plan. Within 60 days after receiving the certifications, unless the Regional Administrator had reason to believe that closure was not in accordance with the plan, the Regional Administrator was required to notify the owner or operator that he is no longer required to maintain financial assurance for closure. Sections 264.145(i) and 265.145(h) specified that the owner or operator was relieved of his post-closure financial assurance obligations when the owner or operator has completed, to the satisfaction of the Regional Administrator, all post-closure care requirements.

The Agency proposed to drop the reference to the "independent" registered professional engineer in §§ 264.143(i) and 265.143(h) to be consistent with the proposed changes to §§ 264.115 and 265.115. The proposed rule also added a requirement to §§ 264.143(i), 264.145(i), 265.143(h), and 265.145(h) that the Regional Administrator must provide the owner or operator with a detailed written statement of any reasons to believe that closure or post-closure care has not been in accordance with the approved plans.

For the same reasons that the final rule is retaining the independent registered professional engineer certification requirement, the final rule also retains the reference to the independent registered professional engineer in §§ 264.143(i) and 265.143(h). Similarly, because the final rule requires in §§ 264.120 and 265.120 that an owner or operator must submit a certification from himself and an independent registered professional engineer that post-closure care has been completed in accordance with the approved post-closure plan, §§ 264.145(i) and §§ 265.145(h) are revised to specify that within 60 days after receiving the required post-closure care certifications the Regional Administrator will notify the owner or operator in writing that he is no longer required to maintain

financial assurance for post-closure care for that unit (or facility). Today's rule promulgates as proposed the requirement that the Regional Administrator must provide the owner or operator with a detailed written statement of any reasons to believe that closure or post-closure care has not been in accordance with the approved plans.

l. Period of liability coverage (§§ 264.147(e) and 265.147(e)). The regulations previously required owners or operators to provide sudden accidental and, if applicable, nonsudden accidental liability coverage until certifications of closure have been received by the Regional Administrator. Because the Agency proposed to require that partial closures of disposal units be certified, units within a facility may be closed and certified while other units continue to operate. The Agency does not consider it appropriate to alter the amount of financial assurance required for sudden or nonsudden liability coverage as a result of such partial closures. Therefore, the proposed rule clarified that an owner or operator must provide liability coverage continuously as required until the certification of final closure is received by the Regional Administrator.

The Agency also believes that release from liability coverage requirements should be consistent with the procedures for releasing the owner or operator from closure financial responsibility requirements under §§ 264.143(i) and 265.143(h). Therefore, today's final rule states that owners or operators must maintain liability coverage until the Regional Administrator notifies the owner or operator in writing that he is released from this obligation.

m. Wording of instruments (§ 264.151). On March 19, 1985 the Agency proposed two changes to the wording of the instruments allowed under §§ 264.143, 264.145, 265.143, and 265.145. These changes, intended to ensure consistency with the other amendments in the proposal, modified § 264.151(b) to provide that the surety is responsible for funding the standby trust fund within 15 days after a "final" order to begin closure has been issued, and modified § 264.151(f) by adding an additional paragraph requiring owners and operators using the financial test to list the most current cost estimates associated with their Class I UIC facilities under the Part 144 financial responsibility requirements.

Because some owners or operators may use the financial test to cover closure and post-closure costs as well as liability coverage, the final rule adds a

parallel paragraph to § 264.151(f), new paragraph (g), to require these owners or operators to list cost estimates associated with their Class I UIC facilities under the Part 144 final responsibility requirements.

Those firms with surety bonds or letters from the chief financial officer issued before the effective date of these regulations must change those instruments to reflect these wording changes as §§ 264.143, 265.143, 264.145 and 265.145 require that the wording of these instruments be identical to the applicable wording in § 264.151. For owners or operators using surety bonds, the wording changes must be made within 60 days prior to the anniversary date of the establishment of the financial instrument(s), as per §§ 264.142(b), 265.142(b), 264.144(b) and 265.144(b). For owners or operators using the financial test or corporate guarantee, the changes must be made within 30 days after the close of the firm's fiscal year and before submission of updated information to the Regional Administrator, as specified in §§ 264.142(f), 265.142(e), 264.145(f), and 265.145(e).

C. Interim Status Standards (Part 265)

1. Applicability of Requirements (§ 265.110(b))

Section 265.110(b) specified that the post-closure care regulations apply to all hazardous waste disposal facilities. Surface impoundments and waste piles that are unable to remove all hazardous wastes are required under §§ 265.228 and 265.258 to be closed as landfills and must comply with the post-closure care requirements. Therefore, in order to clarify the applicability of §§ 265.117-265.120, the Agency proposed in § 265.110(b) that the post-closure care requirements apply to the owners or operators of all hazardous waste disposal facilities and piles and surface impoundments for which the owner or operator intends to remove the wastes at closure but is required to close the facility as a landfill.

The Agency received no comments on this clarification and is promulgating the final rule as proposed.

2. Waste Pile Closure Requirements Included by Reference in the Closure Performance Standard (§ 265.111(c))

Section 265.112(a)(1) previously required the closure plan to include a description of how and when the facility will be partially closed, if applicable, and finally closed. The description must specify how the applicable requirements of the closure performance standard

specified in § 265.111 and the process-specific standards in Subparts J through Q will be met. The Agency proposed to incorporate the technical standards in the process-specific regulations into the closure performance standard in § 265.111 and to revise § 265.111 to include a reference to § 265.258, which establishes closure requirements for waste piles. Closure requirements specific to waste pile facilities had not been promulgated prior to the promulgation of the Subpart G regulations, and thus were not previously referenced.

No comments were received concerning this proposal, and the Agency is adopting the rule as proposed.

3. Submission of Interim Status Closure and Post-Closure Plans (§§ 265.112(d), 265.118(e))

Sections 265.112(c) and 265.118(c) required owners or operators to submit their closure and post-closure plans 180 days prior to final closure. The proposed amendment specified that owners or operators of facilities with a landfill, surface impoundment, waste pile, or land treatment unit must submit their closure and post-closure plans for review and approval 180 days prior to the first partial closure. Facilities with only container storage, storage or treatment tanks, or incinerators must submit the closure plan 45 days prior to final closure. After the closure plan has been approved, the owner or operator is required to notify the Regional Administrator prior to all partial closures of landfills, surface impoundments, waste piles, and land treatment units and prior to final closure. Unless changes are made to the approved closure plan, however, the proposed rule did not require the owner or operator to seek reapproval of the closure plan for each subsequent partial closure or final closure.

Some commenters suggested that owners or operators be required to submit only that portion of the closure plan applicable to the unit being closed. The Agency disagrees with this suggestion. All owners or operators of interim status facilities were required to have their plans available on-site by May 19, 1981. Therefore, no additional burden is imposed on the owner or operator by requiring that the entire plan be submitted.

The Agency believes that it is necessary that the entire plan be submitted to ensure that the plans adequately address the activities required at the entire facility. Especially if the owner or operator intends to handle some of the hazardous wastes on-site, it is essential to ensure that the

facility has incorporated these requirements into the closure plan. If necessary to ensure protection of human health and the environment, the Regional Administrator may approve only that portion of the plan applicable to the partial closure.

4. Written Statements by Regional Administrator of Reasons for Refusing to Approve or Reasons for Modifying Closure or Post-Closure Plan (§§ 265.112(d)(4), 265.118(f))

Sections 265.112(d) and 265.118(d) previously specified that the Regional Administrator would approve, modify, or disapprove the closure plan and, if applicable, post-closure plan within 90 days of their receipt from the owner or operator. If the Regional Administrator did not approve the plan, the owner or operator was required to modify the plan or submit a new plan for approval within 60 days. If the Regional Administrator modified the plan, this modified plan became the approved closure and post-closure plan.

In response to the contention of the ACCI petitioners that this provision provided the Regional Administrator with undue discretion, the Agency proposed in §§ 265.112(d) and 265.118(f) to require the Regional Administrator to provide a detailed written statement of reasons for refusing to approve or reasons for modifying a closure or post-closure plan. In addition, to be consistent with the provisions of § 265.112(d) applicable to approving the closure plan, the Agency also proposed in § 265.118(f) that the Regional Administrator will hold a public hearing on approving the post-closure plan whenever such a hearing would clarify the issues.

The commenters generally favored these proposed changes and the Agency is promulgating the rule as proposed.

D. Typographical Errors

The final rule corrects a number of typographical errors included in the proposed rule.

E. Permitting Standards (Part 270)

1. Contents of Part B: General Requirements (§§ 270.14(b) (14), (15), and (16))

Section 270.14(b)(14) specified that the Part B application must include documentation that the notice in the deed required under § 264.120 has been filed. Because many Part B applications will be filed prior to closure of a hazardous waste disposal unit, it will not be possible to include documentation indicating that the

notices have been filed. Therefore, the Agency proposed to amend § 270.14(b)(14) to require documentation to be included in the Part B application only for facilities with hazardous waste disposal units closed prior to the submission of the application. In addition, because the notice in the deed requirement is now included in § 264.119, the reference in § 270.14(b)(14) to § 264.120 has also been amended.

Section 270.14(b) (15) and (16) previously specified that the Part B application must include a copy of the most recent closure and post-closure cost estimates as required by §§ 264.142 and 264.144 and documentation required to demonstrate closure and post-closure financial assurance in accordance with the requirements of §§ 264.143 and 264.145, if applicable. Sections 264.143 and 264.145 require that for new facilities, demonstration of financial assurance must be made at least 60 days prior to the initial receipt of hazardous wastes. Because an owner or operator of a new facility may submit the Part B application more than 60 days prior to the initial receipt of hazardous wastes, the Agency also proposed to amend §§ 270.14(b) (15) and (16) to specify that a copy of the demonstration of financial assurance must be included with the submission of the Part B application, or at least 60 days prior to the initial receipt of hazardous wastes, whichever is later.

The Agency received no comments on any of these proposed changes and is promulgating them as proposed.

2. Minor Modifications of Permits (§ 270.42(d))

Section 270.42(d) previously stated that a change in ownership or operational control of a facility may be considered a minor permit modification provided that the Director determines that no other change is necessary in the permit and that a written agreement has been submitted to the Director which specifies the date for transfer of permit responsibility, coverage, and liability between the current and new permittees. The Agency wishes to ensure that facilities are transferred to financially viable firms and thus proposed to require that the new owner demonstrate compliance with the Subpart H regulations within three months of the transfer of ownership. The preamble inadvertently stated that the proposed rule allowed for a six-month deadline for demonstrating financial assurance although the proposed rule referred to the requirements of § 270.72 which proposed a three-month deadline.

Some commenters argued that a six-month time limit was too short while others argued that it was too long. Another commenter was concerned that the regulation did not state whether the old owner or operator remains responsible if the new owner or operator fails to demonstrate financial assurance within the allotted time period. Finally, one commenter noted that the reference to the deadlines in § 270.72, which address requirements for interim status facilities, is confusing for permitted facilities.

