

The Texas Commission on Environmental Quality (commission) adopts amendments to §§335.1, 335.2, 335.7, 335.111, 335.112, 335.116, 335.118, 335.119, 335.151, 335.152, 335.156, 335.167, and 335.179. Sections 335.1, 335.2, and 335.151 are adopted *with changes* to the proposed text as published in the September 27, 2002 issue of the *Texas Register* (27 TexReg 9115). Sections 335.7, 335.111, 335.112, 335.116, 335.118, 335.119, 335.152, 335.156, 335.167, and 335.179 are adopted *without changes* to the proposed text and will not be republished.

#### BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE ADOPTED RULES

The purpose of the adopted rules is to implement House Bill (HB) 2912, Article 5, §5.06, and Article 9, §9.07, 77th Legislature, 2001. HB 2912 amended Texas Health and Safety Code (THSC), §361.082 and Texas Water Code (TWC), §7.031. The commission now has the authority, consistent with federal law, to issue orders for “the closure, post-closure care, or other remediation of hazardous waste or hazardous waste constituents from a solid waste management unit at a solid waste processing, storage, or disposal facility.” Until the change made by the 77th Legislature, owners and operators of hazardous waste management units and facilities could only apply for, and the commission could only issue, post-closure permits. HB 2912 became effective on September 1, 2001.

In accordance with the 2001 amendments to THSC, §361.082 and TWC, §7.031, and consistent with federal law, the commission proposes to amend Chapter 335 to adopt certain requirements of the United States Environmental Protection Agency (EPA) amendments to 40 Code of Federal Regulations (CFR) Parts 264, 265, 270, and 271 as published in the October 22, 1998 issue of the *Federal Register* (63 FR 56509). The October 22, 1998 federal regulations allow EPA and authorized states to: 1) issue an

enforceable document in lieu of a post-closure permit for interim status units or facilities; and 2) substitute corrective action requirements (alternative standards) for closure requirements for regulated units in cases where there is a release and both a regulated unit and a solid waste management unit or area of concern have contributed to the release. An area of concern is any area of a facility under the control or ownership of an owner or operator where a release to the environment of hazardous waste(s) or hazardous constituent(s) has occurred, is suspected to have occurred, or may occur, regardless of the frequency or duration as published in the October 22, 1998 issue of the *Federal Register* (63 FR 56715).

The adopted rules will adopt certain requirements of the October 22, 1998 federal regulations. First, the adopted rules allow the commission to issue an order or permit for post-closure care for interim status units or facilities. Second, the adopted rules give the commission the discretion to approve corrective action requirements as an alternative to closure requirements when certain environmental conditions are met. The adopted rules also specify the public's involvement during three stages of the ordering process. Corresponding amendments are also adopted for 30 TAC Chapter 37, Financial Assurance; 30 TAC Chapter 39, Public Notice; 30 TAC Chapter 55, Request for Reconsideration and Contested Case Hearings; Public Comment; 30 TAC Chapter 80, Contested Case Hearings; and 30 TAC Chapter 305, Consolidated Permits, in this issue of the *Texas Register*.

Prior to the October 22, 1998 federal regulations, EPA and states were required to issue post-closure permits at interim status facilities even where the environmental risks associated with the facility were addressed through other authorities. According to EPA, the regions and states have encountered two

major difficulties when issuing post-closure permits at interim status facilities: 1) some facilities could not obtain post-closure permits because they could not comply with 40 CFR Part 265 standards, particularly groundwater monitoring and financial assurance; and 2) owners and operators of closed interim status facilities often had little incentive to seek a post-closure permit. Hoping to address these interim status facilities and to prescribe actions to address the most significant environmental risks, EPA allowed post-closure care requirements to be imposed for interim status units or facilities by either permit or an approved alternate authority in the October 22, 1998 amendments.

The October 22, 1998 federal regulations will impose the following requirements when post-closure care is approved under an alternate authority: 1) the requirements of new 40 CFR §265.121(a)(1), which imposes information requirements that are relevant to closed facilities needing permits only for post-closure care; 2) the requirements of new 40 CFR §265.121(a)(3), which applies 40 CFR Part 264 groundwater standards to the regulated unit; and 3) the requirements of new 40 CFR §265.121(a)(2), which imposes facility-wide corrective action consistent with 40 CFR §264.101.

The 77th Legislature granted the commission the authority, consistent with federal law, to issue orders for the closure, post-closure care, or other remediation of solid waste management units. The purpose of this rulemaking is to allow the use of alternate “enforceable documents” to authorize post-closure care and alternative corrective action requirements, consistent with federal law, i.e., the 1998 EPA federal regulations.

In addition to adopting changes made by the 77th Legislature and the October 22, 1998 federal regulations, the adopted rules will allow corrective action management units authorized under a corrective action management unit order to be eligible for a post-closure order and allow new corrective action management units to be authorized under a post-closure order. Corrective action management units authorized under a post-closure order must comply with the requirements of §335.167.

A corrective action management unit is defined as an area within a facility that is designated by the commission under 40 CFR Part 264, Subpart S, for the purpose of implementing corrective action requirements under §335.167 and TWC, §7.031 concerning corrective action related to hazardous waste. A corrective action management unit may only be used for the management of remediation wastes in accordance with implementing such corrective action requirements at the facility.

Authorization of post-closure activities under a post-closure order will be restricted to interim status land-based units at permitted and non-permitted (interim status) facilities. A facility is in interim status if its owners or operators have submitted their Part A hazardous waste permit application and remain compliant with the standards outlined in Chapter 335, Subchapter E.

Authorization to substitute corrective action requirements for closure requirements under a post-closure order will occur at the agency's discretion when releases from regulated units are commingled with releases from solid waste management units or areas of concern. The alternative corrective action requirements will have to be protective of human health and the environment in accordance with the corrective action requirements outlined in §335.167 for solid waste management units. Currently, the

Resource Conservation Recovery Act (RCRA) provides for only two methods of closure: 1) remove and/or decontaminate the waste; or 2) leave the waste in place. If waste is left in place, then a final cover and post-closure care with groundwater monitoring and maintenance are required. Corrective action alternatives, however, provide greater flexibility with more varied technologies than existing closure requirements while still protecting human health and the environment. The Texas Risk Reduction Program provided in 30 TAC Chapter 350 or, in cases where applicable, the commission's risk reduction rules provided in Chapter 335, Subchapter S, provide written criteria to define what is protective of human health and the environment. These alternatives will be available for a post-closure order or a permit.

In addition to relieving the facility from having to comply with two closure standards at the same remediation site, the alternative requirements will simplify response actions and reduce costs while still focusing on environmental results. Use of the alternative corrective action requirements will have to be set out in a permit and/or a post-closure order.

Post-closure activities for permitted units and solid waste management units that are identified in a permit for corrective action will not be eligible for post-closure orders unless they have contaminant plumes that are commingled. Post-closure activities at these permitted sites will be authorized under a post-closure permit rather than an order. Like post-closure permits, post-closure orders will be required to address facility-wide corrective action and implement the more comprehensive groundwater monitoring requirements established for permitted facilities under Chapter 335, Subchapter F. This will ensure that post-closure orders meet the same substantive technical requirements as those implemented

under post-closure permits. However, if a post-closure order is issued to authorize alternative corrective action requirements for commingled contaminant plumes at a permitted facility, then the permit will simply reference the post-closure order, which contains the alternate corrective action requirements.

Facility-wide corrective action provisions require that the owner or operator institute corrective action for all releases of hazardous waste or constituents regardless of whether the release occurred from a regulated hazardous waste management unit or a solid waste management unit. Groundwater monitoring systems for permitted units outlined in §§335.156 - 335.166 are typically more extensive and better able to immediately detect releases than those required for interim status facilities outlined in §335.116 and 40 CFR §§265.90 - 265.94. In accordance with 40 CFR §265.92, interim status groundwater monitoring is limited to a set of indicator parameters that are sampled at a prescribed frequency. Under post-closure orders, the facility will have to upgrade to a groundwater monitoring program prescribed for permitted units that evaluates site-specific constituents at a sampling frequency that is more responsive to site conditions. Groundwater monitoring programs for permitted facilities also stipulate response actions should a release be detected.

The adopted amendment to Chapter 37 will entail the minor addition of a post-closure order definition. The adopted amendments to Chapter 39 will add public participation requirements applicable to post-closure orders, including public notice, and an opportunity to comment on at least three occasions: 1) when the agency declares an application for a post-closure order administratively complete; 2) prior to final approval of the adopted post-closure order; and 3) at the time of a adopted decision that remedial

action is complete. The adopted amendment to Chapter 55 will specify how the executive director will prepare responses to public comments. An opportunity for a hearing will also be provided upon request by the executive director, the applicant, and the Public Interest Counsel, in accordance with the amendment adopted in Chapter 80. Like enforcement orders issued by the commission, affected persons will not be able to request a hearing. Consistent with the October 22, 1998 federal regulations, the adopted amendments to §305.50 are intended to streamline the application process for post-closure orders and post-closure permits. The financial assurance requirements for post-closure orders will be the same as for post-closure permits.

Post-closure orders will contain many of the components already in commission orders, including, but not limited to, jurisdiction, parties, statement of purpose, legal description of the facility, findings of fact, conclusions of law, technical requirements, dispute resolution, procedures for modifications and deadline extensions, order termination and renewal, commission remedies for noncompliance, reservation of rights, force majeure, statement of severability, and the effective date. In addition, while applicants may voluntarily apply for post-closure orders, nothing in this adopted rulemaking limits the commission's existing authority to issue an enforcement order containing post-closure technical requirements under the commission's authority in TWC, Chapter 7. However, the commission wishes to make a clear distinction between enforcement orders dealing with noncompliant operations and post-closure orders designed to authorize the post-closure care of hazardous waste management facilities or units. If a facility's noncompliance with post-closure requirements is an issue, then the commission intends that the noncompliance be corrected under an enforcement order, which in turn will require the

owner or operator to apply for and receive a post-closure order or permit. As such, the receipt of a post-closure order should not adversely impact a facility's compliance history.

