

TRANSMITTAL SHEET FOR
NOTICE OF INTENDED ACTION

Control 335 Department or Agency Environmental Management
Rule No. 335-14-5-.07
Rule Title: Closure and Post-Closure

 New X Amend Repeal Adopt by Reference

Would the absence of the proposed rule significantly harm or endanger the public health, welfare, or safety? YES

Is there a reasonable relationship between the state's police power and the protection of the public health, safety, or welfare? YES

Is there another, less restrictive method of regulation available that could adequately protect the public? NO

Does the proposed rule have the effect of directly or indirectly increasing the costs of any goods or services involved and, if so, to what degree? NO

Is the increase in cost, if any, more harmful to the public than the harm that might result from the absence of the proposed rule? NO

Are all facets of the rulemaking process designed solely for the purpose of, and so they have, as their primary effect, the protection of the public? YES

Does the proposed action relate to or affect in any manner any litigation which the agency is a party to concerning the subject matter of the proposed rule? NO

Does the proposed rule have an economic impact? NO

If the proposed rule has an economic impact, the proposed rule is required to be accompanied by a fiscal note prepared in accordance with subsection (f) of section 41-22-23, Code of Alabama 1975.

Certification of Authorized Official

I certify that the attached proposed rule has been proposed in full compliance with the requirements of Chapter 22, Title 41, Code of Alabama 1975, and that it conforms to all applicable filing requirements of the Administrative Procedure Division of the Legislative Services Agency.

Signature of certifying officer *Mary Elliott*

Date: July 21, 2020

REC'D & FILED
JUL 20 2020

(DATE FILED) LEGISLATIVE SVC AGENCY
(STAMP)

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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
LAND DIVISION

NOTICE OF INTENDED ACTION

AGENCY NAME: DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

RULE NO. & TITLE:

335-14-5-.01 General (Amend)
335-14-5-.02 General Facility Standards (Amend)
335-14-5-.06 Releases from Solid Waste Management Units (Amend)
335-14-5-.07 Closure and Post-Closure (Amend)
335-14-5-.10 Tank Systems (Amend)

INTENDED ACTION: Revise Division 14 of the ADEM Administrative Code.

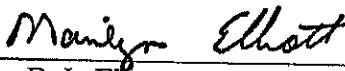
SUBSTANCE OR PROPOSED ACTION: Revise portions of Division 14 Regulations to incorporate changes to ensure consistency with State and Federal Statutes; to adopt certain State specific requirements; and to provide clarification of State requirements for the management of hazardous waste.

TIME, PLACE, MANNER OF PRESENTING VIEWS:

Comments may be submitted in writing or orally at a public hearing to be held September 17, 2020 at 10:30 AM in the Main Hearing Room at the ADEM Central Office located at 1400 Coliseum Boulevard, Montgomery, Alabama 36110.

FINAL DATE FOR COMMENT AND COMPLETION OF NOTICE: September 17, 2020

CONTACT PERSON AT AGENCY: Sonja Favors, Chief of the Industrial Hazardous Waste Branch, ADEM Land Division (334-279-3067)



Lance R. LeFleur
Director

335-14-5-.07 Closure and Post-Closure.

(1) Applicability. Except as 335-14-5-.01(1) provides otherwise:

(a) 335-14-5-.07(2) through (6) (which concern closure) apply to the owners and operators of all hazardous waste management facilities and CAMUs; and

(b) 335-14-5-.07(7) through (11) (which concern post-closure care) apply to the owners and operators of:

1. All hazardous waste disposal facilities;

2. Waste piles, surface impoundments, and drip pads from which the owner or operator intends to remove the wastes at closure to the extent that these paragraphs are made applicable to such facilities in 335-14-5-.12(9), 335-14-5-.11(9), or 335-14-5-.23(6);