The Agency disagrees with those commenters who argued that six months is insufficient time to demonstrate financial assurance. The Agency is extending the three-month period allowed in the proposed rule to six months. EPA is also clarifying the Agency's intent that the old owner or operator is responsible for financial assurance obligations if the new owner or operator fails to meet his obligations. Finally, the final rule clarifies the language of § 270.42. The proposal included a reference in § 270.42 to the deadlines of § 270.72. Because § 270.72 refers to interim status facilities, the Agency was concerned that owners or operators may not recognize that the deadlines in § 270.72 also applied to permitted facilities under § 270.42. To avoid potential ambiguities, the final rule states explicitly in § 270.42(d) that the new owner or operator must demonstrate financial assurance within six months of the transfer of ownership.

3. Changes During Interim Status (§ 270.72(d))

Section 270.72(d) stated that when there is a transfer of ownership or operational control of an interim status facility, the old owner or operator is responsible for complying with the Subpart H requirements until the new owner or operator demonstrates compliance with the financial responsibility requirements. Consistent with the proposed changes to § 270.42(d) for permitted facilities, the Agency proposed to require that the new owner or operator demonstrate financial assurance within three months of the transfer of ownership.

For the reasons discussed above, the Agency is allowing the new owner or operator six months to demonstrate financial assurance. The old owner or operator is responsible for financial assurance until the new owner or operator fulfills his obligations under Subpart H.

III. State Authority

A. Applicability of Rules in Authorized States

Under Section 3006 of RCRA, EPA may authorize qualified States to administer and enforce the RCRA program within the State. (See 40 CFR Part 271 for the standards and requirements for authorization.) Following authorization, EPA retains enforcement authority under Sections 3008, 7003 and 3013 of RCRA, although authorized States have primary enforcement responsibility.

Prior to HSWA amending RCRA, a State with final authorization administered its hazardous waste program entirely in lieu of the Federal program. The Federal requirements no longer applied in the authorized State, and EPA could not issue permits for any facilities in a State where the State was authorized to permit. When new, more stringent Federal requirements were promulgated or enacted, the State was obligated to enact equivalent authority within specified time frames. New Federal requirements did not take effect in an authorized State until the State adopted the requirements as State law.

In contrast, under newly enacted Section 3006(g) of RCRA, 42 U.S.C. 6926(g), new requirements and prohibitions imposed by the HSWA take effect in authorized States at the same time that they take effect in nonauthorized States. EPA is directed to carry out those requirements and prohibitions in authorized States, including the issuance of permits, until the State is granted authorization to do so. While States must still adopt HSWA-related provisions as State law to retain final authorization, the HSWA are applied in authorized States in the interim.

B. Effect on State Authorizations

Today's announcement promulgates standards that will not be effective in authorized States since the requirements will not be imposed pursuant to the HSWA. Thus, the requirements will be applicable only in those States that do not have final authorization. In authorized States, the requirements will not be applicable until the State revises its program to adopt equivalent requirements under State law.

40 CFR 271.21(e)(2) requires that States that have final authorization must revise their programs to include equivalent standards within a year of promulgation of these standards if only regulatory changes are necessary, or within two years of promulgation if statutory changes are necessary. These deadlines can be extended in

exceptional cases (40 CFR 271.21(e)(3)). Once EPA approves the revision, the State requirements become Subtitle C RCRA requirements.

States with authorized RCRA programs may already have requirements similar to those in today's rule. These State requirements have not been assessed against the Federal regulations being promulgated today to determine whether they meet the tests for authorization. Thus, a State is not authorized to carry out these requirements in lieu of EPA until the State requirements are approved. Of course, States with existing standards may continue to administer and enforce their standards as a matter of State law.

States that submit official applications for final authorization less than 12 months after promulgation of these standards may be approved without including equivalent standards. However, once authorized, a State must revise its program to include equivalent standards within the time period discussed above. The process and schedule for revision of State programs is described in 40 CFR § 271.21.

It should be noted that authorized States are only required to revise their programs when EPA promulgates standards more stringent than the existing standards. Under Section 3009 of RCRA, States are allowed to impose standards which are more stringent than those in Federal program. Some of the standards promulgated today are considered to be less stringent than or reduce the scope of the previous Federal requirements. Those provisions appear in Sections: 264.112(a), 264.118(a), 265.112(a), 265.118(a), 264.112(b)(7), 264.112(e), 265.112(e), 264.113, 265.113, 264.115, 265.115, 264.143(a)(10), 264.143(e)(5), 264.145(a)(11), 264.145(e)(5), 265.143(a)(10), 265.143(d)(5), 265.145(a)(11), 265.145(d)(5), 264.143(b)(4)(ii), 264.145(b)(4)(ii), 265.143(b)(4)(ii), 265.145(b)(4)(ii), 264.143(c)(5), 264.143(d)(8), 264.145(c)(5), 264.145(d)(9), 265.143(c)(8), 265.145(c)(9), 265.112(b)(7), 264.112(d), 265.112(d), 265.118(e), and 265.118(f). Authorized States will not be required to revise their programs to adopt requirements equivalent or substantially equivalent to the provisions identified above.

IV. Executive Order 12291

This regulation was submitted to the Office of Management and Budget for review as required by Executive Order 12291. The regulatory amendments being promulgated today to Subparts G and H are not "major rules." Some of the amendments are technical corrections

designed to clarify the intent of the regulations issued January 12, 1981. The changes are not likely to result in a significant increase in costs and thus are not a major rule. No Regulatory Impact analysis has been prepared.

V. Paperwork Reduction Act

The information collection requirements contained in this rule have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 *et seq.* and have been assigned OMB control number 2050-0008.

VI. Regulatory Flexibility Act

Under the Regulatory Flexibility Act of 1980 (5 U.S.C. 801 *et seq.*), Federal agencies must, in developing regulations, analyze their impact on small entities (small businesses, small government jurisdictions, and small organizations). Many of the changes promulgated today clarify the existing regulations and thus result in no additional costs. For those amendments that will result in an increase in costs, the costs are not significant enough to impact adversely the viability of small entities.

Accordingly, I certify that this regulation will not have a significant impact on a substantial number of small entities.

VII. Supporting Documents

A background document was prepared for the Subpart G closure and post-closure care regulations and for the financial assurance regulations promulgated on January 12, 1981. In addition, background documents were prepared for the financial assurance regulations published on April 7, 1982. Supporting materials, including a background document, discussing the most significant issues raised by the amendments promulgated today have been prepared and are included in the docket for these regulations.

The supporting materials are available for review in the public docket, Room S-212-E U.S. EPA, 401 M Street, SW., Washington, D.C. 20460 from 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding holidays.

EPA will prepare guidance manuals to assist owners or operators and regulatory officials and will make them available from EPA Headquarters and the Regional Offices.

VIII. Effective Date

Section 3010(b) of RCRA provides that EPA's hazardous waste regulations and revisions thereto take effect six months after their promulgation. The purpose of

this requirement is to allow sufficient lead time for the regulated community to prepare to comply with major new regulatory requirements. Section 553(d) of the Administrative Procedures Act prohibits "publication of service of a substantive rule . . . less than 30 days before its effective date except for good cause." For the amendment to § 270.14(b)(14) promulgated today, however, the Agency believes that an effective date six months or 30 days after promulgation would cause substantial and unnecessary disruption in the implementation of the regulations and would be contrary to the interest of the regulated community and the public.

Today's amendment to § 270.14(b)(14) requires that an owner or operator seeking a permit submit documentation that notices required under § 264.119 have been filed only for hazardous waste disposal units that have been closed. The previous regulations required that documentation of such notices be submitted for the entire facility, whether or not units have been closed at the time the permit application is submitted.

The Agency believes it makes little sense that the intended relief from this requirement be delayed for six months. This is especially true in light of the requirement that owners or operators of land disposal facilities submit their permit applications by November 8, 1985 (see HSWA § 213). Consequently, the Agency is setting an effective date of May 2, 1986, for the amendment to § 270.14(b)(14) promulgated in this rulemaking action.

Dated: March 8, 1986.

Approved:

Lee M. Thomas,
Administrator.

For the reasons set out in the preamble, Title 40 of the Code of Federal Regulations is to be amended as follows:

PART 260—HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

40 CFR Part 260 is amended as follows:

1. The authority citation for Part 260 continues to read as follows:

Authority: Secs. 1006, 2002(a), 3001 through 3007, 3010, 3014, 3015, 3017, 3018, 3019, and 7004, of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6921 through 6927, 6930, 6934, 6935, 6937, 6938, 6939 and 6974).

Subpart B—Definitions

2. In 40 CFR Part 260 Subpart B, § 260.10 is amended by adding the

following terms alphabetically to the existing list of terms:

§ 260.10 Definitions.

* * * * *

"Active life" of a facility means the period from the initial receipt of hazardous waste at the facility until the Regional Administrator receives certification of final closure.

"Final closure" means the closure of all hazardous waste management units at the facility in accordance with all applicable closure requirements so that hazardous waste management activities under Parts 264 and 265 of this Chapter are no longer conducted at the facility unless subject to the provisions in § 262.34.

"Hazardous waste management unit" is a contiguous area of land on or in which hazardous waste is placed, or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area. Examples of hazardous waste management units include a surface impoundment, a waste pile, a land treatment area, a landfill cell, an incinerator, a tank and its associated piping and underlying containment system and a container storage area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed.

"Partial closure" means the closure of a hazardous waste management unit in accordance with the applicable closure requirements of Parts 264 and 265 of this Chapter at a facility that contains other active hazardous waste management units. For example, partial closure may include the closure of a tank (including its associated piping and underlying containment systems), landfill cell, surface impoundment, waste pile, or other hazardous waste management unit, while other units of the same facility continue to operate.

* * * * *

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

40 CFR Part 264 is amended as follows:

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

Authority: Secs. 1006, 2002(a), 3004 and 3005 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6924 and 6925).

2. 40 CFR Part 264 Subpart G, §§ 264.110-264.120 are revised to read as follows:

Subpart G—Closure and Post-Closure

- Sec.
 264.110 Applicability.
 264.111 Closure performance standard.
 264.112 Closure plan; amendment of plan.
 264.113 Closure; time allowed for closure.
 264.114 Disposal or decontamination of equipment, structures and soils.
 264.115 Certification of closure.
 264.116 Survey plat.
 264.117 Post-closure care and use of property.
 264.118 Post-closure plan; amendment of plan.
 264.119 Post-closure notices.
 264.120 Certification of completion of post-closure care.

Subpart G—Closure and Post-Closure

§ 264.110 Applicability.

Except as § 264.1 provides otherwise:

- (a) Sections 264.111-264.115 (which concern closure) apply to the owners and operators of all hazardous waste management facilities; and
- (b) Sections 264.116-264.120 (which concern post-closure care) apply to the owners and operators of:

- (1) All hazardous waste disposal facilities; and
- (2) Waste piles and surface impoundments from which the owner or operator intends to remove the wastes at closure to the extent that these sections are made applicable to such facilities in §§ 264.228 or 264.258.

§ 264.111 Closure performance standard.

The owner or operator must close the facility in a manner that:

- (a) Minimizes the need for further maintenance; and
- (b) Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere; and
- (c) Complies with the closure requirements of this Subpart including, but not limited to, the requirements of §§ 264.178, 264.197, 264.228, 264.258, 264.280, 264.310 and 264.351.

§ 264.112 Closure plan; amendment of plan.