The commission is not proposing to limit the authority of the commission to impose a post-closure order on a facility.

#### SECTION BY SECTION DISCUSSION

Administrative changes have been made throughout the sections for consistency with other commission rules and *Texas Register* requirements.

#### *Subchapter A - Industrial Solid Waste and Municipal Hazardous Waste Management in General*

Adopted §335.1, Definitions, adds the definition of "Post-closure order" in new paragraph (110).

Based on the comments received, the definition has been amended since proposal. A post-closure order is an order issued by the commission for post-closure care of interim status units, a corrective action management unit unless authorized by permit, or alternative corrective action requirements for contamination commingled from RCRA and solid waste management units. Subsequent paragraphs have been renumbered to accommodate the new definition. Paragraph (33) has been changed since proposal by deleting "pursuant to" and adding "in accordance with."

Adopted §335.2, Permit Required, allows the owners or operators the option of closure by decontamination in subsection (i), in addition to the closure by removal already provided in the rule.

This new language will make this subsection consistent with the corresponding federal regulations in 40

CFR §270.1(c). Subsection (i) is also adopted to be amended to relieve owners or operators from obtaining a post-closure permit if they have already obtained a post-closure order.

Adopted new §335.2(m) is added so that an owner or operator may, at the discretion of the commission, obtain an order in lieu of a post-closure permit. The option to obtain a post-closure order will apply only to interim status units at hazardous waste management facilities, corrective action management units not authorized under a permit, and regulated units and solid waste management units whose contaminant plumes are commingled. For post-closure issues, waste management units already addressed in a permit will remain under the permit and not transferred to orders. The order will have to address the facility-wide corrective action requirements of §335.167 and the groundwater monitoring requirements of §335.156. The alternative groundwater monitoring requirements will have to be set out in the order.

Adopted §335.7, Financial Assurance Required, extends the requirement for financial assurance provided in Chapter 37, Subchapter P, to post-closure orders.

*Subchapter E - Interim Standards for Owners and Operators of Hazardous Waste Storage, Processing, or Disposal Facilities*

Adopted §335.111, Purpose, Scope, and Applicability, adds new subsection (d) to identify specific requirements applicable to owners and operators who obtain a post-closure order in lieu of a post-closure permit. These requirements will include the submittal of the streamlined application outlined in §305.50(b), implementation of facility-wide corrective action in accordance with §335.167, compliance

with groundwater monitoring programs described in §§335.156 - 335.166, and adherence to the financial assurance requirements of Chapter 37, Subchapter P. The submittal of the application will be addressed in new subsection (d)(1). The requirement for facility-wide corrective action will be referred to in new subsection (d)(2). Compliance with groundwater monitoring requirements will be contained in new subsection (d)(3). Financial assurance requirements will be referred to in new subsection (d)(4).

New §335.111(e) gives the commission the discretion to substitute corrective action requirements for closure and post-closure requirements when releases from a regulated hazardous waste management unit are commingled with releases from solid waste management units or areas of concern. The closure requirements for interim status facilities are adopted from 40 CFR Subpart G, except for the closure requirements of land treatment units provided in §335.123. The alternative corrective action requirements will have to be protective of human health and the environment and meet the corrective action requirements outlined in §335.167 for solid waste management units. The Texas Risk Reduction Program provided in Chapter 350 or, in cases where applicable, the commission's risk reduction rules provided in Chapter 335, Subchapter S, provide written criteria to define what is protective of human health and the environment.

Adopted §335.112, Standards, updates references in subsection (a)(5) and (6) to the more recent amendments to 40 CFR Part 265 as published in the October 22, 1998 issue of the *Federal Register* (63 FR 56609).

Adopted §335.116, Applicability of Groundwater Monitoring Requirements, adds a reference to new subsection (g). Adopted new subsection (g) will allow the use of alternative groundwater monitoring requirements at regulated units when groundwater contaminant plumes from these units are commingled with contamination from a solid waste management unit or area of concern. The alternative groundwater monitoring requirements will have to be protective of human health and the environment and meet the corrective action requirements for solid waste management units outlined in §335.167 and §335.8.

Adopted §335.118, Closure Plan; Submission and Approval of Plan, clarifies that post-closure plans submitted in a post-closure order application will follow the public notice and comment requirements of Chapter 39, Subchapter N, Public Notice of Post-Closure Orders, rather than the requirements of this section. More specifically, an exception will be added to subsection (b) that directs the reader to new subsection (c) and the public notice and comment requirements specified in Chapter 39, Subchapter N.

Adopted §335.119, Post-Closure Plan; Submission and Approved of Plan, clarifies that post-closure plans submitted in a post-closure order application follow the public notice and comment requirements of Chapter 39, Subchapter N, rather than the requirements of this section. These amendments will include an exception in subsection (b) that directs the reader to new subsection (c) and the public notice and comment requirements specified in Chapter 39, Subchapter N. The title of this section will also be amended to correct a typographical error.

*Subchapter F - Permitting Standards for Owners and Operators of Hazardous Waste Storage, Processing, or Disposal Facilities*

Adopted §335.151, Purpose, Scope, and Applicability, adds new subsections (d) - (f). New subsection (d) will clarify that references made to permits in Subchapter F also apply to post-closure orders. New subsection (e) is adopted to allow facilities the use of alternative corrective action requirements when releases from regulated units are commingled with solid waste management units or areas of concern. At adoption, a reference was added to subsection (e)(2) to be consistent with other agency rules. New subsection (f) will require that a facility's permit reference any alternative groundwater monitoring and corrective action requirements that may be set out in an order.

The alternative requirements will have to be protective of human health and the environment. The intention will be to relieve the facility from having to comply with two sets of requirements in areas where releases from regulated units are commingled with solid waste management units or areas of concern. It will not be the intention of the agency to cancel or revoke a permit in favor of a post-closure order. If a facility has a permit, the alternative corrective action requirements could be addressed in the post-closure order which will be referenced in the permit. The commission recognizes that a completed RCRA facility assessment can demonstrate that portions of a facility are not subject to corrective action and may either be carved out of the existing permit or excluded from a post-closure order prior to issuance. Furthermore, nothing in these rules is intended to limit the commission's authority to revoke permits where all corrective action has been completed, no post-closure care is required, and an institutional control (e.g., deed notice) is relied upon to restrict post-closure land use.

Adopted §335.152, Standards, updates references in subsection (a)(5) to the more recent amendments to 40 CFR Part 264 as published in the October 22, 1998 issue of the *Federal Register* (63 FR 56709).

The amendments to 40 CFR Part 264, Subpart G, include the corrective action alternatives to closure requirements.

Adopted §335.156, Applicability of Groundwater Monitoring and Response, adds new subsection (a)(3) and (4). Adopted new subsection (a)(3) will give the commission the discretion to replace the language specified in §§335.157 - 335.166 with alternative requirements when releases from regulated units are commingled with releases from solid waste management units. The alternative groundwater monitoring requirements will have to be memorialized in a permit or post-closure order and must be protective of human health and the environment.

Corresponding amendments to subsection (a)(1) and (2) will reference the alternative requirements in subsection (a)(3) and identify the alternative groundwater monitoring requirements as an exception to the monitoring requirements specified in subsection (a)(2).

Adopted new subsection (a)(4) requires that a facility's permit reference any alternative groundwater monitoring and corrective action requirements that may be set out in an order.

Adopted §335.167, Corrective Action for Solid Waste Management Units, specifies that a facility-wide corrective action will also be required for facilities under a post-closure order. The requirement to

conduct facility-wide corrective action under post-closure orders will be inserted in new adopted subsection (c). Existing subsection (c) will be relettered to subsection (d).

Adopted §335.179, Financial Assurance, references post-closure orders. The added reference will subject facilities under post-closure orders to the same financial assurance requirements as permitted facilities.

#### FINAL REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the adopted rules in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the adopted rules do not meet the definition of a “major environmental rule” as defined in that statute. Major environmental rule means a rule the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The adopted rules are intended to protect the environment or reduce risks to human health from facilities that are required to obtain a post-closure permit, but have failed to do so, by bringing them into compliance through an alternative regulatory mechanism. However, they are not expected to adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The adopted rules will protect public health and safety by bringing into compliance those facilities that have not obtained a post-closure permit by providing an equally protective alternative. The adopted

rules also allow the agency the discretion to use corrective action requirements, rather than closure requirements, to address regulated units that have released hazardous constituents.

Even if the rules were considered to be a major environmental rule, Texas Government Code, §2001.0225, only applies to a major environmental rule, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law. These adopted rules do not meet any of these four applicability requirements. These adopted rules do not exceed any standard set by federal law for interim status units or facilities, or regulated units with releases of hazardous constituents, and in fact implement a federal regulation authorized by federal law. These adopted rules do not exceed the requirements of state law under THSC, Chapter 361 or TWC, Chapter 7; those chapters specifically allow the type of orders adopted in this rulemaking. There is no delegation agreement or contract between the state and an agency or representative of the federal government to implement any state and federal program specifically on post-closure orders; Texas' authorization, by the EPA, of the RCRA program does relate to post-closure activities, but the activities that will be authorized in accordance with these rules are authorized by EPA RCRA regulations. These rules are not adopted solely under the general powers of the agency, but specifically under THSC, §361.082 and TWC, §7.031, as well as the other general powers of the agency.

#### TAKINGS IMPACT ASSESSMENT

The commission has prepared a takings impact assessment for these adopted rules in accordance with Texas Government Code, §2007.043. The specific purpose of the adopted rules is to implement applicable requirements of HB 2912, which amended THSC, §361.082 and TWC, §7.031. The purpose of these adopted rules is to allow the commission to issue orders in lieu of permits for post-closure care at interim status facilities and to give the commission the discretion to approve corrective action requirements as an alternative to closure requirements when certain environmental conditions are met. The adopted rules substantially advance the stated purpose by incorporating the applicable requirements of HB 2912 and by amending the applicable provisions relating to corrective action requirements.