3. Tank systems that are required under 335-14-5-.10(8) to meet the requirements for landfills;

4. Containment buildings that are required under 335-14-5-.30(3) to meet the requirements for landfills;

5. Corrective action management units in which wastes remain after closure; and

6. Other hazardous waste management units which are unable to demonstrate closure by removal.

(c) The Department may replace all or part of the requirements of 335-14-5-.07 (and the unit-specific standards referenced in 335-14-5-.07(2)(c) applying to a regulated unit, ~~which with~~ alternative requirements set out in a permit or in an enforceable document (as defined in 335-14-8-.01(1)(c)7.), where the Department determines that:

1. The regulated unit is situated among solid waste management units (or areas of concern), a release has occurred, and both the regulated unit and one or more solid waste management unit(s) (or areas of concern) are likely to have contributed to the release; and

2. It is not necessary to apply to closure requirements of 335-14-5-.07 (and those referenced herein) because the alternative requirements will protect human health and the environment and will satisfy the closure performance standard of 335-14-5-.07(2)(a) and (b).

(2) Closure performance standards. 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 335-14-5-.07, including, but not limited to, the requirements of 335-14-5-.09(9), 335-14-5-.10(8), 335-14-5-.11(9), 335-14-5-.12(9), 335-14-5-.13(11), 335-14-5-.14(11), 335-14-5-.15(12), 335-14-5-.19(1) through (3), 335-14-5-.23(6), 335-14-5-.24(2) through (4), 335-15-5-.30(3), and 335-14-7-.08(3) [40 CFR 266.102(e)(11)].

(3) 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, waste piles, and drip pads from which the owner or operator intends to remove or decontaminate the hazardous waste at partial or final closure are required by 335-14-5-.11(9)(c)1.(i), 335-14-5-.12(9)(c)1.(i), and 335-14-5-.23(6)(c)1.(i) to have contingent closure plans. The plan must be submitted with the permit application, in accordance with 335-14-8-.02(5)(b)13., and approved by the Director as part of the permit issuance procedures. In accordance with 335-14-8-.03(3), the approved closure plan will become a condition of any AHWMMMA permit.

2. The Director's approval of the plan must ensure that the approved closure plan is consistent with 335-14-5-.07(2) through (6) and the applicable requirements of 335-14-5-.06(1) et seq., 335-14-5-.09(9), 335-14-5-.10(8), 335-14-5-.11(9), 335-14-5-.12(9), 335-14-5-.13(11), 335-14-5-.14(11), 335-14-5-.15(12), 335-14-5-.19(1) through (3), 335-14-5-.23(6), 335-14-5-.24(2), 335-14-5-.30(3) and 335-14-7-.08(3) [40 CFR 266.102(e)(11)]. Until final closure is completed and certified in accordance with 335-14-5-.07(6), a copy of the approved plan and all approved revisions must be furnished to the Director upon request, including requests 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 335-14-5-.07(2);

2. A description of how final closure of the facility will be conducted in accordance with 335-14-5-.07(2). The description must identify the maximum extent of the operations which will be unclosed during the active life of the facility;

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;

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, groundwater monitoring, leachate collection, and run-on and run-off control; and

6. A schedule for closure for 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 335-14-5-.08(4) and (6) and that are expected to close prior to the expiration of the permit, an estimate of the expected year of final closure.

8. For facilities where the Department has applied alternative requirements at a regulated unit under 335-14-5-.06(1)(f), 335-14-5-.07(1)(c), and/or 335-14-5-.08(1)(e), either the alternative requirements applying to the regulated unit, or a reference to the enforceable document containing those alternative requirements.

(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 335-14-8. The written request must include a copy of the amended closure plan for review or approval by the Director.

1. The owner or operator may submit a written request to the Director 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.

(iv) The owner or operator requests the Department to apply alternative requirements to a regulated unit under 335-14-5-.06(1)(f), 335-14-5-.07(1)(c), and/or 335-14-5-.08(1)(e).