(a) *Written plan.* (1) The owner or operator of a hazardous waste management facility must have a written closure plan. In addition, certain surface impoundments and waste piles from which the owner or operator intends to remove or decontaminate the

hazardous waste at partial or final closure are required by §§ 264.228(c)(1)(i) and 264.258(c)(1)(i) to have contingent closure plans. The plan must be submitted with the permit application, in accordance with § 270.14(b)(13) of this Chapter, and approved by the Regional Administrator as part of the permit issuance procedures under Part 124 of this Chapter. In accordance with § 270.32 of this Chapter, the approved closure plan will become a condition of any RCRA permit.

(2) The Regional Administrator's approval of the plan must ensure that the approved closure plan is consistent with §§ 264.111-264.115 and the applicable requirements of §§ 264.90 *et seq.*, 264.178, 264.197, 264.228, 264.258, 264.280, 264.310, and 264.351. Until final closure is completed and certified in accordance with § 264.115, a copy of the approved plan and all approved revisions must be furnished to the Regional Administrator upon request, including request by mail.

(b) *Content of plan.* The plan must identify steps necessary to perform partial and/or final closure of the facility at any point during its active life. The closure plan must include, at least:

(1) A description of how each hazardous waste management unit at the facility will be closed in accordance with § 264.111;

(2) A description of how final closure of the facility will be conducted in accordance with § 264.111. The description must identify the maximum extent of the operations which will be unclosed during the active life of the facility; and

(3) An estimate of the maximum inventory of hazardous wastes ever on-site over the active life of the facility and a detailed description of the methods to be used during partial closures and final closure, including, but not limited to, methods for removing, transporting, treating, storing, or disposing of all hazardous wastes, and identification of the type(s) of the off-site hazardous waste management units to be used, if applicable; and

(4) A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures, and soils during partial and final closure, including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination required to satisfy the closure performance standard; and

(5) A detailed description of other activities necessary during the closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including, but not limited to, ground-water monitoring, leachate collection, and run-on and run-off control; and

(6) A schedule for closure of each hazardous waste management unit and for final closure of the facility. The schedule must include, at a minimum, the total time required to close each hazardous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure. (For example, in the case of a landfill unit, estimates of the time required to treat or dispose of all hazardous waste inventory and of the time required to place a final cover must be included.)

(7) For facilities that use trust funds to establish financial assurance under §§ 264.143 or 264.145 and that are expected to close prior to the expiration of the permit, an estimate of the expected year of final closure.

(c) *Amendment of plan.* The owner or operator must submit a written request for a permit modification to authorize a change in operating plans, facility design, or the approved closure plan in accordance with the procedures in Parts 124 and 270. The written request must include a copy of the amended closure plan for approval by the Regional Administrator.

(1) The owner or operator may submit a written request to the Regional Administrator for a permit modification to amend the closure plan at any time prior to the notification of partial or final closure of the facility.

(2) The owner or operator must submit a written request for a permit modification to authorize a change in the approved closure plan whenever:

- (i) Changes in operating plans or facility design affect the closure plan, or
- (ii) There is a change in the expected year of closure, if applicable, or
- (iii) In conducting partial or final closure activities, unexpected events require a modification of the approved closure plan.

(3) The owner or operator must submit a written request for a permit modification including a copy of the amended closure plan for approval at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the closure plan. If an unexpected event occurs during the partial or final closure period, the owner or operator must request a permit

modification no later than 30 days after the unexpected event. An owner or operator of a surface impoundment or waste pile that intends to remove all hazardous waste at closure and is not otherwise required to prepare a contingent closure plan under §§ 264.228(c)(1)(i) or 264.258(c)(1)(i), must submit an amended closure plan to the Regional Administrator no later than 60 days from the date that the owner or operator or Regional Administrator determines that the hazardous waste management unit must be closed as a landfill, subject to the requirements of § 264.310, or no later than 30 days from that date if the determination is made during partial or final closure. The Regional Administrator will approve, disapprove, or modify this amended plan in accordance with the procedures in Parts 124 and 270. In accordance with § 270.32 of this Chapter, the approved closure plan will become a condition of any RCRA permit issued.

(4) The Regional Administrator may request modifications to the plan under the conditions described in § 264.112(c)(2). The owner or operator must submit the modified plan within 60 days of the Regional Administrator's request, or within 30 days if the change in facility conditions occurs during partial or final closure. Any modifications requested by the Regional Administrator will be approved in accordance with the procedures in Parts 124 and 270.

(d) Notification of partial closure and final closure.

(1) The owner or operator must notify the Regional Administrator in writing at least 60 days prior to the date on which he expects to begin closure of a surface impoundment, waste pile, land treatment or landfill unit, or final closure of a facility with such a unit. The owner or operator must notify the Regional Administrator in writing at least 45 days prior to the date on which he expects to begin final closure of a facility with only treatment or storage tanks, container storage, or incinerator units to be closed.

(2) The date when he "expects to begin closure" must be either no later than 30 days after the date on which any hazardous waste management unit receives the known final volume of hazardous wastes or, if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous waste. If the owner or operator of a hazardous waste management unit can demonstrate to the Regional Administrator that the hazardous waste management unit or

facility has the capacity to receive additional hazardous wastes and he has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the Regional Administrator may approve an extension to this one-year limit.

(3) If the facility's permit is terminated, or if the facility is otherwise ordered, by judicial decree or final order under Section 3008 of RCRA, to cease receiving hazardous wastes or to close, then the requirements of this paragraph do not apply. However, the owner or operator must close the facility in accordance with the deadlines established in § 264.113.

(e) Removal of wastes and decontamination or dismantling of equipment. Nothing in this Section shall preclude the owner or operator from removing hazardous wastes and decontaminating or dismantling equipment in accordance with the approved partial or final closure plan at any time before or after notification of partial or final closure.

§ 264.113 Closure; time allowed for closure.

(a) Within 90 days after receiving the final volume of hazardous wastes at a hazardous waste management unit or facility, the owner or operator must treat, remove from the unit or facility, or dispose of on-site, all hazardous wastes in accordance with the approved closure plan. The Regional Administrator may approve a longer period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that:

(1)(i) The activities required to comply with this paragraph will, of necessity, take longer than 90 days to complete; or

(ii)(A) The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes; and

(B) There is a reasonable likelihood that he or another person will recommence operation of the hazardous waste management unit or the facility within one year; and

(C) Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and

(2) He has taken and will continue to take all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements.

(b) The owner or operator must complete partial and final closure activities in accordance with the

approved closure plan and within 180 days after receiving the final volume of hazardous wastes at the hazardous waste management unit or facility. The Regional Administrator may approve an extension to the closure period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that:

(1)(i) The partial or final closure activities will, of necessity, take longer than 180 days to complete; or

(ii)(A) The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes; and

(B) There is reasonable likelihood that he or another person will recommence operation of the hazardous waste management unit or the facility within one year; and

(C) Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and

(2) He has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but not operating hazardous waste management unit or facility, including compliance with all applicable permit requirements.

(c) The demonstrations referred to in § 264.113(a) and (b) must be made as follows: (1) The demonstrations in paragraph (a) must be made at least 30 days prior to the expiration of the 90-day period in paragraph (a); and (2) the demonstration in paragraph (b) must be made at least 30 days prior to the expiration of the 180-day period in paragraph (b).

§ 264.114 Disposal or decontamination of equipment, structures and soils.

During the partial and final closure periods, all contaminated equipment, structures and soils must be properly disposed of or decontaminated unless otherwise specified in §§ 264.228, 264.258, 264.280, or 264.310. By removing any hazardous wastes or hazardous constituents during partial and final closure, the owner or operator may become a generator of hazardous waste and must handle that waste in accordance with all applicable requirements of Part 262 of this Chapter.

§ 264.115 Certification of closure.

Within 60 days of completion of closure of each hazardous waste surface impoundment, waste pile, land treatment, and landfill unit, and within 60 days of the completion of final closure, the owner or operator must submit to the Regional Administrator, by

registered mail, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification must be signed by the owner or operator and by an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the Regional Administrator upon request until he releases the owner or operator from the financial assurance requirements for closure under § 264.143(i).

§ 264.116 Survey plat.

No later than the submission of the certification of closure of each hazardous waste disposal unit, the owner or operator must submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Regional Administrator, a survey plat indicating the location and dimensions of landfills cells or other hazardous waste disposal units with respect to permanently surveyed benchmarks. This plat must be prepared and certified by a professional land surveyor. The plat filed with the local zoning authority, or the authority with jurisdiction over local land use, must contain a note, prominently displayed, which states the owner's or operator's obligation to restrict disturbance of the hazardous waste disposal unit in accordance with the applicable Subpart G regulations.

§ 264.117 Post-closure care and use of property.

(a)(1) Post-closure care for each hazardous waste management unit subject to the requirements of §§ 264.117-264.120 must begin after completion of closure of the unit and continue for 30 years after that date and must consist of at least the following:

(i) Monitoring and reporting in accordance with the requirements of Subparts F, K, L, M, and N of this Part; and

(ii) Maintenance and monitoring of waste containment systems in accordance with the requirements of Subparts F, K, L, M, and N of this Part.

(2) Any time preceding partial closure of a hazardous waste management unit subject to post-closure care requirements or final closure, or any time during the post-closure period for a particular unit, the Regional Administrator may, in accordance with the permit modification procedures in Parts 124 and 270:

(i) Shorten the post-closure care period applicable to the hazardous

waste management unit, or facility, if all disposal units have been closed, if he finds that the reduced period is sufficient to protect human health and the environment (e.g., leachate or ground-water monitoring results, characteristics of the hazardous wastes, application of advanced technology, or alternative disposal, treatment, or re-use techniques indicate that the hazardous waste management unit or facility is secure); or

(ii) Extend the post-closure care period applicable to the hazardous waste management unit or facility if he finds that the extended period is necessary to protect human health and the environment (e.g., leachate or ground-water monitoring results indicate a potential for migration of hazardous wastes at levels which may be harmful to human health and the environment).

(b) The Regional Administrator may require, at partial and final closure, continuation of any of the security requirements of § 264.14 during part or all of the post-closure period when:

(1) Hazardous wastes may remain exposed after completion of partial or final closure; or

(2) Access by the public or domestic livestock may pose a hazard to human health.

(c) Post-closure use of property on or in which hazardous wastes remain after partial or final closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the facility's monitoring systems, unless the Regional Administrator finds that the disturbance:

(1) Is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

(2) Is necessary to reduce a threat to human health or the environment.

(d) All post-closure care activities must be in accordance with the provisions of the approved post-closure plan as specified in § 264.118.

§ 264.118 Post-closure plan; amendment of plan.

(a) *Written Plan.* The owner or operator of a hazardous waste disposal unit must have a written post-closure plan. In addition, certain surface impoundments and waste piles from which the owner or operator intends to remove or decontaminate the hazardous wastes at partial or final closure are required by §§ 264.228(c)(1)(ii) and 264.258(c)(1)(ii) to have contingent post-closure plans. Owners or operators of surface impoundments and waste piles

not otherwise required to prepare contingent post-closure plans under §§ 264.228(c)(1)(ii) and 264.258(c)(1)(ii) must submit a post-closure plan to the Regional Administrator within 90 days from the date that the owner or operator or Regional administrator determines that the hazardous waste management unit must be closed as a landfill, subject to the requirements of §§ 264.117-264.120. The plan must be submitted with the permit application, in accordance with § 270.14(b)(13) of this Chapter, and approved by the Regional Administrator as part of the permit issuance procedures under Part 124 of this Chapter. In accordance with § 270.32 of this Chapter, the approved post-closure plan will become a condition of any RCRA permit issued.