Promulgation and enforcement of these adopted rules will be neither a statutory nor a constitutional taking of private real property. Specifically, the adopted rules will not burden private real property, nor restrict or limit the owner's right to property, nor reduce its value by 25% or more beyond what will otherwise exist in the absence of these regulations. The rules merely allow the commission to issue an order in place of a permit for post-closure care at interim status facilities. Under existing rules, the facilities affected by this rulemaking are already required to obtain a permit. Thus, the adopted rules provide an option for a new mechanism to provide post-closure care. The adopted rules also allow for corrective action requirements as an alternative to closure requirements. Therefore, these adopted rules will not constitute a takings under Texas Government Code, Chapter 2007.

#### CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission has reviewed the adopted rules and found that the rules are identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(b)(2), relating to Actions and Rules Subject to the Texas Coastal Management Program (CMP), or they will affect an action/authorization identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(a)(6), and will therefore, require that applicable goals and policies of the CMP be considered during the rulemaking process.

The commission has prepared a consistency determination for the adopted rules in accordance with 31 TAC §505.22, and has found that the adopted rules are consistent with the applicable CMP goals and policies. The adopted rules are subject to the CMP and must be consistent with applicable goals and policies that are found in 31 TAC §501.12 and §501.14. The CMP goal applicable to the rules is the goal to protect, preserve, restore, and enhance the diversity, quality, quantity, functions, and values in Coastal Natural Resource Areas. The adopted rules do not govern any of the activities that are within the designated coastal zone management area or otherwise specifically identified under the Texas Coastal Management Act or related rules of the Coastal Coordination Council. The commission invited public comment on the CMP consistency determination, and no comments were received.

#### PUBLIC COMMENT

The public comment period closed October 28, 2002. The commenters were Thompson and Knight, L.L.P, on behalf of Lone Star Steel Company (Lone Star Steel); Lloyd, Gosselink, Blevins, Rochelle & Townsend, P.C. (Lloyd, Gosselink); and Chevron Environmental Management Company (CEMC).

## RESPONSE TO COMMENTS

Lone Star Steel commented that the commission should clarify in Chapters 335 that for those tracts where a RCRA facility assessment has been completed, only the regulated units requiring post-closure care and the remaining solid waste management units requiring investigation or corrective action be included in a post-closure order. The preambles currently state that once a RCRA facility assessment has been completed, portions of a facility could be carved out of the permit or order. Lone Star Steel suggested this language could be interpreted to mean that even property unrelated to waste management activities must first be included in the post-closure order and later removed.

**The commission agrees, in part, with this comment. It is true that the agency assumes, upon receipt for an application, that the entire facility is involved in active waste management and/or is subject to corrective action. This assumption is consistent with the requirement for facility-wide corrective action outlined in §335.167, as well as both definitions for facility, which specify contiguous property in §335.1(52). The application, therefore, must include an assessment of the entire facility. However, while processing the application and drafting the post-closure order, the agency considers the applicant's RCRA facility assessment. The RCRA facility assessment is the applicant's opportunity to demonstrate that portions of the facility should not be subject to regulatory oversight and are eligible for exclusion from the post-closure order. This may occur *prior* to the issuance of a post-closure order. In response to this comment, the preamble to the Chapter 335 rules has been changed to clarify that portions of a facility can be removed prior to a post-closure order being issued. The Section by Section Discussion portion of this preamble for §335.151 has been amended to read: "The commission recognizes that a completed RCRA facility**

**assessment can demonstrate that portions of a facility are not subject to corrective action and may either be carved out of the existing permit or excluded from a post-closure order prior to issuance.”**

Lone Star Steel also specifically asked “will only the regulated units requiring post-closure care and the remaining solid waste management units requiring investigation or corrective action be included in the Order?” Lone Star Steel noted that focusing the post-closure order on regulated units and solid waste management units would free those portions of larger tracts for productive use and contended that the broader “facility” definition used for corrective action is irrelevant once the solid waste management units have been identified. To narrow the focus to only the regulated units and solid waste management units, Lone Star proposed that the commission add to the end of §335.2(m) and its corresponding Section by Section Discussion in the preamble the following language: “In those instances in which the solid waste management units have been identified through a prior facility-wide investigation, the order shall address only the regulated units and any of the solid waste management units for which corrective action remains.”

**The commission agrees that eliminating portions of a facility free of potential corrective action from regulatory oversight and/or RCRA authorization as expressed in a post-closure order is desirable, but disagrees with proposed changes offered by this commenter. Enabling the reuse of these tracts is consistent with the policy of the state to protect our state's human and natural resources taking into consideration the economic development of the state. The commission disagrees, however, that identifying only the regulated units and solid waste management units as**

**subject to the post-closure order would sufficiently address the agency's concerns. In addition to regulated units and solid waste management units, there are areas of concern where a release of hazardous waste or hazardous constituents may have occurred. To protect human health and the environment and maintain consistency, the agency requires that the owner/operator address the potential risk from these areas of concerns the same as for solid waste management units.**

**Furthermore, the agency must be assured that access is clearly established and identified for each regulated unit, solid waste management unit, and area of concern. However, in order to avoid needlessly requiring an encumbrance of private property, the commission is willing to accept access that utilizes public roads, easements, and/or other methods of legal access when issuing a post-closure order. Note that any portion of a facility that is not addressed in a post-closure order is still subject to other regulations and associated corrective action programs should it become necessary to revisit the tracts for further assessment and cleanup. The commission has made no changes in response to this comment.**

Lone Star Steel also commented that the applicant's obligation to prepare and submit a description of the facility in the post-closure order application should be limited. Specifically, the application should contain only descriptions of the individual regulated units and allow solid waste management units to be identified on a map. Lone Star Steel contended that an applicant for a post-closure order should not be required to survey property that is not associated with waste management activity and "include extraneous property in the application and Order solely for the purpose of 'connecting' the scattered dots into a contiguous tract." Additionally, Lone Star Steel contended that an applicant should also not be required to submit a survey describing a contiguous tract of land that encompasses all the discrete

units addressed in a post-closure order. Lone Star Steel stated that the “one tract” approach is overly restrictive and costly and limits the property’s value and its availability for the Voluntary Cleanup Program in future land sales.

**The commission disagrees with this comment. Portions of the facility may not be carved out of a post-closure order until they are addressed by a RCRA facility assessment that covers all contiguous property under the control of the owner or operator or, in other words, the facility as defined in §335.1(52)(B) and 40 CFR §260.10. To determine whether a RCRA facility assessment has addressed the entire facility, the applicant needs to sufficiently describe the property in accordance with the requirements for a post-closure order application as provided in §305.50(b)(1). Section 305.50(b)(1) incorporates by reference the federal application requirements from 40 CFR §270.14(b)(19), which requires the applicant to submit a topographical map of the facility that contains the legal boundaries of the facility. It does not, however, require a new survey. The commission may accept existing certified maps that describe the entire facility and meet the requirements of 40 CFR §270.14(b)(19). In an issued post-closure order, the resulting facility boundary does not have to be contiguously owned by the applicant and may include discontinuous tracts where legal access is available, for example, through the use of public roadways or recorded easements. With respect to the individual regulated units and solid waste management units, any waste left in place may require that the event be recorded in the real property records. Specific requirements for deed notices or deed covenants, including metes and bounds descriptions and certified plat maps, are provided in §350.111 (Texas Risk Reduction**

**Program) and the risk reduction rules provided in Chapter 335, Subchapters A and S. The commission has made no changes in response to this comment.**

Lloyd, Gosselink and CEMC commented that the definition of post-closure order in §335.1(110) and §335.2(m) could be confused “to mean that corrective action management units (CAMUs) must be associated with commingled contamination in order to be eligible for a post-closure order.” CEMC and Lloyd, Gosselink suggested that the definition of post-closure order be changed to read: “an interim status unit, a corrective action management unit, or alternative corrective action requirements for contamination commingled from RCRA and solid waste management units.”

**The commission agrees with the proposed sequence of eligible units; however, the commission is retaining the language in the definition of post-closure order stipulating that corrective action management units are eligible “unless authorized by a permit.” The definition of a post-closure order in §335.1(110) has been changed to read: “an order issued by the commission for post-closure care of interim status units, a corrective action management unit unless authorized by permit, or alternative corrective action requirements for contamination commingled from RCRA and solid waste management units.” The discussion of post-closure orders in §335.2(m) has been changed to: “At the discretion of the commission, an owner or operator may obtain a post-closure order in lieu of a post-closure permit for interim status units, a corrective action management unit unless authorized by a permit, or alternative corrective action requirements for contamination commingled from RCRA and solid waste management units.”**

CEMC and Lloyd, Gosselink further commented that the preamble to the proposed rules rarely references the fact that corrective action management units are eligible for post-closure orders. They recommended that when the preamble references types of units and facilities eligible for post-closure orders, it should consistently include corrective action management units.

**The commission disagrees with this comment. The preamble devotes two entire paragraphs to the authorization of corrective action management units under the post-closure orders. Moreover, the definition of a post-closure order specifically notes the eligibility of corrective action management units not already authorized under a permit. The commission believes the applicability of post-closure orders to corrective action management units is adequately discussed in the preamble to these rules and makes no changes in response to this comment.**

CEMC and Lloyd, Gosselink commented that most references in the preamble indicate that it is either interim status “units and facilities” or interim status “facilities” that are eligible for post-closure orders. CEMC and Lloyd, Gosselink believed that interim status is only relevant to post-closure order eligibility as it relates to units, not facilities. They suggested that the adopted rule and preamble not reference interim status facilities, but only reference interim status units to avoid confusion about the eligibility of other types of units (e.g., corrective action management units) that might not be located at interim status facilities.