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, waste pile, or drip pad that intends to remove all hazardous waste at closure and is not otherwise required to prepare a contingent closure plan under 335-14-5-.11(9)(c)1.(i), 335-14-5-.12(9)(c)1.(i), or 335-14-5-.23(6)(c)1.(i) must submit an amended closure plan to the Department no later than 60 days from the date that the owner or operator or Director determines that the hazardous waste management unit must be closed as a landfill, subject to the requirements of 335-14-5-.14(11), or no later than 30 days from that date if the determination is made during partial or final closure. The Department will approve, disapprove, or modify this amended plan in accordance with the procedures in 335-14-8. In accordance with 335-14-8-.03(3), the approved closure plan will become a condition of any AHWMMMA permit issued.

4. The Department may request modifications to the plan under the conditions described in 335-14-5-.07(3)(c)2. The owner or operator must submit the modified plan within 60 days of the Department's request, or within 30 days if the change in facility conditions occurs during partial or final closure. Any modifications requested by the Department will be approved in accordance with the procedures in 335-14-8.

(d) Notification of partial closure and final closure.

1. The owner or operator must notify the Department 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 Department 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. The owner or operator must notify the Department in writing at least 45 days prior to the date on which he expects to begin partial or final closure of a boiler or industrial furnace, whichever is earlier.

2. The date when he "expects to begin closure" must be either:

(i) 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 Department that the hazardous waste management unit or facility has the capacity to receive additional hazardous wastes and he has taken all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the Department may approve an extension to this one-year limit; or

(ii) For units meeting the requirements of 335-14-5-.07(4)(d), no later than 30 days after the date on which the hazardous waste management unit receives the known final volume of non-hazardous wastes, or if there is a reasonable possibility that the hazardous waste management unit will receive additional non-hazardous wastes, no later than one year after the date on which the unit received the most recent volume of non-hazardous wastes. If the owner or operator can demonstrate to the Department that the hazardous waste management unit has the capacity to receive additional non-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 Department 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 335-14-5-.07(3) do not apply. However, the owner or operator must close the facility in accordance with the deadlines established in 335-14-5-.07(4).

(e) Nothing in 335-14-5-.07 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.

(4) Closure: time allowed for closure.

(a) Within 90 days after receiving the final volume of hazardous wastes, or the final volume of non-hazardous wastes if the owner or operator complies with all applicable requirements in 335-14-5-.07(4)(d) and (e), 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 Department 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 335-14-5-.07(4) will, of necessity, take longer than 90 days to complete; or

(ii)(I) The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes, or has the capacity to receive non-hazardous wastes if the owner or operator complies with 335-14-5-.07(4)(d) and (e);

(II) 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

(III) 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, or the final volume of non-hazardous wastes if the owner or operator complies with all applicable requirements in 335-14-5-.07(4)(d) and (e), at the hazardous waste management unit or facility. The Director 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)(I) The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes, or has the capacity to receive non-hazardous wastes if the owner or operator complies with 335-14-5-.07(4)(d) and (e);

(II) 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

(III) 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 335-14-5-.07(4)(a)1. and (b)1. must be made as follows:

1. The demonstrations in 335-14-5-.07(4)(a)1. must be made at least 30 days prior to the expiration of the 90-day period in 335-14-5-.07(4)(a); and

2. The demonstration in 335-14-5-.07(4)(b)1. must be made at least 30 days prior to the expiration of the 180-day period in 335-14-5-.07(4)(b), unless the owner or operator is otherwise subject to the deadlines in 335-14-5-.07(4)(d).

(d) The Department may allow an owner or operator to receive only non-hazardous wastes in a landfill, land treatment, or surface impoundment unit after the final receipt of hazardous wastes at that unit if:

1. The owner or operator requests a permit modification in compliance with all applicable requirements in 335-14-8 and in the permit; modification request demonstrates that:

(i) The unit has the existing design capacity as indicated on the Part A Application to receive non-hazardous wastes; and

(ii) There is a reasonable likelihood that the owner or operator or another person will receive non-hazardous wastes in the unit within one year after the final receipt of hazardous wastes; and

(iii) The non-hazardous wastes will not be incompatible with any remaining wastes in the unit, or with the facility design and operating requirements of the unit or facility under this part; and