(b) For each hazardous waste management unit subject to the requirements of this Section, the post-closure plan must identify the activities that will be carried on after closure of each disposal unit and the frequency of these activities, and include at least:

(1) A description of the planned monitoring activities and frequencies at which they will be performed to comply with Subparts F, K, L, M, and N of this Part during the post-closure care period; and

(2) A description of the planned maintenance activities, and frequencies at which they will be performed, to ensure:

(i) The integrity of the cap and final cover or other containment systems in accordance with the requirements of Subparts K, L, M, and N of this Part; and

(ii) The function of the monitoring equipment in accordance with the requirements of Subparts F, K, L, M, and N of this Part; and

(3) The name, address, and phone number of the person or office to contact about the hazardous waste disposal unit or facility during the post-closure care period.

(c) Until final closure of the facility, a copy of the approved post-closure plan must be furnished to the Regional Administrator upon request, including request by mail. After final closure has been certified, the person or office specified in § 264.188(b)(3) must keep the approved post-closure plan during the remainder of the post-closure period.

(d) *Amendment of plan.* The owner or operator must request a permit modification to authorize a change in the approved post-closure plan in accordance with the applicable requirements of Parts 124 and 270. The written request must include a copy of the amended post-closure plan for approval by the Regional Administrator.

(1) The owner or operator may submit a written request to the Regional Administrator for a permit modification to amend the post-closure plan at any time during the active life of the facility or during the post-closure care period.

(2) The owner or operator must submit a written request for a permit modification to authorize a change in the approved post-closure plan whenever:

(i) Changes in operating plans or facility design affect the approved post-closure plan, or

(ii) There is a change in the expected year of final closure, if applicable, or

(iii) Events which occur during the active life of the facility, including partial and final closures, affect the approved post-closure plan.

(3) The owner or operator must submit a written request for a permit modification at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the post-closure plan. An owner or operator of a surface impoundment or waste pile that intends to remove all hazardous waste at closure and is not otherwise required to submit a contingent post-closure plan under §§ 264.228(c)(1)(ii) and 264.258(c)(1)(ii) must submit a post-closure plan to the Regional Administrator no later than 90 days after the date that the owner or operator or Regional Administrator determines that the hazardous waste management unit must be closed as a landfill, subject to the requirements of § 264.310. The Regional Administrator will approve, disapprove or modify this plan in accordance with the procedures in Parts 124 and 270. In accordance with § 270.32 of this Chapter, the approved post-closure plan will become a permit condition.

(4) The Regional Administrator may request modifications to the plan under the conditions described in § 264.118(d)(2). The owner or operator must submit the modified plan no later than 60 days after the Regional Administrator's request, or no later than 90 days if the unit is a surface impoundment or waste pile not previously required to prepare a contingent post-closure plan. Any modifications requested by the Regional Administrator will be approved, disapproved, or modified in accordance with the procedures in Parts 124 and 270.

§ 264.119 Post-closure notices.

(a) No later than 60 days after certification of closure of each hazardous waste disposal unit, the owner or operator must submit to the

local zoning authority, or the authority with jurisdiction over local land use, and to the Regional Administrator a record of the type, location, and quantity of hazardous wastes disposed of within each cell or other disposal unit of the facility. For hazardous wastes disposed of before January 12, 1981, the owner or operator must identify the type, location, and quantity of the hazardous wastes to the best of his knowledge and in accordance with any records he has kept.

(b) Within 60 days of certification of closure of the first hazardous waste disposal unit and within 60 days of certification of closure of the last hazardous waste disposal unit, the owner or operator must:

(1) Record, in accordance with State law, a notation on the deed to the facility property—or on some other instrument which is normally examined during title search—that will in perpetuity notify any potential purchaser of the property that:

(i) The land has been used to manage hazardous wastes; and

(ii) Its use is restricted under 40 CFR Subpart G regulations; and

(iii) The survey plat and record of the type, location, and quantity of hazardous wastes disposed of within each cell or other hazardous waste disposal unit of the facility required by § 264.116 and § 264.119(a) have been filed with the local zoning authority or the authority with jurisdiction over local land use and with the Regional Administrator; and

(2) Submit a certification, signed by the owner or operator, that he has recorded the notation specified in paragraph (b)(1) of this Section, including a copy of the document in which the notation has been placed, to the Regional Administrator.

(c) If the owner or operator or any subsequent owner or operator of the land upon which a hazardous waste disposal unit is located wishes to remove hazardous wastes and hazardous waste residues, the liner, if any, or contaminated soils, he must request a modification to the post-closure permit in accordance with the applicable requirements in Parts 124 and 270. The owner or operator must demonstrate that the removal of hazardous wastes will satisfy the criteria of § 264.117(c). By removing hazardous waste, the owner or operator may become a generator of hazardous waste and must manage it in accordance with all applicable requirements of this Chapter. If he is granted a permit modification or otherwise granted approval to conduct such removal activities, the owner or operator may

request that the Regional Administrator approve either:

(1) The removal of the notation on the deed to the facility property or other instrument normally examined during title search; or

(2) The addition of a notation to the deed or instrument indicating the removal of the hazardous waste.

§ 264.120 Certification of completion of post-closure care.

No later than 60 days after completion of the established post-closure care period for each hazardous waste disposal unit, the owner or operator must submit to the Regional Administrator, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the owner or operator and an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the Regional Administrator upon request until he releases the owner or operator from the financial assurance requirements for post-closure care under § 264.145(i).

Subpart H—Financial Requirements

40 CFR Part 264 Subpart H is amended as follows:

1. In § 264.141, the following term is added to paragraph (f) in alphabetical order:

§ 264.141 Definitions of terms as used in this subpart.

* * * * *

(f) * * *

"Current plugging and abandonment cost estimate" means the most recent of the estimates prepared in accordance with § 144.62(a), (b), and (c) of this title.

* * * * *

2. In § 264.142, paragraphs (a), introductory text of (b) and (c) are revised to read as follows:

§ 264.142 Cost estimate for closure.

(a) The owner or operator must have a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in §§ 264.111–264.115 and applicable closure requirements in §§ 264.178, 264.197, 264.228, 264.258, 264.280, 264.310, and 264.351.

(1) The estimate must equal the cost of final closure at the point in the facility's active life when the extent and manner of its operation would make closure the

most expensive, as indicated by its closure plan (see § 264.112(b)); and

(2) The closure cost estimate must be based on the costs to the owner or operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of parent corporation in § 264.141(d).) The owner or operator may use costs for on-site disposal if he can demonstrate that on-site disposal capacity will exist at all times over the life of the facility.

(3) The closure cost estimate may not incorporate any salvage value, that may be realized with the sale of hazardous wastes, facility structures or equipment, land, or other assets associated with the facility at the time of partial or final closure.

(4) The owner or operator may not incorporate a zero cost for hazardous wastes that might have economic value.

(b) During the active life of the facility, the owner or operator must adjust the closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with § 264.143. For owners and operators using the financial test or corporate guarantee, the closure cost estimate must be updated for inflation within 30 days after the close of the firm's fiscal year and before submission of updated information to the Regional Administrator as specified in § 264.143(f)(3). The adjustment may be made by recalculating the maximum costs of closure in current dollars, or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its *Survey of Current Business*, as specified in paragraphs (b)(1) and (b)(2) of this section. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(c) During the active life of the facility, the owner or operator must revise the closure cost estimate no later than 30 days after the Regional Administrator has approved the request to modify the closure plan, if the change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in § 264.142(b).

3. In § 264.143, paragraphs (a)(10), (b)(4)(ii), (c)(5), (d)(8), (e)(5), (f)(1)(i)(B), (f)(1)(i)(D), (f)(1)(ii)(B), (f)(1)(ii)(D), (f)(2), and (i) are revised to read as follows:

§ 264.143 Financial assurance for closure.

* * * * *

(a) * * *
(10) After beginning partial or final closure, an owner or operator or another person authorized to conduct partial or final closure may request reimbursements for partial or final closure expenditures by submitting itemized bills to the Regional Administrator. The owner or operator may request reimbursements for partial closure only if sufficient funds are remaining in the trust fund to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for partial or final closure activities, the Regional Administrator will instruct the trustee to make reimbursements in those amounts as the Regional Administrator specifies in writing, if the Regional Administrator determines that the partial or final closure expenditures are in accordance with the approved closure plan, or otherwise justified. If the Regional Administrator has reason to believe that the maximum cost of closure over the remaining life of the facility will be significantly greater than the value of the trust fund, he may withhold reimbursements of such amounts as he deems prudent until he determines, in accordance with § 264.143(i) that the owner or operator is no longer required to maintain financial assurance for final closure of the facility. If the Regional Administrator does not instruct the trustee to make such reimbursements, he will provide the owner or operator with a detailed written statement of reasons.

* * * * *

(b) * * *
(4) * * *
(ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an administrative order to begin final closure issued by the Regional Administrator becomes final, or within 15 days after an order to begin final closure is issued by a U.S. district court or other court of competent jurisdiction; or

* * * * *

(c) * * *
(5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a final administrative determination pursuant to section 3008 of RCRA that the owner or operator has failed to perform final closure in accordance with the approved closure plan and other permit requirements when required to do so, under the terms of the bond the surety will perform final closure as guaranteed by the bond or

will deposit the amount of the penal sum into the standby trust fund.

* * * * *

(d) * * *
(8) Following a final administrative determination pursuant to section 3008 of RCRA that the owner or operator has failed to perform final closure in accordance with the closure plan and other permit requirements when required to do so, the Regional Administrator may draw on the letter of credit.

* * * * *

(e) * * *
(5) After beginning partial or final closure, an owner or operator or any other person authorized to conduct closure may request reimbursements for closure expenditures by submitting itemized bills to the Regional Administrator. The owner or operator may request reimbursements for partial closure only if the remaining value of the policy is sufficient to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for closure activities, the Regional Administrator will instruct the insurer to make reimbursements in such amounts as the Regional Administrator specifies in writing, if the Regional Administrator determines that the partial or final closure expenditures are in accordance with the approved closure plan or otherwise justified. If the Regional Administrator has reason to believe that the maximum cost of closure over the remaining life of the facility will be significantly greater than the face amount of the policy, he may withhold reimbursements of such amounts as he deems prudent until he determines, in accordance with § 264.143(i), that the owner or operator is no longer required to maintain financial assurance for final closure of the facility. If the Regional Administrator does not instruct the insurer to make such reimbursements, he will provide the owner or operator with a detailed written statement of reasons.

* * * * *

(f) * * *
(1) * * *
(i) * * *

(B) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates; and

* * * * *

(D) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the

sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.

(ii) * * *

(B) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates; and

* * * * *

(D) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.

* * * * *

(2) The phrase "current closure and post-closure cost estimates" as used in paragraph (f)(1) of this section refers to the cost estimates required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer (§ 264.151(f)). The phrase "current plugging and abandonment cost estimates" as used in paragraph (f)(1) of this section refers to the cost estimates required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer (§ 144.70(f) of this title).