**The commission disagrees with the portion of the comment that regards not referencing interim status facilities in the rules or preamble. While interim status units are expected to receive the**

**most attention, interim status facilities do exist. As such, the ability to require facility-wide corrective action remains a concern of the commission. In addition, the commission is aware that there may be hazardous waste facilities that have not filed Part A and Part B hazardous waste permit applications. Although these facilities are not in interim status, they would, after discovery, be eligible for a post-closure order or permit and subject to the corresponding rules for facility-wide corrective action. The commission agrees that for additional clarity and consistency regarding “units” and “facilities,” the reference in the first paragraph in the Background and Summary of the Factual Basis for the Adopted Rules portion of this preamble has been amended to read: “Until the change made by the 77th Legislature, owners and operators of hazardous waste management units and facilities could only apply for, and the commission could only issue, post-closure permits.”**

Finally, CEMC and Lloyd, Gosselink commented on the relationship between RCRA permits and post-closure orders. The proposed preamble states that it is not the intention of the commission to cancel or revoke a permit in favor of a post-closure order. CEMC and Lloyd, Gosselink requested that the commission provide clarification in the preamble that “nothing in these rules is intended to limit the commission’s authority to revoke permits where permitted units have been remediated, no active post-closure care is required for those units, and an institutional control (e.g., deed notice) is relied upon to restrict post-closure land use.”

**The commission agrees in part with this comment and has added the following language to the Section by Section Discussion portion of the preamble in §335.151 to read: “Furthermore,**

**nothing in these rules is intended to limit the commission's authority to revoke permits where all corrective action has been completed, no post-closure care is required, and an institutional control (e.g., deed notice) is relied upon to restrict post-closure land use." The commission changed the suggested language relating to "remediation" to "corrective action" to retain consistency within the rules. Additionally, the commission eliminated the reference to "active" post-closure care because there is no regulatory basis for distinguishing between "active" and "inactive" post-closure care.**

**SUBCHAPTER A: INDUSTRIAL SOLID WASTE AND  
MUNICIPAL HAZARDOUS WASTE IN GENERAL**

**§§335.1, 335.2, 335.7**

**STATUTORY AUTHORITY**

The amendments are adopted under TWC, §5.103, which provides the commission with the authority to adopt rules necessary to carry out its power and duties under this code and other laws of this state; §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; §7.031, which authorizes the commission to issue an order for the closure, post-closure care, or other remediation of hazardous waste or hazardous waste constituents from a solid waste management unit at a solid waste processing, storage, or disposal facility; Solid Waste Disposal Act, THSC, §361.024, which authorizes the commission to adopt rules consistent with Chapter 361; and THSC, §361.082, which authorizes the commission to issue an order for the closure, post-closure care, or other remediation of hazardous waste or hazardous waste constituents from a solid waste management unit at a solid waste processing, storage, or disposal facility.

**§335.1. Definitions.**

In addition to the terms defined in Chapter 3 of this title (relating to Definitions), the following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly requires otherwise.

(1) **Aboveground tank** - A device meeting the definition of tank in this section and that is situated in such a way that the entire surface area of the tank is completely above the plane of the adjacent surrounding surface and the entire surface area of the tank (including the tank bottom) is able to be visually inspected.

(2) **Act** - Texas Health and Safety Code, Chapter 361.

(3) **Active life** - The period from the initial receipt of hazardous waste at the facility until the executive director receives certification of final closure.

(4) **Active portion** - That portion of a facility where processing, storage, or disposal operations are being or have been conducted after November 19, 1980, and which is not a closed portion. (See also "closed portion" and "inactive portion.")

(5) **Activities associated with the exploration, development, and protection of oil or gas or geothermal resources** - Activities associated with:

(A) the drilling of exploratory wells, oil wells, gas wells, or geothermal resource wells;

(B) the production of oil or gas or geothermal resources, including:

(i) activities associated with the drilling of injection water source wells that penetrate the base of usable quality water;

(ii) activities associated with the drilling of cathodic protection holes associated with the cathodic protection of wells and pipelines subject to the jurisdiction of the commission to regulate the production of oil or gas or geothermal resources;

(iii) activities associated with gasoline plants, natural gas or natural gas liquids processing plants, pressure maintenance plants, or repressurizing plants;

(iv) activities associated with any underground natural gas storage facility, provided the terms "natural gas" and "storage facility" shall have the meanings set out in the Texas Natural Resources Code, §91.173;

(v) activities associated with any underground hydrocarbon storage facility, provided the terms "hydrocarbons" and "underground hydrocarbon storage facility" shall have the meanings set out in the Texas Natural Resources Code, §91.173; and

(vi) activities associated with the storage, handling, reclamation, gathering, transportation, or distribution of oil or gas prior to the refining of such oil or prior to the use of such gas in any manufacturing process or as a residential or industrial fuel;

(C) the operation, abandonment, and proper plugging of wells subject to the jurisdiction of the commission to regulate the exploration, development, and production of oil or gas or geothermal resources; and

(D) the discharge, storage, handling, transportation, reclamation, or disposal of waste or any other substance or material associated with any activity listed in subparagraphs (A) - (C) of this paragraph, except for waste generated in connection with activities associated with gasoline plants, natural gas or natural gas liquids processing plants, pressure maintenance plants, or repressurizing plants if that waste is a hazardous waste as defined by the administrator of the EPA in accordance with the Federal Solid Waste Disposal Act, as amended (42 United States Code, §§6901 *et seq.*).

(6) **Administrator** - The administrator of the EPA or his designee.

(7) **Ancillary equipment** - Any device that is used to distribute, meter, or control the flow of solid waste or hazardous waste from its point of generation to a storage or processing tank(s), between solid waste or hazardous waste storage and processing tanks to a point of disposal on-site, or to a point of shipment for disposal off-site. Such devices include, but are not limited to, piping, fittings, flanges, valves, and pumps.

(8) **Aquifer** - A geologic formation, group of formations, or part of a formation capable of yielding a significant amount of groundwater to wells or springs.

(9) **Area of concern** - Any area of a facility under the control or ownership of an owner or operator where a release to the environment of hazardous wastes or hazardous constituents has occurred, is suspected to have occurred, or may occur, regardless of the frequency or duration.

(10) **Authorized representative** - The person responsible for the overall operation of a facility or an operation unit (i.e., part of a facility), e.g., the plant manager, superintendent, or person of equivalent responsibility.

(11) **Battery** - Has the definition adopted under §335.261 of this title (relating to Universal Waste Rule).

(12) **Boiler** - An enclosed device using controlled flame combustion and having the following characteristics:

(A) the unit must have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases;

(B) the unit's combustion chamber and primary energy recovery section(s) must be of integral design. To be of integral design, the combustion chamber and the primary energy recovery section(s) (such as waterwalls and superheaters) must be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not integrally designed;

however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because they are not of integral design:

(i) process heaters (units that transfer energy directly to a process stream); and

(ii) fluidized bed combustion units;

(C) while in operation, the unit must maintain a thermal energy recovery efficiency of at least 60%, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

(D) the unit must export and utilize at least 75% of the recovered energy, calculated on an annual basis. In this calculation, no credit shall be given for recovered heat used internally in the same unit. (Examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feedwater pumps); or

(E) the unit is one which the executive director has determined, on a case-by-case basis, to be a boiler, after considering the standards in §335.20 of this title (relating to Variance to be Classified as a Boiler).

(13) **Carbon regeneration unit** - Any enclosed thermal treatment device used to regenerate spent activated carbon.

(14) **Certification** - A statement of professional opinion based upon knowledge and belief.

(15) **Class 1 wastes** - Any industrial solid waste or mixture of industrial solid wastes which because of its concentration, or physical or chemical characteristics, is toxic, corrosive, flammable, a strong sensitizer or irritant, a generator of sudden pressure by decomposition, heat, or other means, or may pose a substantial present or potential danger to human health or the environment when improperly processed, stored, transported, or disposed of or otherwise managed, as further defined in §335.505 of this title (relating to Class 1 Waste Determination).

(16) **Class 2 wastes** - Any individual solid waste or combination of industrial solid waste which cannot be described as Hazardous, Class 1 or Class 3 as defined in §335.506 of this title (relating to Class 2 Waste Determination).

(17) **Class 3 wastes** - Inert and essentially insoluble industrial solid waste, usually including, but not limited to, materials such as rock, brick, glass, dirt, and certain plastics and rubber, etc., that are not readily decomposable, as further defined in §335.507 of this title (relating to Class 3 Waste Determination).

(18) **Closed portion** - That portion of a facility which an owner or operator has closed in accordance with the approved facility closure plan and all applicable closure requirements. (See also "active portion" and "inactive portion.")

(19) **Closure** - The act of permanently taking a waste management unit or facility out of service.

(20) **Commercial hazardous waste management facility** - Any hazardous waste management facility that accepts hazardous waste or polychlorinated biphenyl compounds for a charge, except a captured facility or a facility that accepts waste only from other facilities owned or effectively controlled by the same person, where "captured facility" means a manufacturing or production facility that generates an industrial solid waste or hazardous waste that is routinely stored, processed, or disposed of on a shared basis in an integrated waste management unit owned, operated by, and located within a contiguous manufacturing complex.

(21) **Component** - Either the tank or ancillary equipment of a tank system.

(22) **Confined aquifer** - An aquifer bounded above and below by impermeable beds or by beds of distinctly lower permeability than that of the aquifer itself; an aquifer containing confined groundwater.

(23) **Consignee** - The ultimate treatment, storage, or disposal facility in a receiving country to which the hazardous waste will be sent.

(24) **Container** - Any portable device in which a material is stored, transported, processed, or disposed of, or otherwise handled.

(25) **Containment building** - A hazardous waste management unit that is used to store or treat hazardous waste under the provisions of §335.152(a)(19) or §335.112(a)(21) of this title (relating to Standards).

(26) **Contaminant** - Includes, but is not limited to, “solid waste,” “hazardous waste,” and “hazardous waste constituent” as defined in this subchapter, “pollutant” as defined in Texas Water Code (TWC), §26.001, and Texas Health and Safety Code (THSC), §361.431, “hazardous substance” as defined in THSC, §361.003, and other substances that are subject to the Texas Hazardous Substances Spill Prevention and Control Act, TWC, §§26.261 - 26.268.

(27) **Contaminated medium/media** - A portion or portions of the physical environment to include soil, sediment, surface water, ground water or air, that contain contaminants at levels that pose a substantial present or future threat to human health and the environment.