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

(v) The owner or operator is operating and will continue to operate in compliance with all applicable permit requirements; and

2. The request to modify the permit includes an amended waste analysis plan, groundwater monitoring and response program, human exposure assessment required under RCRA Section 3019, and closure and post-closure plans, and updated cost estimates and demonstrations of financial assurance for closure and post-closure care as necessary and appropriate, to reflect any changes due to the presence of hazardous constituents in the non-hazardous wastes, and changes in closure activities, including the expected year of closure if applicable under 335-14-5-.07(3)(b)7., as a result of the receipt of non-hazardous wastes following the final receipt of hazardous wastes; and

3. The request to modify the permit includes revisions, as necessary and appropriate, to affected conditions of the permit to account for the receipt of non-hazardous wastes following receipt of the final volume of hazardous wastes; and

4. The request to modify the permit and the demonstrations referred to in 335-14-5-.07(4)(d)1. and (d)2. are submitted to the Director no later than 120 days prior to the date on which the owner or operator of the facility receives the known final volume of hazardous wastes at the unit, or no later than 90 days after the effective date of 335-14-5-.07, whichever is later.

(e) In addition to the requirements in 335-14-5-.07(4)(d), an owner or operator of a hazardous waste surface impoundment that is not in compliance with the liner and leachate collection system requirements in 42 U.S.C. 3004(o)(1) and 3005(j)(1) or 42 U.S.C. 3004(o)(2) or (3) or 3005(j)(2), (3), (4), or (13) must:

1. Submit with the request to modify the permit:
 - (i) A contingent corrective measures plan, unless a corrective action plan has already been submitted under 335-14-5-.06(10); and
 - (ii) A plan for removing hazardous wastes in compliance with 335-14-5-.07(4)(e)2.; and
2. Remove all hazardous wastes from the unit by removing all hazardous liquids, and removing all hazardous sludges to the extent practicable without impairing the integrity of the liner(s), if any.
3. Removal of hazardous wastes must be completed no later than 90 days after the final receipt of hazardous wastes. The Director may approve an extension to this deadline if the owner or operator demonstrates that the removal of hazardous wastes will, of necessity, take longer than the allotted period to complete and that an extension will not pose a threat to human health and the environment.
4. If a release that is a statistically significant increase (or decrease in the case of pH) over background values for detection monitoring parameters or constituents specified in the permit or that exceeds the facility's groundwater protection standard at the point of compliance, if applicable, is detected in accordance with the requirements in 335-14-5-.06, the owner or operator of the unit:
 - (i) Must implement corrective measures in accordance with the approved contingent corrective measures plan required by 335-14-5-.07(4)(e)1. no later than one year after detection of the release, or approval of the contingent corrective measures plan, whichever is later;
 - (ii) May continue to receive wastes at the unit following detection of the release only if the approved corrective measures plan includes a demonstration that continued receipt of wastes will not impede corrective action; and
 - (iii) May be required by the Director to implement corrective measures in less than one year or to cease the receipt of wastes until corrective measures have been implemented if necessary to protect human health and the environment.
5. During the period of corrective action, the owner or operator shall provide annual reports to the Director describing the progress of the corrective action program, compile all groundwater monitoring data, and evaluate the effect of the continued receipt of non-hazardous wastes on the effectiveness of the corrective action.
6. The Director may require the owner or operator to commence closure of the unit if the owner or operator fails to implement corrective action measures in accordance with the approved contingent corrective measures plan within one year as required in 335-14-5-.07(4)(e)4., or fails to make substantial progress in implementing corrective action and achieving the facility's groundwater protection standard or background levels if the facility has not yet established a groundwater protection standard.

7. If the owner or operator fails to implement corrective measures as required in 335-14-5-.07(4)(e)4. or if the Director determines that substantial progress has not been made pursuant to 335-14-5-.07(4)(e)6., he shall:

(i) Notify the owner or operator in writing that the owner or operator must begin closure in accordance with the deadlines in 335-14-5-.07(4)(a) and (b) and provide a detailed statement of reasons for this determination.