* * * * *

(i) Release of the owner or operator from the requirements of this section. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that final closure has been completed in accordance with the approved closure plan, the Regional Administrator will notify the owner or operator in writing that he is no longer required by this section to maintain financial assurance for final closure of the facility, unless the Regional Administrator has reason to believe that final closure has not been in accordance with the approved closure plan. The Regional Administrator shall provide the owner or operator a detailed written statement of any such reason to believe that closure has not been in accordance with the approved closure plan.

4. In § 264.144, paragraphs (a), the introductory text of (b), and paragraph (c) are revised to read as follows:

§ 264.144 Cost estimate for post-closure care.

(a) The owner or operator of a disposal surface impoundment, land treatment, or landfill unit, or of a surface impoundment or waste pile required under §§ 264.228 and 264.258 to prepare a contingent closure and post-closure plan, must have a detailed written

estimate, in current dollars, of the annual cost of post-closure monitoring and maintenance of the facility in accordance with the applicable post-closure regulations in §§ 264.117-264.120, 264.228, 264.258, 264.280, and 264.310.

(1) The post-closure cost estimate must be based on the costs to the owner or operator of hiring a third party to conduct post-closure care activities. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of parent corporation in § 264.141(d).)

(2) The post-closure cost estimate is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required under § 264.117.

(b) During the active life of the facility, the owner or operator must adjust the post-closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with § 264.145. For owners or operators using the financial test or corporate guarantee, the post-closure cost estimate must be updated for inflation within 30 days after the close of the firm's fiscal year and before the submission of updated information to the Regional Administrator as specified in § 264.145(f)(5). The adjustment may be made by recalculating the post-closure cost estimate in current dollars or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its *Survey of Current Business* as specified in § 264.145(b)(1) and (b)(2). The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

* * * * *

(c) During the active life of the facility, the owner or operator must revise the post-closure cost estimate within 30 days after the Regional Administrator has approved the request to modify the post-closure plan, if the change in the post-closure plan increases the cost of post-closure care. The revised post-closure cost estimate must be adjusted for inflation as specified in § 264.144(b).

* * * * *

5. In § 264.145, the introductory paragraph and paragraphs (a)(11), (b)(4)(ii), (c)(5), (d)(9), (e)(5), (f)(1)(i)(B), (f)(1)(i)(D), (f)(1)(ii)(B), (f)(1)(ii)(D), (f)(2), and (i) are revised to read as follows:

§ 264.145 Financial assurance for post-closure care.

The owner or operator of a hazardous waste management unit subject to the

requirements of § 264.144 must establish financial assurance for post-closure care in accordance with the approved post-closure plan for the facility 60 days prior to the initial receipt of hazardous waste or the effective date of the regulation, whichever is later. He must choose from the following options:

(a) * * *

(11) An owner or operator or any other person authorized to conduct post-closure care may request reimbursements for post-closure care expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for post-closure care activities, the Regional Administrator will instruct the trustee to make reimbursements in those amounts as the Regional Administrator specifies in writing, if the Regional Administrator determines that the post-closure care expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Regional Administrator does not instruct the trustee to make such reimbursements, he will provide the owner or operator with a detailed written statement of reasons.

* * * * *

(b) * * *

(4) * * *

(ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an administrative order to begin final closure issued by the Regional Administrator becomes final, or within 15 days after an order to begin final closure is issued by a U.S. district court or other court of competent jurisdiction; or

* * * * *

(c) * * *

(5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a final administrative determination pursuant to section 3008 of RCRA that the owner or operator has failed to perform post-closure care in accordance with the approved post-closure plan and other permit requirements, under the terms of the bond the surety will perform post-closure care in accordance with the post-closure plan and other permit requirements or will deposit the amount of the penal sum into the standby trust fund.

* * * * *

(d) * * *

(9) Following a final administrative determination pursuant to Section 3008 of RCRA that the owner or operator has failed to perform post-closure care in accordance with the approved post-

closure plan and other permit requirements, the Regional Administrator may draw on the letter of credit.

(e) An owner or operator or any other person authorized to conduct post-closure care may request reimbursements for post-closure care expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for post-closure care activities, the Regional Administrator will instruct the insurer to make reimbursements in those amounts as the Regional Administrator specifies in writing, if the Regional Administrator determines that the post-closure care expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Regional Administrator does not instruct the insurer to make such reimbursements, he will provide the owner or operator with a detailed written statement of reasons.

(f) (1) (i) (B) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates; and

(D) Assets in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.

(ii) (B) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates; and

(D) Assets located in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.

(2) The phrase "current closure and post-closure cost estimates" as used in paragraph (f)(1) of this section refers to the cost estimates required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer (§ 264.151(f)). The phrase "current plugging and abandonment cost estimates" as used in paragraph (f)(1) of this section refers to the cost estimates

required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer (§ 144.70(f) of this Title).

(i) Release of the owner or operator from the requirements of this Section. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that the post-closure care period has been completed for a hazardous waste disposal unit in accordance with the approved plan, the Regional Administrator will notify the owner or operator that he is no longer required to maintain financial assurance for post-closure care of that unit, unless the Regional Administrator has reason to believe that post-closure care has not been in accordance with the approved post-closure plan. The Regional Administrator shall provide the owner or operator with a detailed written statement of any such reason to believe that post-closure care has not been in accordance with the approved post-closure plan.

6. In § 264.147, paragraph (e) is revised to read as follows:

§ 264.147 Liability requirements.

(e) Period of coverage. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that final closure has been completed in accordance with the approved closure plan, the Regional Administrator will notify the owner or operator in writing that he is no longer required by this Section to maintain liability coverage for that facility, unless the Regional Administrator has reason to believe that closure has not been in accordance with the approved closure plan.

7. In § 264.151 paragraph (b) is revised and paragraphs (f)(5) and (g)(5) are added to read as follows:

§ 264.151 Wording of the Instruments.

(b) A surety bond guaranteeing payment into a trust fund, as specified in § 264.143(b) or § 264.145(b) or § 265.143(b) or § 265.145(b) of this Chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Financial Guarantee Bond
Date bond executed:
Effective date:
Principal: [legal name and business address of owner or operator]

Type of Organization: [insert "individual," "joint venture," "partnership," or "corporation"]
State of incorporation:
Surety(ies): [name(s) and business address(es)]
EPA Identification Number, name, address and closure and/or post-closure amount(s) for each facility guaranteed by this bond [indicate closure and post-closure amounts separately]:
Total penal sum of bond: \$
Surety's bond number:

Know All Persons By These Presents, That we, the Principal and Surety(ies) hereto are firmly bound to the U.S. Environmental Protection Agency (hereinafter called EPA), in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas said Principal is required, under the Resource Conservation and Recovery Act as amended (RCRA), to have a permit or interim status in order to own or operate each hazardous waste management facility identified above, and

Whereas said Principal is required to provide financial assurance for closure, or closure and post-closure care, as a condition of the permit or interim status, and

Whereas said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, Therefore, the conditions of the obligation are such that if the Principal shall faithfully, before the beginning of final closure of each facility identified above, fund the standby trust fund in the amount(s) identified above for the facility,

Or, if the Principal shall fund the standby trust fund in such amount(s) within 15 days after a final order to begin closure is issued by an EPA Regional Administrator or a U.S. district court or other court of competent jurisdiction,

(f) (5) This firm is the owner or operator of the following UIC facilities for which financial assurance for plugging and abandonment is required under Part 144. The current closure cost estimates as required by 40 CFR 144.62 are shown for each facility:

(g) (5) This firm is the owner or operator of the following UIC facilities for which financial assurance for plugging and

abandonment is required under Part 144. The current closure cost estimates as required by 40 CFR 144.62 are shown for each facility:

* * * * *

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

40 CFR Part 265 is amended as follows:

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

Authority: Secs. 1006, 2002(a), 3004, 3005 and 3015 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6924, 6925 and 6935).

2. In 40 CFR Part 265 Subpart G, §§ 265.110–265.120 are revised as follows:

Subpart G—Closure and Post-Closure

- 265.110 Applicability.
- 265.111 Closure performance standard.
- 265.112 Closure plan; amendment of plan.
- 265.113 Closure; time allowed for closure.
- 265.114 Disposal or decontamination of equipment, structures and soils.
- 265.115 Certification of closure.
- 265.116 Survey plat.
- 265.117 Post-closure care and use of property.
- 265.118 Post-closure plan; amendment of plan.
- 265.119 Post-closure notices.
- 265.120 Certification of completion of post-closure care.

Subpart G—Closure and Post-Closure

§ 265.110 Applicability.

Except as § 265.1 provides otherwise:

(a) Sections 265.111–265.115 (which concern closure) apply to the owners and operators of all hazardous waste management facilities; and

(b) Sections 265.116–265.120 (which concern post-closure care) apply to the owners and operators of:

(1) All hazardous waste disposal facilities; and

(2) Waste piles and surface impoundments for which the owner or operator intends to remove the wastes at closure to the extent that these Sections are made applicable to such facilities in §§ 265.228 or 265.258.

§ 265.111 Closure performance standard.

The owner or operator must close the facility in a manner that:

(a) Minimizes the need for further maintenance, and

(b) Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-

closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere, and

(c) Complies with the closure requirements of this Subpart including, but not limited to, the requirements of §§ 265.197, 265.228, 265.258, 265.280, 265.310, 265.351, 265.381 and 265.404.

§ 265.112 Closure plan; amendment of plan.

(a) *Written plan.* By May 19, 1981, the owner or operator of a hazardous waste management facility must have a written closure plan. Until final closure is completed and certified in accordance with § 265.115, a copy of the most current plan must be furnished to the Regional Administrator upon request, including request by mail. In addition, for facilities without approved plans, it must also be provided during site inspections, on the day of inspection, to any officer, employee or representative of the Agency who is duly designated by the Administrator.

(b) *Content of plan.* The plan must identify steps necessary to perform partial and/or final closure of the facility at any point during its active life. The closure plan must include, at least:

(1) A description of how each hazardous waste management unit at the facility will be closed in accordance with § 265.111; and

(2) A description of how final closure of the facility will be conducted in accordance with § 265.111. The description must identify the maximum extent of the operation which will be unclosed during the active life of the facility; and

(3) An estimate of the maximum inventory of hazardous wastes ever on-site over the active life of the facility and a detailed description of the methods to be used during partial and final closure, including, but not limited to methods for removing, transporting, treating, storing or disposing of all hazardous waste, identification of and the type(s) of off-site hazardous waste management unit(s) to be used, if applicable; and

(4) A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures, and soils during partial and final closure including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of

decontamination necessary to satisfy the closure performance standard; and

(5) A detailed description of other activities necessary during the partial and final closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including, but not limited to, ground-water monitoring, leachate collection, and run-on and run-off control; and

(6) A schedule for closure of each hazardous waste management unit and for final closure of the facility. The schedule must include, at a minimum, the total time required to close each hazardous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure. (For example, in the case of a landfill unit, estimates of the time required to treat or dispose of all hazardous waste inventory and of the time required to place a final cover must be included.); and

(7) An estimate of the expected year of final closure for facilities that use trust funds to demonstrate financial assurance under §§ 265.143 or 265.145 and whose remaining operating life is less than twenty years, and for facilities without approved closure plans.