(28) **Contingency plan** - A document setting out an organized, planned, and coordinated course of action to be followed in case of a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

(29) **Control** - To apply engineering measures such as capping or reversible treatment methods and/or institutional measures such as deed restrictions to facilities or areas with wastes or contaminated media which result in remedies that are protective of human health and the environment when combined with appropriate maintenance, monitoring, and any necessary further corrective action.

(30) **Corrective action management unit (CAMU)** - An area within a facility that is designated by the commission under 40 Code of Federal Regulations Part 264, Subpart S, for the purpose of implementing corrective action requirements under §335.167 of this title (relating to Corrective Action for Solid Waste Management Units) and Texas Water Code, §7.031 (Corrective Action related to Hazardous Waste). A CAMU shall only be used for the management of remediation wastes in accordance with implementing such corrective action requirements at the facility.

(31) **Corrosion expert** - A person who, by reason of his knowledge of the physical sciences and the principles of engineering and mathematics, acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person must be certified as being qualified by the National Association of Corrosion Engineers or be a registered professional engineer who has

certification or licensing that includes education and experience in corrosion control on buried or submerged metal piping systems and metal tanks.

(32) **Decontaminate** - To apply a treatment process(es) to wastes or contaminated media whereby the substantial present or future threat to human health and the environment is eliminated.

(33) **Designated facility** - A Class 1 or hazardous waste storage, processing, or disposal facility which has received an EPA permit (or a facility with interim status) in accordance with the requirements of 40 Code of Federal Regulations (CFR) Parts 270 and 124; a permit from a state authorized in accordance with 40 CFR Part 271 (in the case of hazardous waste); a permit issued in accordance with §335.2 of this title (relating to Permit Required) (in the case of nonhazardous waste); or that is regulated under §335.24(f), (g), or (h) of this title (relating to Requirements for Recyclable Materials and Nonhazardous Recyclable Materials) or §335.241 of this title (relating to Applicability and Requirements) and that has been designated on the manifest by the generator in accordance with §335.10 of this title (relating to Shipping and Reporting Procedures Applicable to Generators of Hazardous Waste or Class 1 Waste and Primary Exporters of Hazardous Waste). If a waste is destined to a facility in an authorized state which has not yet obtained authorization to regulate that particular waste as hazardous, then the designated facility must be a facility allowed by the receiving state to accept such waste.

(34) **Destination facility** - Has the definition adopted under §335.261 of this title (relating to Universal Waste Rule).

(35) **Dike** - An embankment or ridge of either natural or man-made materials used to prevent the movement of liquids, sludges, solids, or other materials.

(36) **Dioxins and furans (D/F)** - Tetra, penta, hexa, hepta, and octa-chlorinated dibenzo dioxins and furans.

(37) **Discharge or hazardous waste discharge** - The accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of waste into or on any land or water.

(38) **Disposal** - The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste (whether containerized or uncontainerized) into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including groundwaters.

(39) **Disposal facility** - A facility or part of a facility at which solid waste is intentionally placed into or on any land or water, and at which waste will remain after closure. The term “disposal facility” does not include a corrective action management unit into which remediation wastes are placed.

(40) **Drip pad** - An engineered structure consisting of a curbed, free-draining base, constructed of a non-earthen materials and designed to convey preservative kick-back or drippage from treated wood, precipitation, and surface water run-on to an associated collection system at wood preserving plants.

(41) **Elementary neutralization unit** - A device which:

(A) is used for neutralizing wastes which are hazardous only because they exhibit the corrosivity characteristic defined in 40 Code of Federal Regulations (CFR) §261.22, or are listed in 40 CFR Part 261, Subpart D, only for this reason; or is used for neutralizing the pH of non-hazardous industrial solid waste; and

(B) meets the definition of tank, tank system, container, transport vehicle, or vessel as defined in this section.

(42) **Environmental Protection Agency acknowledgment of consent** - The cable sent to EPA from the United States Embassy in a receiving country that acknowledges the written consent of the receiving country to accept the hazardous waste and describes the terms and conditions of the receiving country's consent to the shipment.

(43) **Environmental Protection Agency hazardous waste number** - The number assigned by the EPA to each hazardous waste listed in 40 Code of Federal Regulations (CFR) Part 261, Subpart D and to each characteristic identified in 40 CFR Part 261, Subpart C.

(44) **Environmental Protection Agency identification number** - The number assigned by the EPA or the commission to each generator, transporter, and processing, storage, or disposal facility.

(45) **Essentially insoluble** - Any material, which if representatively sampled and placed in static or dynamic contact with deionized water at ambient temperature for seven days, will not leach any quantity of any constituent of the material into the water in excess of current United States Public Health Service or EPA limits for drinking water as published in the *Federal Register*.

(46) **Equivalent method** - Any testing or analytical method approved by the administrator under 40 Code of Federal Regulations §260.20 and §260.21.

(47) **Existing portion** - That land surface area of an existing waste management unit, included in the original Part A permit application, on which wastes have been placed prior to the issuance of a permit.

(48) **Existing tank system or existing component** - A tank system or component that is used for the storage or processing of hazardous waste and that is in operation, or for which

installation has commenced on or prior to July 14, 1986. Installation will be considered to have commenced if the owner or operator has obtained all federal, state, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system and if either:

(A) a continuous on-site physical construction or installation program has begun; or

(B) the owner or operator has entered into contractual obligations - which cannot be canceled or modified without substantial loss - for physical construction of the site or installation of the tank system to be completed within a reasonable time.

(49) **Explosives or munitions emergency** - A situation involving the suspected or detected presence of unexploded ordnance, damaged or deteriorated explosives or munitions, an improvised explosive device, other potentially explosive material or device, or other potentially harmful military chemical munitions or device, that creates an actual or potential imminent threat to human health, including safety, or the environment, including property, as determined by an explosives or munitions emergency response specialist. These situations may require immediate and expeditious action by an explosives or munitions emergency response specialist to control, mitigate, or eliminate the threat.

(50) **Explosives or munitions emergency response** - All immediate response activities by an explosives and munitions emergency response specialist to control, mitigate, or eliminate the

actual or potential threat encountered during an explosives or munitions emergency, subject to the following:

(A) an explosives or munitions emergency response includes in-place render-safe procedures, treatment or destruction of the explosives or munitions and/or transporting those items to another location to be rendered safe, treated, or destroyed;

(B) any reasonable delay in the completion of an explosives or munitions emergency response caused by a necessary, unforeseen, or uncontrollable circumstance will not terminate the explosives or munitions emergency; and

(C) explosives and munitions emergency responses can occur on either public or private lands and are not limited to responses at hazardous waste facilities.

(51) **Explosives or munitions emergency response specialist** - An individual trained in chemical or conventional munitions or explosives handling, transportation, render-safe procedures, or destruction techniques, including United States Department of Defense (DOD) emergency explosive ordnance disposal, technical escort unit, and DOD-certified civilian or contractor personnel; and, other federal, state, or local government, or civilian personnel similarly trained in explosives or munitions emergency responses.

(52) **Extrusion** - A process using pressure to force ground poultry carcasses through a decreasing-diameter barrel or nozzle, causing the generation of heat sufficient to kill pathogens, and resulting in an extruded product acceptable as a feed ingredient.

(53) **Facility** - Includes:

(A) all contiguous land, and structures, other appurtenances, and improvements on the land, used for storing, processing, or disposing of municipal hazardous waste or industrial solid waste. A facility may consist of several storage, processing, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them);

(B) for the purpose of implementing corrective action under §335.167 of this title (relating to Corrective Action for Solid Waste Management Units), all contiguous property under the control of the owner or operator seeking a permit for the storage, processing, and/or disposal of hazardous waste. This definition also applies to facilities implementing corrective action under Texas Water Code, §7.031 (Corrective Action Relating to Hazardous Waste).

(54) **Final closure** - 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 Subchapter E of this chapter (relating to Interim Standards for Owners and Operators of Hazardous Waste Storage, Processing, or Disposal Facilities) and Subchapter F of this chapter (relating to Permitting Standards for Owners and Operators of Hazardous Waste Storage, Processing, or

Disposal Facilities) are no longer conducted at the facility unless subject to the provisions in §335.69 of this title (relating to Accumulation Time).

(55) **Food-chain crops** - Tobacco, crops grown for human consumption, and crops grown for feed for animals whose products are consumed by humans.

(56) **Freeboard** - The vertical distance between the top of a tank or surface impoundment dike, and the surface of the waste contained therein.

(57) **Free liquids** - Liquids which readily separate from the solid portion of a waste under ambient temperature and pressure.

(58) **Generator** - Any person, by site, who produces municipal hazardous waste or industrial solid waste; any person who possesses municipal hazardous waste or industrial solid waste to be shipped to any other person; or any person whose act first causes the solid waste to become subject to regulation under this chapter. For the purposes of this regulation, a person who generates or possesses Class 3 wastes only shall not be considered a generator.

(59) **Groundwater** - Water below the land surface in a zone of saturation.

(60) **Hazardous industrial waste** - Any industrial solid waste or combination of industrial solid wastes identified or listed as a hazardous waste by the administrator of the EPA in

accordance with the RCRA of 1976, §3001. The administrator has identified the characteristics of hazardous wastes and listed certain wastes as hazardous in 40 Code of Federal Regulations Part 261. The executive director will maintain in the offices of the commission a current list of hazardous wastes, a current set of characteristics of hazardous waste, and applicable appendices, as promulgated by the administrator.

(61) **Hazardous substance** - Any substance designated as a hazardous substance under the CERCLA, 40 Code of Federal Regulations Part 302.

(62) **Hazardous waste** - Any solid waste identified or listed as a hazardous waste by the administrator of the EPA in accordance with the federal Solid Waste Disposal Act, as amended by the RCRA, 42 United States Code §§6901 *et seq.*, as amended.

(63) **Hazardous waste constituent** - A constituent that caused the administrator to list the hazardous waste in 40 Code of Federal Regulations (CFR) Part 261, Subpart D or a constituent listed in Table 1 of 40 CFR §261.24.