(ii) Provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments on the decision no later than 20 days after the date of the notice.

(iii) If the Director receives no written comments, the decision will become final five days after the close of the comment period. The Director will notify the owner or operator that the decision is final, and that a revised closure plan, if necessary, must be submitted within 15 days of the final notice and that closure must begin in accordance with the deadlines in 335-14-5-.07(4)(a) and (b).

(iv) If the Director receives written comments on the decision, he shall make a final decision within 30 days after the end of the comment period, and provide the owner or operator in writing and the public through a newspaper notice, a detailed statement of reasons for the final decision. If the Director determines that substantial progress has not been made, closure must be initiated in accordance with the deadlines in 335-14-5-.07(4)(a) and (b).

(v) The final determinations made by the Director under 335-14-5-.07(4)(e)7.(iii) and (iv) are not subject to administrative appeal.

(5) 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 335-14-5-.09(9), 335-14-5-.10(8), 335-14-5-.11(9), 335-14-5-.12(9), 335-14-5-.13(11), 335-14-5-.14(11), 335-14-5-.19(1) through (3), 335-14-5-.23(6), 335-14-5-.24, or 335-14-5-.30(3). 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 335-14-3.

(6) 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 Director, 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 professional engineer's certification must be furnished to the Director upon request until he releases the owner or operator from the financial assurance requirements for closure under 335-14-5-.08(4)(i).

(7) Survey plat.

(a) 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 Director, 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 requirements of 335-14-5-.07; and

(b) Where closure does not achieve the standard of unrestricted use, the owner or operator or other responsible person must provide documentation of compliance with the requirements of the Uniform Environmental Covenants Program in ADEM Admin. Code Division 335-5.

(8) Post-closure care and use of property.

(a)l. Post-closure care for each hazardous waste management unit subject to the requirements of 335-14-5-.07(8) through (11) must begin after completion of closure of the unit and continue for 30 years after that date, or for 30 years after the date of issuance of a post-closure permit or in an enforceable document (as defined in 335-14-8-.01(1)(c)7.), whichever is later. Post-closure care must consist of at least the following:

(i) Monitoring and reporting in accordance with the requirements of 335-14-5-.06, .11, .12, .13, .14, .23, and .24; and

(ii) Maintenance and monitoring of waste containment systems in accordance with the requirements of 335-14-5-.06, .11, .12, .13, .14, .23, and .24.

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 Department may, in accordance with the permit modification procedures in 335-14-8:

(i) Shorten the post-closure care period applicable to the hazardous waste management unit, or facility, if all disposal units have been closed, if it finds that the reduced period is sufficient to protect human health and the environment (e.g., leachate or groundwater monitoring results, characteristics of the hazardous wastes, application of advanced technology, or alternative disposal, treatment, or reuse 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 it finds that the extended period is necessary to protect human health and the environment (e.g., leachate or groundwater monitoring

results indicate a potential for migration of hazardous wastes at levels which may be harmful to human health and the environment).

(iii) The post-closure care period automatically extends through any time during which hazardous wastes remain in a hazardous waste management unit unless the owner/operator is able to demonstrate closure by removal in accordance with 335-14-8-.01(1)(c)5.

(b) The Department may require, at partial and final closure, continuation of any of the security requirements of 335-14-5-.02(5) during part or all of the post-closure care 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 Department 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 335-14-5-.07(9).