(c) *Amendment of plan.* The owner or operator may amend the closure plan at any time prior to the notification of partial or final closure of the facility. An owner or operator with an approved closure plan must submit a written request to the Regional Administrator to authorize a change to the approved closure plan. The written request must include a copy of the amended closure plan for approval by the Regional Administrator.

(1) The owner or operator must amend the closure plan whenever:

(i) Changes in operating plans or facility design affect the closure plan, or

(ii) There is a change in the expected year of closure, if applicable, or

(iii) In conducting partial or final closure activities, unexpected events require a modification of the closure plan.

(2) The owner or operator must amend the closure plan at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the closure plan. If an unexpected event occurs during the partial or final closure period, the owner or operator must amend the closure plan no later than 30 days after the unexpected event. These provisions also apply to owners or operators of surface impoundments and waste piles who

intended to remove all hazardous wastes at closure, but are required to close as landfills in accordance with § 265.310.

(3) An owner or operator with an approved closure plan must submit the modified plan to the Regional Administrator at least 60 days prior to the proposed change in facility design or operation, or no more than 60 days after an unexpected event has occurred which has affected the closure plan. If an unexpected event has occurred during the partial or final closure period, the owner or operator must submit the modified plan no more than 30 days after the unexpected event. These provisions also apply to owners or operators of surface impoundments and waste piles who intended to remove all hazardous wastes at closure but are required to close as landfills in accordance with § 265.310. If the amendment to the plan is a major modification according to the criteria in § 270.41 and § 270.42, the modification to the plan will be approved according to the procedures in § 265.112(d)(4).

(4) The Regional Administrator may request modifications to the plan under the conditions described in paragraph (c)(1) of this Section. An owner or operator with an approved closure plan must submit the modified plan within 60 days of the request from the Regional Administrator, or within 30 days if the unexpected event occurs during partial or final closure. If the amendment is considered a major modification according to the criteria in §§ 270.41 and 270.42, the modification to the plan will be approved in accordance with the procedures in § 265.112(d)(4).

(d) *Notification of partial closure and final closure.*

(1) The owner or operator must submit the closure plan to the Regional Administrator at least 180 days prior to the date on which he expects to begin closure of the first surface impoundment, waste pile, land treatment, or landfill unit, or final closure if it involves such a unit, whichever is earlier. The owner or operator must submit the closure plan to the Regional Administrator at least 45 days prior to the date on which he expects to begin final closure of a facility with only tanks, container storage, or incinerator units. Owners or operators with approved closure plans must notify the Regional Administrator in writing at least 60 days prior to the date on which he expects to begin closure of a surface impoundment, waste pile, landfill, or land treatment unit, or final closure of a facility involving such a unit. Owners and operators with approved closure plans

must notify the Regional Administrator in writing at least 45 days prior to the date on which he expects to begin final closure of a facility with only tanks, container storage, or incinerator units.

(2) The date when he "expects to begin closure" must be either within 30 days after the date on which any hazardous waste management unit receives the known final volume of hazardous wastes or, if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous waste. If the owner or operator of a hazardous waste management unit can demonstrate to the Regional Administrator that the hazardous waste management unit or facility has the capacity to receive additional hazardous wastes and he has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all interim status requirements, the Regional Administrator may approve an extension to this one-year limit.

(3) The owner or operator must submit his closure plan to the Regional Administrator no later than 15 days after:

(i) Termination of interim status except when a permit is issued simultaneously with termination of interim status; or

(ii) Issuance of a judicial decree or final order under Section 3008 of RCRA to cease receiving hazardous wastes or close.

(4) The Regional Administrator will provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments on the plan and request modifications to the plan no later than 30 days from the date of the notice. He will also, in response to a request or at his own discretion, hold a public hearing whenever such a hearing might clarify one or more issues concerning a closure plan. The Regional Administrator will give public notice of the hearing at least 30 days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments, and the two notices may be combined.) The Regional Administrator will approve, modify, or disapprove the plan within 90 days of its receipt. If the Regional Administrator does not approve the plan he shall provide the owner or operator with a detailed written statement of reasons for the refusal and the owner or operator must modify the plan or submit a new plan for approval within 30 days

after receiving such written statement. The Regional Administrator will approve or modify this plan in writing within 60 days. If the Regional Administrator modifies the plan, this modified plan becomes the approved closure plan. The Regional Administrator must assure that the approved plan is consistent with §§ 265.111 through 265.115 and the applicable requirements of §§ 265.90 *et seq.*, 265.197, 265.228, 265.258, 265.280, 265.310, 265.351, 265.381, and 265.404. A copy of the modified plan with a detailed statement of reasons for the modifications must be mailed to the owner or operator.

(e) *Removal of wastes and decontamination or dismantling of equipment.* Nothing in this section shall preclude the owner or operator from removing hazardous wastes and decontaminating or dismantling equipment in accordance with the approved partial or final closure plan at any time before or after notification of partial or final closure.

§ 265.113 Closure; time allowed for closure.

(a) Within 90 days after receiving the final volume of hazardous wastes at a hazardous waste management unit or facility, or within 90 days after approval of the closure plan, whichever is later, the owner or operator must treat, remove from the unit or facility, or dispose of on-site, all hazardous wastes in accordance with the approved closure plan. The Regional Administrator may approve a longer period if the owner or operator demonstrates that:

(1)(i) The activities required to comply with this paragraph will, of necessity, take longer than 90 days to complete; or

(ii)(A) The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes; and

(B) There is a reasonable likelihood that he or another person will recommence operation of the hazardous waste management unit or the facility within one year; and

(C) Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and

(2) He has taken and will continue to take all steps to prevent threats to human health and the environment, including compliance with all applicable interim status requirements.

(b) The owner or operator must complete partial and final closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of

hazardous wastes at the hazardous waste management unit or facility, or 180 days after approval of the closure plan, if that is later. The Regional Administrator may approve an extension to the closure period if the owner or operator demonstrates that:

(1) (i) The partial or final closure activities will, of necessity, take longer than 180 days to complete; or

(ii) (A) The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes; and

(B) There is reasonable likelihood that he or another person will recommence operation of the hazardous waste management unit or the facility within one year; and

(C) Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and

(2) He has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but not operating hazardous waste management unit or facility, including compliance with all applicable interim status requirements.

(c) The demonstrations referred to in § 265.113(a) and (b) must be made as follows: (1) The demonstrations in paragraph (a) must be made at least 30 days prior to the expiration of the 90-day period in paragraph (a); and (2) The demonstrations in paragraph (b) must be made at least 30 days prior to the expiration of the 180-day period in paragraph (b).

§ 265.114 Disposal or decontamination of equipment, structures and soils.

During the partial and final closure periods, all contaminated equipment, structures and soil must be properly disposed of, or decontaminated unless specified otherwise in §§ 265.228, 265.258, 265.280, or 265.310. By removing all hazardous wastes or hazardous constituents during partial and final closure, the owner or operator may become a generator of hazardous waste and must handle that hazardous waste in accordance with all applicable requirements of Part 262 of this Chapter.

§ 265.115 Certification of closure.

Within 60 days of completion of closure of each hazardous waste surface impoundment, waste pile, land treatment, and landfill unit, and within 60 days of completion of final closure, the owner or operator must submit to the Regional Administrator, by registered mail, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in

the approved closure plan. The certification must be signed by the owner or operator and by an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the Regional Administrator upon request until he releases the owner or operator from the financial assurance requirements for closure under § 265.143(h).

§ 265.116 Survey plat.

No later than the submission of the certification of closure of each hazardous waste disposal unit, an owner or operator must submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Regional Administrator, a survey plat indicating the location and dimensions of landfill cells or other hazardous waste disposal units with respect to permanently surveyed benchmarks. This plat must be prepared and certified by a professional land surveyor. The plat filed with the local zoning authority, or the authority with jurisdiction over local land use must contain a note, prominently displayed, which states the owner's or operator's obligation to restrict disturbance of the hazardous waste disposal unit in accordance with the applicable Subpart G regulations.

§ 265.117 Post-closure care and use of property.

(a)(1) Post-closure care for each hazardous waste management unit subject to the requirements of §§ 265.117-265.120 must begin after completion of closure of the unit and continue for 30 years after that date. It must consist of at least the following:

(i) Monitoring and reporting in accordance with the requirements of Subparts F, K, L, M, and N of this Part; and

(ii) Maintenance and monitoring of waste containment systems in accordance with the requirements of Subparts F, K, L, M, and N of this part.

(2) Any time preceding closure of a hazardous waste management unit subject to post-closure care requirements or final closure, or any time during the post-closure period for a particular hazardous waste disposal unit, the Regional Administrator may:

(i) Shorten the post-closure care period applicable to the hazardous waste management unit, or facility, if all disposal units have been closed, if he finds that the reduced period is sufficient to protect human health and the environment (e.g., leachate or ground-water monitoring results,

characteristics of the hazardous waste, application of advanced technology, or alternative disposal, treatment, or re-use techniques indicate that the hazardous waste management unit or facility is secure); or

(ii) Extend the post-closure care period applicable to the hazardous waste management unit or facility, if he finds that the extended period is necessary to protect human health and the environment (e.g., leachate or ground-water monitoring results indicate a potential for migration of hazardous wastes at levels which may be harmful to human health and the environment).

(b) The Regional Administrator may require, at partial and final closure, continuation of any of the security requirements of § 265.14 during part or all of the post-closure period when:

(1) Hazardous wastes may remain exposed after completion of partial or final closure; or

(2) Access by the public or domestic livestock may pose a hazard to human health.

(c) Post-closure use of property on or in which hazardous wastes remain after partial or final closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the facility's monitoring systems, unless the Regional Administrator finds that the disturbance:

(1) Is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

(2) Is necessary to reduce a threat to human health or the environment.

(d) All post-closure care activities must be in accordance with the provisions of the approved post-closure plan as specified in § 265.118.

§ 265.118 Post-closure plan; amendment of plan.

(a) *Written plan.* By May 19, 1981, the owner or operator of a hazardous waste disposal unit must have a written post-closure plan. An owner or operator of a surface impoundment or waste pile that intends to remove all hazardous wastes at closure must prepare a post-closure plan and submit it to the Regional Administrator within 90 days of the date that the owner or operator or Regional Administrator determines that the hazardous waste management unit or facility must be closed as a landfill, subject to the requirements of §§ 265.117-265.120.

(b) Until final closure of the facility, a copy of the most current post-closure

plan must be furnished to the Regional Administrator upon request, including request by mail. In addition, for facilities without approved post-closure plans, it must also be provided during site inspections, on the day of inspection, to any officer, employee or representative of the Agency who is duly designated by the Administrator. After final closure has been certified, the person or office specified in § 265.118(c)(3) must keep the approved post-closure plan during the post-closure period.

(c) For each hazardous waste management unit subject to the requirements of this Section, the post-closure plan must identify the activities that will be carried on after closure of each disposal unit and the frequency of these activities, and include at least:

(1) A description of the planned monitoring activities and frequencies at which they will be performed to comply with Subparts F, K, L, M, and N of this Part during the post-closure care period; and

(2) A description of the planned maintenance activities, and frequencies at which they will be performed, to ensure:

(i) The integrity of the cap and final cover or other containment systems in accordance with the requirements of Subparts K, L, M, and N of this Part; and

(ii) The function of the monitoring equipment in accordance with the requirements of Subparts F, K, L, M, and N of this Part; and

(3) The name, address, and phone number of the person or office to contact about the hazardous waste disposal unit or facility during the post-closure care period.