(64) **Hazardous waste management facility** - All contiguous land, including structures, appurtenances, and other improvements on the land, used for processing, storing, or disposing of hazardous waste. The term includes a publicly- or privately-owned hazardous waste management facility consisting of processing, storage, or disposal operational hazardous waste management units such as one or more landfills, surface impoundments, waste piles, incinerators,

boilers, and industrial furnaces, including cement kilns, injection wells, salt dome waste containment caverns, land treatment facilities, or a combination of units.

(65) **Hazardous waste management unit** - A landfill, surface impoundment, waste pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or land treatment unit, or any other structure, vessel, appurtenance, or other improvement on land used to manage hazardous waste.

(66) **In operation** - Refers to a facility which is processing, storing, or disposing of solid waste or hazardous waste.

(67) **Inactive portion** - That portion of a facility which is not operated after November 19, 1980. (See also "active portion" and "closed portion.")

(68) **Incinerator** - Any enclosed device that:

(A) uses controlled flame combustion and neither meets the criteria for classification as a boiler, sludge dryer, or carbon regeneration unit, nor is listed as an industrial furnace; or

(B) meets the definition of infrared incinerator or plasma arc incinerator.

(69) **Incompatible waste** - A hazardous waste which is unsuitable for:

(A) placement in a particular device or facility because it may cause corrosion or decay of containment materials (e.g., container inner liners or tank walls); or

(B) commingling with another waste or material under uncontrolled conditions because the commingling might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, mists, fumes, or gases, or flammable fumes or gases.

(70) **Individual generation site** - The contiguous site at or on which one or more solid waste or hazardous wastes are generated. An individual generation site, such as a large manufacturing plant, may have one or more sources of solid waste or hazardous waste, but is considered a single or individual generation site if the site or property is contiguous.

(71) **Industrial furnace** - Includes any of the following enclosed devices that use thermal treatment to accomplish recovery of materials or energy:

(A) cement kilns;

(B) lime kilns;

(C) aggregate kilns;

(D) phosphate kilns;

(E) coke ovens;

(F) blast furnaces;

(G) smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters, and foundry furnaces);

(H) titanium dioxide chloride process oxidation reactors;

(I) methane reforming furnaces;

(J) pulping liquor recovery furnaces;

(K) combustion devices used in the recovery of sulfur values from spent sulfuric acid;

(L) halogen acid furnaces for the production of acid from halogenated hazardous waste generated by chemical production facilities where the furnace is located on the site of a chemical production facility, the acid product has a halogen acid content of at least 3.0%, the acid

product is used in a manufacturing process, and, except for hazardous waste burned as fuel, hazardous waste fed to the furnace has a minimum halogen content of 20% as generated; and

(M) other devices the commission may list, after the opportunity for notice and comment is afforded to the public.

(72) **Industrial solid waste** - Solid waste resulting from or incidental to any process of industry or manufacturing, or mining or agricultural operation, which may include hazardous waste as defined in this section.

(73) **Infrared incinerator** - Any enclosed device that uses electric powered resistance heaters as a source of radiant heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.

(74) **Inground tank** - A device meeting the definition of tank in this section whereby a portion of the tank wall is situated to any degree within the ground, thereby preventing visual inspection of that external surface area of the tank that is in the ground.

(75) **Injection well** - A well into which fluids are injected. (See also "underground injection.")

(76) **Inner liner** - A continuous layer of material placed inside a tank or container which protects the construction materials of the tank or container from the contained waste or reagents used to treat the waste.

(77) **Installation inspector** - A person who, by reason of his knowledge of the physical sciences and the principles of engineering, acquired by a professional education and related practical experience, is qualified to supervise the installation of tank systems.

(78) **International shipment** - The transportation of hazardous waste into or out of the jurisdiction of the United States.

(79) **Lamp** - Has the definition adopted under §335.261 of this title (relating to Universal Waste Rule).

(80) **Land treatment facility** - A facility or part of a facility at which solid waste or hazardous waste is applied onto or incorporated into the soil surface and that is not a corrective action management unit; such facilities are disposal facilities if the waste will remain after closure.

(81) **Landfill** - A disposal facility or part of a facility where solid waste or hazardous waste is placed in or on land and which is not a pile, a land treatment facility, a surface impoundment, an injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit.

(82) **Landfill cell** - A discrete volume of a solid waste or hazardous waste landfill which uses a liner to provide isolation of wastes from adjacent cells or wastes. Examples of landfill cells are trenches and pits.

(83) **Leachate** - Any liquid, including any suspended components in the liquid, that has percolated through or drained from solid waste or hazardous waste.

(84) **Leak-detection system** - A system capable of detecting the failure of either the primary or secondary containment structure or the presence of a release of solid waste or hazardous waste or accumulated liquid in the secondary containment structure. Such a system must employ operational controls (e.g., daily visual inspections for releases into the secondary containment system of aboveground tanks) or consist of an interstitial monitoring device designed to detect continuously and automatically the failure of the primary or secondary containment structure or the presence of a release of solid waste or hazardous waste into the secondary containment structure.

(85) **Liner** - A continuous layer of natural or man-made materials, beneath or on the sides of a surface impoundment, landfill, or landfill cell, which restricts the downward or lateral escape of solid waste or hazardous waste, hazardous waste constituents, or leachate.

(86) **Management or hazardous waste management** - The systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, and disposal of solid waste or hazardous waste.

(87) **Manifest** - The waste shipping document which accompanies and is used for tracking the transportation, disposal, treatment, storage, or recycling of shipments of hazardous wastes or Class 1 industrial solid wastes. The form used for this purpose is TNRCC-0311 (Uniform Hazardous Waste Manifest) which is furnished by the executive director or may be printed through the agency's "Print Your Own Manifest Program."

(88) **Manifest document number** - A number assigned to the manifest by the commission for reporting and recordkeeping purposes.

(89) **Military munitions** - All ammunition products and components produced or used by or for the Department of Defense (DOD) or the United States Armed Services for national defense and security, including military munitions under the control of the DOD, the United States Coast Guard, the United States Department of Energy (DOE), and National Guard personnel. The term "military munitions":

(A) includes confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DOD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof; and

(B) includes non-nuclear components of nuclear devices, managed under DOE's nuclear weapons program after all required sanitization operations under the Atomic Energy Act of 1954, as amended, have been completed; but

(C) does not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components thereof.

(90) **Miscellaneous unit** - A hazardous waste management unit where hazardous waste is stored, processed, or disposed of and that is not a container, tank, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, underground injection well with appropriate technical standards under Chapter 331 of this title (relating to Underground Injection Control), corrective action management unit, containment building, staging pile, or unit eligible for a research, development, and demonstration permit or under Chapter 305, Subchapter K of this title (relating to Research Development and Demonstration Permits).

(91) **Movement** - That solid waste or hazardous waste transported to a facility in an individual vehicle.

(92) **Municipal hazardous waste** - A municipal solid waste or mixture of municipal solid wastes which has been identified or listed as a hazardous waste by the administrator of the EPA.

(93) **Municipal solid waste** - Solid waste resulting from or incidental to municipal, community, commercial, institutional, and recreational activities; including garbage, rubbish, ashes, street cleanings, dead animals, abandoned automobiles, and all other solid waste other than industrial waste.

(94) **New tank system or new tank component** - A tank system or component that will be used for the storage or processing of hazardous waste and for which installation has commenced after July 14, 1986; except, however, for purposes of 40 Code of Federal Regulations (CFR) §264.193(g)(2) (incorporated by reference at §335.152(a)(8) of this title (relating to Standards)) and 40 CFR §265.193(g)(2) (incorporated by reference at §335.112(a)(9) of this title (relating to Standards)), a new tank system is one for which construction commences after July 14, 1986. (See also “existing tank system.”)

(95) **Off-site** - Property which cannot be characterized as on-site.

(96) **Onground tank** - A device meeting the definition of tank in this section and that is situated in such a way that the bottom of the tank is on the same level as the adjacent surrounding surface so that the external tank bottom cannot be visually inspected.

(97) **On-site** - The same or geographically contiguous property which may be divided by public or private rights-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing, as opposed to going along, the right-of-way.

Noncontiguous properties owned by the same person but connected by a right-of-way which he controls and to which the public does not have access, is also considered on-site property.

(98) **Open burning** - The combustion of any material without the following characteristics:

(A) control of combustion air to maintain adequate temperature for efficient combustion;

(B) containment of the combustion-reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; and

(C) control of emission of the gaseous combustion products. (See also "incineration" and "thermal treatment.")

(99) **Operator** - The person responsible for the overall operation of a facility.

(100) **Owner** - The person who owns a facility or part of a facility.

(101) **Partial closure** - The closure of a hazardous waste management unit in accordance with the applicable closure requirements of Subchapters E and F of this chapter (relating to Interim Standards for Owners and Operators of Hazardous Waste Storage, Processing, or Disposal

Facilities; and Permitting Standards for Owners and Operators of Hazardous Waste Storage, Processing, or Disposal Facilities) 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.

(102) **PCBs or polychlorinated biphenyl compounds** - Compounds subject to 40 Code of Federal Regulations Part 761.

(103) **Permit** - A written permit issued by the commission which, by its conditions, may authorize the permittee to construct, install, modify, or operate a specified municipal hazardous waste or industrial solid waste storage, processing, or disposal facility in accordance with specified limitations.

(104) **Person** - Any individual, corporation, organization, government, or governmental subdivision or agency, business trust, partnership, association, or any other legal entity.

(105) **Personnel or facility personnel** - All persons who work at, or oversee the operations of, a solid waste or hazardous waste facility, and whose actions or failure to act may result in noncompliance with the requirements of this chapter.

(106) **Pesticide** - Has the definition adopted under §335.261 of this title (relating to Universal Waste Rule).

(107) **Petroleum substance** - A crude oil or any refined or unrefined fraction or derivative of crude oil which is a liquid at standard conditions of temperature and pressure.