(9) 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, waste piles, and drip pads from which the owner or operator intends to remove or decontaminate the hazardous wastes at partial or final closure are required by 335-14-5-.11(9)(c)1.(ii), 335-14-5-.12(9)(c)1.(ii), and 335-14-5-.23(6)(c)1.(ii) to have contingent post-closure plans. Owners or operators of surface impoundments, waste piles, and drip pads not otherwise required to prepare contingent post-closure plans under 335-14-5-.11(9)(c)1.(ii), 335-14-5-.12(9)(c)1.(ii), and 335-14-5-.23(6)(c)1.(ii) and other hazardous waste management units and CAMUs which cannot demonstrate closure by removal must submit a post-closure plan to the Director within 90 days from the date that the owner or operator or Director determines that the hazardous waste management unit must be closed as a landfill, subject to the requirements of 335-14-5-.07(8) through (11). The plan must be submitted with the permit application, in accordance with 335-14-8-.02(5)(b)13. and approved by the Director as part of the

permit issuance procedures under 335-14-8. In accordance with 335-14-8-.03(3), the approved post-closure plan will become a condition of any AHWMMMA permit issued.

(b) For each hazardous waste management unit subject to the requirements of 335-14-5-.07, 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 335-14-5-.06, .09, .10, .11, .12, .13, .14, .19, .23, .24, and .30 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 335-14-5-.06, .09, .10, .11, .12, .13, .14, .19, .23, .24, and .30; and

(ii) The function of the monitoring equipment in accordance with the requirements of 335-14-5-.06, .09, .10, .11, .12, .13, .14, .19, .23, .24, and .30; 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.

4. For facilities where the Department has applied alternative requirements at a regulated unit under 335-14-5-.06(1)(f), 335-14-5-.07(1)(c), and/or 335-14-.08(1)(e), either the alternative requirements that apply to the regulated unit, or a reference to the enforceable document containing those requirements.

(c) Until final closure of the facility, a copy of the approved post-closure plan must be furnished to the Department upon request, including request by mail. After final closure has been certified, the person or office specified in 335-14-5-.07(9)(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 submit a written request for a permit modification to authorize a change in the approved post-closure plan in accordance with the applicable requirements of 335-14-8. The written request must include a copy of the amended post-closure plan for review or approval by the Department.

1. The owner or operator may submit a written request to the Department 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, or

(iv) The owner or operator requests the Department to apply alternative requirements to a regulated unit under 335-14-5-.06(1)(f), 335-14-5-.07(1)(c), and/or 335-14-5-.08(1)(e).

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, waste pile or drip pad that intends to remove all hazardous waste at closure and is not otherwise required to submit a contingent post-closure plan under 335-14-5-.11(9)(c)1.(ii), 335-14-5-.12(9)(c)1.(ii), and 335-14-5-.23(6)(c)1.(ii) must submit a post-closure plan to the Department no later than 90 days after the date that the owner or operator or Department determines that the hazardous waste management unit must be closed as a landfill, subject to the requirements of 335-14-5-.14(11). The Department will approve, disapprove, or modify this plan in accordance with the procedures in 335-14-8. In accordance with 335-14-8-.03(3), the approved post-closure plan will become a permit condition.

4. The Department may request modifications to the plan under the conditions described in 335-14-5-.07(9)(d)2. The owner or operator must submit the modified plan no later than 60 days after the Department's request, or no later than 90 days if the unit is a surface impoundment, waste pile, or drip pad not previously required to prepare a contingent post-closure plan. Any modifications requested by the Department will be approved, disapproved, or modified in accordance with the procedures in 335-14-8.

(10) 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 Department 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 of Alabama 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 335-14-5-.07; 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 335-14-5-.07(7) and 335-14-5-.07(10)(a) have been filed with the local zoning authority or the authority with jurisdiction over local land use and with the Department; and

2. Submit a certification, signed by the owner or operator, that he has recorded the notation specified in 335-14-5-.07(10)(b)1., including a copy of the document in which the notation has been placed, to the Department.

(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 335-14-8. The owner or operator must demonstrate that the removal of hazardous wastes will satisfy the criteria of 335-14-5-.07(8)(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 Division 335-14. If he is granted a permit modification or otherwise granted approval to conduct such removal activities, the owner or operator may request that the Director 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.

(11) 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 Department, 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 professional engineer's certification must be furnished to the Department upon request until the Director releases the owner or operator from the financial assurance requirements for post-closure care under 335-14-5-.08(6)(i).

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