(d) *Amendment of plan.* The owner or operator may amend the post-closure plan any time during the active life of the facility or during the post-closure care period. An owner or operator with an approved post-closure plan must submit a written request to the Regional Administrator to authorize a change to the approved plan. The written request must include a copy of the amended post-closure plan for approval by the Regional Administrator.

(1) The owner or operator must amend the post-closure plan whenever:

(i) Changes in operating plans or facility design affect the post-closure plan, or

(ii) Events which occur during the active life of the facility, including partial and final closures, affect the post-closure plan.

(2) The owner or operator must amend the post-closure plan at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has

occurred which has affected the post-closure plan.

(3) An owner or operator with an approved post-closure plan must submit the modified plan to the Regional Administrator at least 60 days prior to the proposed change in facility design or operation, or no more than 60 days after an unexpected event has occurred which has affected the post-closure plan. If an owner or operator of a surface impoundment or a waste pile who intended to remove all hazardous wastes at closure in accordance with §§ 265.228(b) or 265.258(a) is required to close as a landfill in accordance with § 265.310, the owner or operator must submit a post-closure plan within 90 days of the determination by the owner or operator or Regional Administrator that the unit must be closed as a landfill. If the amendment to the post-closure plan is a major modification according to the criteria in §§ 270.41 and 270.42, the modification to the plan will be approved according to the procedures in § 265.118(f).

(4) The Regional Administrator may request modifications to the plan under the conditions described in above paragraph (d)(1). An owner or operator with an approved post-closure plan must submit the modified plan no later than 60 days of the request from the Regional Administrator. If the amendment to the plan is considered a major modification according to the criteria in §§ 270.41 and 270.42, the modifications to the post-closure plan will be approved in accordance with the procedures in § 265.118(f). If the Regional Administrator determines that an owner or operator of a surface impoundment or waste pile who intended to remove all hazardous wastes at closure must close the facility as a landfill, the owner or operator must submit a post-closure plan for approval to the Regional Administrator within 90 days of the determination.

(e) The owner or operator of a facility with hazardous waste management units subject to these requirements must submit his post-closure plan to the Regional Administrator at least 180 days before the date he expects to begin partial or final closure of the first hazardous waste disposal unit. The date he "expects to begin closure" of the first hazardous waste disposal unit must be either within 30 days after the date on which the hazardous waste management unit receives the known final volume of hazardous waste or, if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent

volume of hazardous wastes. The owner or operator must submit the post-closure plan to the Regional Administrator no later than 15 days after:

(1) Termination of interim status (except when a permit is issued to the facility simultaneously with termination of interim status); or

(2) Issuance of a judicial decree or final orders under Section 3008 of RCRA to cease receiving wastes or close.

(f) The Regional Administrator will provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments on the post-closure plan and request modifications to the plan no later than 30 days from the date of the notice. He will also, in response to a request or at his own discretion, hold a public hearing whenever such a hearing might clarify one or more issues concerning a post-closure plan. The Regional Administrator will give public notice of the hearing at least 30 days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments, and the two notices may be combined.) The Regional Administrator will approve, modify, or disapprove the plan within 90 days of its receipt. If the Regional Administrator does not approve the plan he shall provide the owner or operator with a detailed written statement of reasons for the refusal and the owner or operator must modify the plan or submit a new plan for approval within 30 days after receiving such written statement. The Regional Administrator will approve or modify this plan in writing within 60 days. If the Regional Administrator modifies the plan, this modified plan becomes the approved post-closure plan. The Regional Administrator must ensure that the approved post-closure plan is consistent with §§ 265.117 through 265.120. A copy of the modified plan with a detailed statement of reasons for the modifications must be mailed to the owner or operator.

(g) The post-closure plan and length of the post-closure care period may be modified any time prior to the end of the post-closure care period in either of the following two ways:

(1) The owner or operator or any member of the public may petition the Regional Administrator to extend or reduce the post-closure care period applicable to a hazardous waste management unit or facility based on cause, or alter the requirements of the post-closure care period based on cause.

(i) The petition must include evidence demonstrating that:

(A) The secure nature of the hazardous waste management unit or facility makes the post-closure care requirement(s) unnecessary or supports reduction of the post-closure care period specified in the current post-closure plan (e.g., leachate or ground-water monitoring results, characteristics of the wastes, application of advanced technology, or alternative disposal, treatment, or re-use techniques indicate that the facility is secure), or

(B) The requested extension in the post-closure care period or alteration of post-closure care requirements is necessary to prevent threats to human health and the environment (e.g., leachate or ground-water monitoring results indicate a potential for migration of hazardous wastes at levels which may be harmful to human health and the environment).

(i) These petitions will be considered by the Regional Administrator only when they present new and relevant information not previously considered by the Regional Administrator. Whenever the Regional Administrator is considering a petition, he will provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments within 30 days of the date of the notice. He will also, in response to a request or at his own discretion, hold a public hearing whenever a hearing might clarify one or more issues concerning the post-closure plan. The Regional Administrator will give the public notice of the hearing at least 30 days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for written public comments, and the two notices may be combined.) After considering the comments, he will issue a final determination, based upon the criteria set forth in paragraph (g)(1) of this section.

(ii) If the Regional Administrator denies the petition, he will send the petitioner a brief written response giving a reason for the denial.

(2) The Regional Administrator may tentatively decide to modify the post-closure plan if he deems it necessary to prevent threats to human health and the environment. He may propose to extend or reduce the post-closure care period applicable to a hazardous waste management unit or facility based on cause or alter the requirements of the post-closure care period based on cause.

(i) The Regional Administrator will provide the owner or operator and the affected public, through a newspaper notice, the opportunity to submit written comments within 30 days of the date of the notice and the opportunity for a

public hearing as in subparagraph (g)(1)(ii) of this section. After considering the comments, he will issue a final determination.

(ii) The Regional Administrator will base his final determination upon the same criteria as required for petitions under paragraph (g)(1)(i) of this section. A modification of the post-closure plan may include, where appropriate, the temporary suspension rather than permanent deletion of one or more post-closure care requirements. At the end of the specified period of suspension, the Regional Administrator would then determine whether the requirement(s) should be permanently discontinued or reinstated to prevent threats to human health and the environment.

§ 265.119 Post-closure notices.

(a) No later than 60 days after certification of closure of each hazardous waste disposal unit, the owner or operator must submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Regional Administrator, a record of the type, location, and quantity of hazardous wastes disposed of within each cell or other disposal unit of the facility. For hazardous wastes disposed of before January 12, 1981, the owner or operator must identify the type, location and quantity of the hazardous wastes to the best of his knowledge and in accordance with any records he has kept.

(b) Within 60 days of certification of closure of the first hazardous waste disposal unit and within 60 days of certification of closure of the last hazardous waste disposal unit, the owner or operator must:

(1) Record, in accordance with State law, a notation on the deed to the facility property—or on some other instrument which is normally examined during title search—that will in perpetuity notify any potential purchaser of the property that:

(i) The land has been used to manage hazardous wastes; and

(ii) Its use is restricted under 40 CFR Subpart G regulations; and

(iii) The survey plat and record of the type, location, and quantity of hazardous wastes disposed of within each cell or other hazardous waste disposal unit of the facility required by § 265.116 and § 265.119(a) have been filed with the local zoning authority or the authority with jurisdiction over local land use and with the Regional Administrator; and

(2) Submit a certification signed by the owner or operator that he has recorded the notation specified in paragraph (b)(1) of this Section and a

copy of the document in which the notation has been placed, to the Regional Administrator.

(c) If the owner or operator or any subsequent owner of the land upon which a hazardous waste disposal unit was located wishes to remove hazardous wastes and hazardous waste residues, the liner, if any, and all contaminated structures, equipment, and soils, he must request a modification to the approved post-closure plan in accordance with the requirements of § 265.118(g). The owner or operator must demonstrate that the removal of hazardous wastes will satisfy the criteria of § 265.117(c). By removing hazardous waste, the owner or operator may become a generator of hazardous waste and must manage it in accordance with all applicable requirements of this Chapter. If the owner or operator is granted approval to conduct the removal activities, the owner or operator may request that the Regional Administrator approve either:

(1) The removal of the notation on the deed to the facility property or other instrument normally examined during title search, or

(2) The addition of a notation to the deed or instrument indicating the removal of the hazardous waste.

§ 265.120 Certification of completion of post-closure care.

No later than 60 days after the completion of the established post-closure care period for each hazardous waste disposal unit, the owner or operator must submit to the Regional Administrator, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the owner or operator and an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the Regional Administrator upon request until he releases the owner or operator from the financial assurance requirements for post-closure care under § 265.145(h).

Subpart H—Financial Requirements

40 CFR Part 265 Subpart H is amended as follows:

1. In § 265.140, paragraph (a) is revised as follows:

§ 265.140 Applicability.

(a) The requirements of §§ 265.142, 265.143 and 265.147 through 265.150 apply to owners or operators of all

hazardous waste facilities, except as provided otherwise in this section or in § 265.1.

2. In 40 CFR § 265.141, the following term is added to paragraph (f) in alphabetical order:

§ 265.141 [Amended]

(f) "Current plugging and abandonment cost estimate" means the most recent of the estimates prepared in accordance with § 144.62(a), (b), and (c) of this Title.

3. In § 265.142, paragraphs (a) and the introductory text of paragraph (b), and paragraph (c) are revised. Paragraphs (b)(i) and (b)(ii) are correctly designated as paragraphs (b)(1) and (b)(2), respectively.

§ 265.142 Cost estimate for closure.

(a) The owner or operator must have a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in §§ 265.111-265.115 and applicable closure requirements of §§ 265.178, 265.197, 265.228, 265.258, 265.280, 265.310, 265.351, 265.381 and 265.404.

(1) The estimate must equal the cost of final closure at the point in the facility's active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan (see § 265.112(b)); and

(2) The closure cost estimate must be based on the costs to the owner or operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of parent corporation in § 265.141(d).) The owner or operator may use costs for on-site disposal if he can demonstrate that on-site disposal capacity will exist at all times over the life of the facility.

(3) The closure cost estimate may not incorporate any salvage value that may be realized by the sale of hazardous wastes, facility structures or equipment, land or other facility assets at the time of partial or final closures.

(4) The owner or operator may not incorporate a zero cost for hazardous waste that might have economic value.

(b) During the active life of the facility, the owner or operator must adjust the closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with § 265.143. For owners and operators using the financial test or corporate guarantee, the closure cost estimate must be updated for inflation within 30 days after the close of the

firm's fiscal year and before submission of updated information to the Regional Administrator as specified in § 265.143(e)(3). The adjustment may be made by recalculating the closure cost estimate in current dollars, or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its *Survey of Current Business*, as specified in paragraphs (b)(1) and (b)(2) of this section. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(c) During the active life of the facility, the owner or operator must revise the closure cost estimate no later than 30 days after a revision has been made to the closure plan which increases the cost of closure. If the owner or operator has an approved closure plan, the closure cost estimate must be revised no later than 30 days after the Regional Administrator has approved the request to modify the closure plan, if the change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in § 265.142(b).