(A) Except as provided in subparagraph (C) of this paragraph for the purposes of this chapter, a "petroleum substance" shall be limited to a substance in or a combination or mixture of substances within the following list (except for any listed substance regulated as a hazardous waste under the federal Solid Waste Disposal Act, Subtitle C (42 United States Code §§6921, *et seq.*)) and which is liquid at standard conditions of temperature (20 degrees Centigrade) and pressure (1 atmosphere):

(i) basic petroleum substances - i.e., crude oils, crude oil fractions, petroleum feedstocks, and petroleum fractions;

(ii) motor fuels - a petroleum substance which is typically used for the operation of internal combustion engines and/or motors (which includes, but is not limited to, stationary engines and engines used in transportation vehicles and marine vessels);

(iii) aviation gasolines - i.e., Grade 80, Grade 100, and Grade 100-LL;

(iv) aviation jet fuels - i.e., Jet A, Jet A-1, Jet B, JP-4, JP-5, and JP-8;

(v) distillate fuel oils - i.e., Number 1-D, Number 1, Number 2-D,  
and Number 2;

(vi) residual fuel oils - i.e., Number 4-D, Number 4-light, Number 4,  
Number 5-light, Number 5-heavy, and Number 6;

(vii) gas-turbine fuel oils - i.e., Grade O-GT, Grade 1-GT, Grade 2-  
GT, Grade 3-GT, and Grade 4-GT;

(viii) illuminating oils - i.e., kerosene, mineral seal oil, long-time  
burning oils, 300 oil, and mineral colza oil;

(ix) lubricants - i.e., automotive and industrial lubricants;

(x) building materials - i.e., liquid asphalt and dust-laying oils;

(xi) insulating and waterproofing materials - i.e., transformer oils and  
cable oils; and

(xii) used oils - See definition for "used oil" in this section.

(B) For the purposes of this chapter, a "petroleum substance" shall include solvents or a combination or mixture of solvents (except for any listed substance regulated as a hazardous waste under the federal Solid Waste Disposal Act, Subtitle C (42 United States Code §§6921, *et seq.*)) and which is liquid at standard conditions of temperature (20 degrees Centigrade) and pressure (1 atmosphere) i.e., Stoddard solvent, petroleum spirits, mineral spirits, petroleum ether, varnish makers' and painters' naphthas, petroleum extender oils, and commercial hexane.

(C) The following materials are not considered petroleum substances:

(i) polymerized materials, i.e., plastics, synthetic rubber, polystyrene, high and low density polyethylene;

(ii) animal, microbial, and vegetable fats;

(iii) food grade oils;

(iv) hardened asphalt and solid asphaltic materials - i.e., roofing shingles, roofing felt, hot mix (and cold mix); and

(v) cosmetics.

(108) **Pile** - Any noncontainerized accumulation of solid, nonflowing solid waste or hazardous waste that is used for processing or storage, and that is not a corrective action management unit or a containment building.

(109) **Plasma arc incinerator** - Any enclosed device using a high intensity electrical discharge or arc as a source of heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.

(110) **Post-closure order** - An order issued by the commission for post-closure care of interim status units, a corrective action management unit unless authorized by permit, or alternative corrective action requirements for contamination commingled from RCRA and solid waste management units.

(111) **Poultry** - Chickens or ducks being raised or kept on any premises in the state for profit.

(112) **Poultry carcass** - The carcass, or part of a carcass, of poultry that died as a result of a cause other than intentional slaughter for use for human consumption.

(113) **Poultry facility** - A facility that:

(A) is used to raise, grow, feed, or otherwise produce poultry for commercial purposes; or

(B) is a commercial poultry hatchery that is used to produce chicks or ducklings.

(114) **Primary exporter** - Any person who is required to originate the manifest for a shipment of hazardous waste in accordance with the regulations contained in 40 Code of Federal Regulations Part 262, Subpart B, which are in effect as of November 8, 1986, or equivalent state provision, which specifies a treatment, storage, or disposal facility in a receiving country as the facility to which the hazardous waste will be sent and any intermediary arranging for the export.

(115) **Processing** - The extraction of materials, transfer, volume reduction, conversion to energy, or other separation and preparation of solid waste for reuse or disposal, including the treatment or neutralization of solid waste or hazardous waste, designed to change the physical, chemical, or biological character or composition of any solid waste or hazardous waste so as to neutralize such waste, or so as to recover energy or material from the waste or so as to render such waste nonhazardous, or less hazardous; safer to transport, store or dispose of; or amenable for recovery, amenable for storage, or reduced in volume. The transfer of solid waste for reuse or disposal as used in this definition does not include the actions of a transporter in conveying or transporting solid waste by truck, ship, pipeline, or other means. Unless the executive director determines that regulation of such activity is necessary to protect human health or the environment, the definition of processing

does not include activities relating to those materials exempted by the administrator of the EPA in accordance with the federal Solid Waste Disposal Act, as amended by the RCRA, 42 United States Code, §§6901 *et seq.*, as amended.

(116) **Publicly-owned treatment works (POTW)** - Any device or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature which is owned by a state or municipality (as defined by the Clean Water Act, §502(4)). The definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.

(117) **Qualified groundwater scientist** - A scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and has sufficient training and experience in groundwater hydrology and related fields as may be demonstrated by state registration, professional certifications, or completion of accredited university courses that enable that individual to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport.

(118) **Receiving country** - A foreign country to which a hazardous waste is sent for the purpose of treatment, storage, or disposal (except short-term storage incidental to transportation).

(119) **Regional administrator** - The regional administrator for the EPA region in which the facility is located, or his designee.

(120) **Remediation** - The act of eliminating or reducing the concentration of contaminants in contaminated media.

(121) **Remediation waste** - All solid and hazardous wastes, and all media (including groundwater, surface water, soils, and sediments) and debris, which contain listed hazardous wastes or which themselves exhibit a hazardous waste characteristic, that are managed for the purpose of implementing corrective action requirements under §335.167 of this title (relating to Corrective Action for Solid Waste Management Units) and Texas Water Code, §7.031 (Corrective Action Relating to Hazardous Waste). For a given facility, remediation wastes may originate only from within the facility boundary, but may include waste managed in implementing corrective action for releases beyond the facility boundary under TSWDA, §361.303 (Corrective Action), §335.166(5) of this title (relating to Corrective Action Program), or §335.167(c) of this title.

(122) **Remove** - To take waste, contaminated design or operating system components, or contaminated media away from a waste management unit, facility, or area to another location for storage, processing, or disposal.

(123) **Replacement unit** - A landfill, surface impoundment, or waste pile unit:

(A) from which all or substantially all the waste is removed; and

(B) that is subsequently reused to treat, store, or dispose of hazardous waste.

"Replacement unit" does not apply to a unit from which waste is removed during closure, if the subsequent reuse solely involves the disposal of waste from that unit and other closing units or corrective action areas at the facility, in accordance with an approved closure plan or EPA or state approved corrective action.

(124) **Representative sample** - A sample of a universe or whole (e.g., waste pile, lagoon, groundwater) which can be expected to exhibit the average properties of the universe or whole.

(125) **Run-off** - Any rainwater, leachate, or other liquid that drains over land from any part of a facility.

(126) **Run-on** - Any rainwater, leachate, or other liquid that drains over land onto any part of a facility.

(127) **Saturated zone or zone of saturation** - That part of the earth's crust in which all voids are filled with water.

(128) **Shipment** - Any action involving the conveyance of municipal hazardous waste or industrial solid waste by any means off-site.

(129) **Sludge dryer** - Any enclosed thermal treatment device that is used to dehydrate sludge and that has a maximum total thermal input, excluding the heating valve of the sludge itself, of 2,500 British thermal units per pound of sludge treated on a wet-weight basis.

(130) **Small quantity generator** - A generator who generates less than 1,000 kilogram of hazardous waste in a calendar month.

(131) **Solid waste** -

(A) Any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant or air pollution control facility, and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, municipal, commercial, mining, and agricultural operations, and from community and institutional activities, but does not include:

(i) solid or dissolved material in domestic sewage, or solid or dissolved material in irrigation return flows, or industrial discharges subject to regulation by permit issued in accordance with Texas Water Code, Chapter 26 (an exclusion applicable only to the actual point source discharge that does not exclude industrial wastewaters while they are being collected, stored, or processed before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment);

(ii) uncontaminated soil, dirt, rock, sand, and other natural or man-made inert solid materials used to fill land if the object of the fill is to make the land suitable for the construction of surface improvements. The material serving as fill may also serve as a surface improvement such as a structure foundation, a road, soil erosion control, and flood protection. Man-made materials exempted under this provision shall only be deposited at sites where the construction is in progress or imminent such that rights to the land are secured and engineering, architectural, or other necessary planning have been initiated. Waste disposal shall be considered to have occurred on any land which has been filled with man-made inert materials under this provision if the land is sold, leased, or otherwise conveyed prior to the completion of construction of the surface improvement. Under such conditions, deed recordation shall be required. The deed recordation shall include the information required under §335.5(a) of this title (relating to Deed Recordation), prior to sale or other conveyance of the property;

(iii) waste materials which result from activities associated with the exploration, development, or production of oil or gas or geothermal resources, as those activities are defined in this section, and any other substance or material regulated by the Railroad Commission of Texas in accordance with the Natural Resources Code, §91.101, unless such waste, substance, or material results from activities associated with gasoline plants, natural gas, or natural gas liquids processing plants, pressure maintenance plants, or repressurizing plants and is a hazardous waste as defined by the administrator of the EPA in accordance with the federal Solid Waste Disposal Act, as amended by the RCRA, 42 United States Code §§6901 *et seq.*, as amended; or

(iv) a material excluded by 40 Code of Federal Regulations (CFR) §261.4(a)(1) - (19), as amended through May 11, 1999, (64 FR 25408), subject to the changes in this clause, or by variance granted under §335.18 of this title (relating to Variances from Classification as a Solid Waste) and §335.19 of this title (relating to Standards and Criteria for Variances from Classification as a Solid Waste). For the purposes of the exclusion under 40 CFR §261.4(a)(16), 40 CFR §261.38 is adopted by reference as amended through July 10, 2000 (65 FR 42292), and is revised as follows, with "subparagraph (A)(iv) under the definition of 'Solid Waste' in 30 TAC §335.1" meaning "subparagraph (A)(iv) under the definition of 'Solid Waste' in §335.1 of this title (relating to Definitions)":