4. In § 265.143, paragraphs (a)(10), (b)(4)(ii), (c)(8), (d)(5), (e)(1)(i)(B), (e)(1)(i)(D), (e)(1)(ii)(B), (e)(1)(ii)(D), (e)(2), and (h) are revised as follows:

§ 265.143 Financial assurance for closure.

(a) (10) After beginning partial or final closure, an owner or operator or another person authorized to conduct partial or final closure may request reimbursements for partial or final closure expenditures by submitting itemized bills to the Regional Administrator. The owner or operator may request reimbursements for partial closure only if sufficient funds are remaining in the trust fund to cover the maximum costs of closing the facility over its remaining operating life. No later than 60 days after receiving bills for partial or final closure activities, the Regional Administrator will instruct the trustee to make reimbursements in those amounts as the Regional Administrator specifies in writing, if the Regional Administrator determines that the partial or final closure expenditures are in accordance with the approved closure plan, or otherwise justified. If the Regional Administrator has reason to believe that the maximum cost of closure over the remaining life of the facility will be significantly greater than

the value of the trust fund, he may withhold reimbursements of such amounts as he deems prudent until he determines, in accordance with § 265.143(h) that the owner or operator is no longer required to maintain financial assurance for final closure of the facility. If the Regional Administrator does not instruct the trustee to make such reimbursements, he will provide to the owner or operator a detailed written statement of reasons.

(b) *

(4) *

(ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an administrative order to begin final closure issued by the Regional Administrator becomes final, or within 15 days after an order to begin final closure is issued by a U.S. district court or other court of competent jurisdiction; or

(c) *

(8) Following a final administrative determination pursuant to Section 3008 of RCRA that the owner or operator has failed to perform final closure in accordance with the approved closure plan when required to do so, the Regional Administrator may draw on the letter of credit.

(d) *

(5) After beginning partial or final closure, an owner or operator or any other person authorized to conduct closure may request reimbursements for closure expenditures by submitting itemized bills to the Regional Administrator. The owner or operator may request reimbursements for partial closure only if the remaining value of the policy is sufficient to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for closure activities, the Regional Administrator will instruct the insurer to make reimbursements in such amounts as the Regional Administrator specifies in writing if the Regional Administrator determines that the partial or final closure expenditures are in accordance with the approved closure plan or otherwise justified. If the Regional Administrator has reason to believe that the maximum cost of closure over the remaining life of the facility will be significantly greater than the face amount of the policy, he may withhold reimbursement of such amounts as he deems prudent until he determines, in accordance with § 265.143(h), that the owner or operator is no longer required

to maintain financial assurance for final closure of the particular facility. If the Regional Administrator does not instruct the insurer to make such reimbursements, he will provide to the owner or operator a detailed written statement of reasons.

- * * *
- (e) * * *
- (1) * * *
- (i) * * *

(B) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates; and

(D) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.

(ii) * * *
(B) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates; and

(D) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.

(2) The phrase "current closure and post-closure cost estimates" as used in paragraph (e)(1) of this section refers to the cost estimates required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer (§ 264.151(f)). The phrase "current plugging and abandonment cost estimates" as used in paragraph (e)(1) of this section refers to the cost estimates required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer (§ 144.70(f) of this Title).

(h) Release of the owner or operator from the requirements of this Section.

Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that final closure has been completed in accordance with the approved closure plan, the Regional Administrator will notify the owner or operator in writing that he is no longer required by this Section to maintain financial assurance for final closure of the facility, unless the Regional Administrator has reason to believe that

final closure has not been in accordance with the approved closure plan. The Regional Administrator shall provide the owner or operator a detailed written statement of any such reason to believe that closure has not been in accordance with the approved closure plan.

5. In § 265.144, paragraphs (a), introductory text of (b) and (c) are revised to read as follows:

§ 265.144 Cost estimate for post-closure care.

(a) The owner or operator of a hazardous waste disposal unit must have a detailed written estimate, in current dollars, of the annual cost of post-closure monitoring and maintenance of the facility in accordance with the applicable post-closure regulations in §§ 265.117-265.120, 265.228, 265.258, 265.280, and 265.310.

(1) The post-closure cost estimate must be based on the costs to the owner or operator of hiring a third party to conduct post-closure care activities. A third party is a party who is neither a parent nor subsidiary of the owner or operator. (See definition of parent corporation in § 265.141(d).)

(2) The post-closure cost estimate is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required under § 265.117.

(b) During the active life of the facility, the owner or operator must adjust the post-closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with § 265.145. For owners or operators using the financial test or corporate guarantee, the post-closure care cost estimate must be updated for inflation no later than 30 days after the close of the firm's fiscal year and before submission of updated information to the Regional Administrator as specified in § 265.145(d)(5). The adjustment may be made by recalculating the post-closure cost estimate in current dollars or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its *Survey of Current Business* as specified in § 265.145 (b)(1) and (b)(2). The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(c) During the active life of the facility, the owner or operator must revise the post-closure cost estimate no later than 30 days after a revision to the post-closure plan which increases the cost of

post-closure care. If the owner or operator has an approved post-closure plan, the post-closure cost estimate must be revised no later than 30 days after the Regional Administrator has approved the request to modify the plan, if the change in the post-closure plan increases the cost of post-closure care. The revised post-closure cost estimate must be adjusted for inflation as specified in § 265.144(b).

4. In § 265.145, the introductory paragraph and paragraphs (a)(11), (b)(4)(ii), (c)(9), (d)(5), (e)(1)(i)(B), (e)(1)(i)(D), (e)(1)(ii)(B), (e)(1)(ii)(D), (e)(2), and (h) are revised as follows:

§ 265.145 Financial assurance for post-closure care.

By the effective date of these regulations, an owner or operator of a facility with a hazardous waste disposal unit must establish financial assurance for post-closure care of the disposal unit(s).

(11) An owner or operator or any other person authorized to conduct post-closure care may request reimbursements for post-closure expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for post-closure care activities, the Regional Administrator will instruct the trustee to make reimbursements in those amounts as the Regional Administrator specifies in writing, if the Regional Administrator determines that the post-closure expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Regional Administrator does not instruct the trustee to make such reimbursements, he will provide the owner or operator with a detailed written statement of reasons.

(ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an administrative order to begin final closure issued by the Regional Administrator becomes final, or within 15 days after an order to begin final closure is issued by a U.S. district court or other court of competent jurisdiction; or

(9) Following a final administrative determination pursuant to Section 3008 of RCRA that the owner or operator has failed to perform post-closure care in

accordance with the approved post-closure plan and other permit requirements, the Regional Administrator may draw on the letter of credit.

(d) * * *
(5) An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure care expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for post-closure care activities, the Regional Administrator will instruct the insurer to make reimbursements in those amounts as the Regional Administrator specifies in writing, if the Regional Administrator determines that the post-closure expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Regional Administrator does not instruct the insurer to make such reimbursements, he will provide a detailed written statement of reasons.

(e) * * *
(1) * * *
(j) * * *
(B) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates; and

(D) Assets in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.

(ii) * * *
(B) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates; and

(D) Assets located in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.

(2) The phrase "current closure and post-closure cost estimates" as used in paragraph (e)(1) of this section refers to the cost estimates required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer (§ 264.151(f)). The phrase "current plugging and abandonment cost estimates" as used in paragraph (e)(1) of this section refers to the cost estimates

required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer (§ 144.70(f) of this Title).

(h) *Release of the owner or operator from the requirements of this Section.*

Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that the post-closure care period has been completed in accordance with the approved post-closure plan, the Regional Administrator will notify the owner or operator in writing that he is no longer required by this Section to maintain financial assurance for post-closure care of that unit, unless the Regional Administrator has reason to believe that post-closure care has not been in accordance with the approved post-closure plan. The Regional Administrator will provide the owner or operator a detailed written statement of any such reason to believe that post-closure care has not been in accordance with the approved post-closure plan.

7. In § 265.147, paragraph (e) is revised to read as follows:

§ 265.147 Liability Requirements.

(e) *Period of coverage.* Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that final closure has been completed in accordance with the approved closure plan, the Regional Administrator will notify the owner or operator in writing that he is no longer required by this Section to maintain liability coverage for that facility, unless the Regional Administrator has reason to believe that closure has not been in accordance with the approved closure plan.

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

1. The authority citation for Part 270 continues to read as follows:

Authority: Secs. 1008, 2002, 3005, 3007, 3019, and 7004 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912, 6925, 6927, 6939, and 6974).

Subpart B—Permit Application

40 CFR Part 270 Subpart B is amended as follows:

2. In § 270.14, paragraphs (b)(14), (15) and (16) are revised to read as follows:

§ 270.14 Contents of Part B application: General requirements.

(b) * * *
(14) For hazardous waste disposal units that have been closed, documentation that notices required under §264.119 have been filed.

(15) The most recent closure cost estimate for the facility prepared in accordance with §264.142 and a copy of the documentation required to demonstrate financial assurance under § 264.143. For a new facility, a copy of the required documentation may be submitted 60 days prior to the initial receipt of hazardous wastes, if that is later than the submission of the Part B.

(16) Where applicable, the most recent post-closure cost estimate for the facility prepared in accordance with § 264.144 plus a copy of the documentation required to demonstrate financial assurance under § 264.145. For a new facility, a copy of the required documentation may be submitted 60 days prior to the initial receipt of hazardous wastes, if that is later than the submission of the Part B.

3. In § 270.42, paragraph (d) is revised to read as follows:

§ 270.42 Minor modifications of permits.

(d) Allow for a change in ownership or operational control of a facility where the Director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility between the current and new permittees has been submitted to the Director. Changes in the ownership or operational control of a facility may be made if the new owner or operator submits a revised permit application no later than 90 days prior to the scheduled change. When a transfer of ownership or operational control of a facility occurs, the old owner or operator shall comply with the requirements of 40 CFR 264, Subpart H (Financial Requirements), until the new owner or operator has demonstrated to the Director that he is complying with the requirements of that Subpart. The new owner or operator must demonstrate compliance with Subpart H requirements within six months of the date of the change in the ownership or operational control of the facility. Upon demonstration to the Director by the new owner or operator of compliance with Subpart H, the Director shall notify the old owner or operator in writing that he no longer needs to comply with

Subpart H as of the date of demonstration.

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4. In § 270.72, paragraph (d) is revised to read as follows:

§ 270.72 Changes during interim status.

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(d) Changes in the ownership or operational control of a facility may be made if the new owner or operator submits a revised Part A permit application no later than 90 days prior to the scheduled change. When a transfer

of ownership or operational control of a facility occurs, the old owner or operator shall comply with the requirements of 40 CFR 265, Subpart H (Financial Requirements), until the new owner or operator has demonstrated to the Director that he is complying with the requirements of that Subpart. The new owner or operator must demonstrate compliance with Subpart H requirements within six months of the date of the change in the ownership or operational control of the facility. Upon demonstration to the Director by the

new owner or operator of compliance with Subpart H, the Director shall notify the old owner or operator in writing that he no longer needs to comply with Subpart H as of the date of demonstration. All other interim status duties are transferred effective immediately upon the date of the change of ownership or operational control of the facility.

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