(I) in the certification statement under 40 CFR §261.38(c)(1)(i)(C)(4), the reference to "40 CFR §261.38" is changed to "40 CFR §261.38, as revised under subparagraph (A)(iv) under the definition of 'Solid Waste' in 30 TAC §335.1," and the reference to "40 CFR §261.28(c)(10)" is changed to "40 CFR §261.38(c)(10)";

(II) in 40 CFR §261.38(c)(2), the references to "§260.10 of this chapter" are changed to "§335.1 of this title (relating to Definitions)," and the reference to "parts 264 or 265 of this chapter" is changed to "Chapter 335, Subchapter E of this title (relating to Interim Standards for Owners and Operators of Hazardous Waste Storage, Processing, or Disposal Facilities) or Chapter 335, Subchapter F of this title (relating to Permitting Standards for Owners and Operators of Hazardous Waste Storage, Processing, or Disposal Facilities)";

(III) in 40 CFR §261.38(c)(3) - (5), the references to "parts 264 and 265, or §262.34 of this chapter" are changed to "Chapter 335, Subchapter E of this title (relating to Interim Standards for Owners and Operators of Hazardous Waste Storage, Processing, or Disposal Facilities) and Chapter 335, Subchapter F of this title (relating to Permitting Standards for Owners and Operators of Hazardous Waste Storage, Processing, or Disposal Facilities), or §335.69 of this title (relating to Accumulation Time)";

(IV) in 40 CFR §261.38(c)(5), the reference to "§261.6(c) of this chapter" is changed to "§335.24(e) and (f) of this title (relating to Requirements for Recyclable Materials and Nonhazardous Recyclable Materials)";

(V) in 40 CFR §261.38(c)(7), the references to "appropriate regulatory authority" and "regulatory authority" are changed to "executive director";

(VI) in 40 CFR §261.38(c)(8), the reference to "§262.11 of this chapter" is changed to "§335.62 of this title (relating to Hazardous Waste Determination and Waste Classification)";

(VII) in 40 CFR §261.38(c)(9), the reference to "§261.2(c)(4) of this chapter" is changed to "§335.1(129)(D)(iv) of this title (relating to Definitions)"; and

(VIII) in 40 CFR §261.38(c)(10), the reference to "implementing authority" is changed to "executive director."

(B) A discarded material is any material which is:

(i) abandoned, as explained in subparagraph (C) of this paragraph;

(ii) recycled, as explained in subparagraph (D) of this paragraph; or

(iii) considered inherently waste-like, as explained in subparagraph (E)

of this paragraph.

(iv) a military munition identified as a solid waste in 40 CFR

§266.202.

(C) Materials are solid wastes if they are abandoned by being:

(i) disposed of;

(ii) burned or incinerated; or

(iii) accumulated, stored, or processed (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated.

(D) Except for materials described in subparagraph (H) of this paragraph, materials are solid wastes if they are "recycled" or accumulated, stored, or processed before recycling as specified in this subparagraph. The chart referred to as Table 1 indicates only which materials are considered to be solid wastes when they are recycled and is not intended to supersede the definition of solid waste provided in subparagraph (A) of this paragraph.

(i) Used in a manner constituting disposal. Materials noted with an asterisk in Column 1 of Table 1 are solid wastes when they are:

(I) applied to or placed on the land in a manner that constitutes disposal; or

(II) used to produce products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on the land (in which cases the product itself remains a solid waste). However, commercial chemical products listed in 40 CFR §261.33 are not solid wastes if they are applied to the land and that is their ordinary manner of use.

(ii) Burning for energy recovery. Materials noted with an asterisk in Column 2 of Table 1 are solid wastes when they are:

(I) burned to recover energy; or

(II) used to produce a fuel or are otherwise contained in fuels (in which cases the fuel itself remains a solid waste). However, commercial chemical products, which are listed in 40 CFR §261.33, not listed in §261.33, but that exhibit one or more of the hazardous waste characteristics, or will be considered nonhazardous waste if disposed, are not solid wastes if they are fuels themselves and burned for energy recovery.

(iii) Reclaimed. Materials noted with an asterisk in Column 3 of Table 1 are solid wastes when reclaimed (except as provided under 40 CFR §261.4(a)(17)). Materials without an asterisk in Column 3 of Table 1 are not solid wastes when reclaimed (except as provided under 40 CFR §261.4(a)(17)).

(iv) Accumulated speculatively. Materials noted with an asterisk in Column 4 of Table 1 are solid wastes when accumulated speculatively.

Figure: 30 TAC §335.1(131)(D)(iv)

TABLE 1

	Use Constituting Disposal S.W. Def. (D)(i) (1)	Energy Recovery/Fuel S.W. Def. (D)(ii) (2)	Reclamation S.W. Def. (D)(iii) (3) <sup>2</sup>	Speculative Accumulation S.W. Def. (D)(iv) (4)
Spent materials (listed hazardous & not listed characteristically hazardous)	*	*	*	*
Spent materials (nonhazardous) <sup>1</sup>	*	*	*	*
Sludges (listed hazardous in 40 CFR §261.31 or §261.32)	*	*	*	*
Sludges (not listed characteristically hazardous)	*	*		*
Sludges (nonhazardous) <sup>1</sup>	*	*		*
By-products (listed hazardous in 40 CFR §261.31 or §261.32)	*	*	*	*

By-products (not listed characteristically hazardous)	*	*		*
By-products (nonhazardous) <sup>1</sup>	*	*		*
Commercial chemical products (listed, not listed characteristically hazardous, and nonhazardous)	*	*		
Scrap metal other than excluded scrap metal (see §335.17(9)) (hazardous)	*	*	*	*
Scrap metal other than excluded scrap metal (see §335.17(9)) (nonhazardous) <sup>1</sup>	*	*	*	*

NOTE: The terms "spent materials", "sludges", "by-products", "scrap metal" and "excluded scrap metal" are defined in §335.17 of this title (relating to Special Definitions for Recyclable Materials and Nonhazardous Recyclable Materials).

<sup>1</sup>These materials are governed by the provisions of §335.24(h) only.

<sup>2</sup>Except as provided in 40 CFR §261.4(a)(17) for mineral processing secondary materials

(E) Materials that are identified by the administrator of the EPA as inherently waste-like materials under 40 CFR §261.2(d) are solid wastes when they are recycled in any manner.

(F) Materials are not solid wastes when they can be shown to be recycled by being:

(i) used or reused as ingredients in an industrial process to make a product, provided the materials are not being reclaimed;

(ii) used or reused as effective substitutes for commercial products;

(iii) returned to the original process from which they were generated, without first being reclaimed or land disposed. The material must be returned as a substitute for feedstock materials. In cases where the original process to which the material is returned is a secondary process, the materials must be managed such that there is no placement on the land. In cases where the materials are generated and reclaimed within the primary mineral processing industry, the conditions of the exclusion found at 40 CFR §261.4(a)(17) apply rather than this provision; or

(iv) secondary materials that are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process provided:

(I) only tank storage is involved, and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance;

(II) reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators);

(III) the secondary materials are never accumulated in such tanks for over 12 months without being reclaimed; and

(IV) the reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner constituting disposal.

(G) Except for materials described in subparagraph (H) of this paragraph, the following materials are solid wastes, even if the recycling involves use, reuse, or return to the original process, as described in subparagraph (F) of this paragraph:

(i) materials used in a manner constituting disposal, or used to produce products that are applied to the land;

(ii) materials burned for energy recovery, used to produce a fuel, or contained in fuels;

(iii) materials accumulated speculatively; or

(iv) materials deemed to be inherently waste-like by the administrator of the EPA, as described in 40 CFR §261.2(d)(1) - (2).

(H) With the exception of contaminated soils which are being relocated for use under §350.36 of this title (relating to Relocation of Soils Containing Chemicals of Concern for Reuse Purposes) and other contaminated media, materials that will otherwise be identified as nonhazardous solid wastes if disposed of are not considered solid wastes when recycled by being applied to the land or used as ingredients in products that are applied to the land, provided these materials can be shown to meet all of the following criteria:

(i) a legitimate market exists for the recycling material as well as its products;

(ii) the recycling material is managed and protected from loss as will be raw materials or ingredients or products;

(iii) the quality of the product is not degraded by substitution of raw material/product with the recycling material;

(iv) the use of the recycling material is an ordinary use and it meets or exceeds the specifications of the product it is replacing without treatment or reclamation, or if the recycling material is not replacing a product, the recycling material is a legitimate ingredient in a production process and meets or exceeds raw material specifications without treatment or reclamation;

(v) the recycling material is not burned for energy recovery, used to produce a fuel or contained in a fuel;

(vi) the recycling material can be used as a product itself or to produce products as it is generated without treatment or reclamation;

(vii) the recycling material must not present an increased risk to human health, the environment, or waters in the state when applied to the land or used in products which are applied to the land and the material, as generated:

(I) is a Class 3 waste under Chapter 335, Subchapter R of this title (relating to Waste Classification), except for arsenic, cadmium, chromium, lead, mercury, nickel, selenium, and total dissolved solids; and

(II) for the metals listed in subclause (I) of this clause:

(-a-) is a Class 2 or Class 3 waste under Chapter 335,

Subchapter R of this title; and

(-b-) does not exceed a concentration limit under

§312.43(b)(3), Table 3 of this title (relating to Metal Limits); and

(viii) notwithstanding the requirements under §335.17(a)(8) of this title (relating to Special Definitions for Recyclable Materials and Nonhazardous Recyclable Materials):

(I) at least 75% (by weight or volume) of the annual production of the recycling material must be recycled or transferred to a different site and recycled on an annual basis; and

(II) if the recycling material is placed in protective storage, such as a silo or other protective enclosure, at least 75% (by weight or volume) of the annual production of the recycling material must be recycled or transferred to a different site and recycled on a biennial basis.

(I) Respondents in actions to enforce the industrial solid waste regulations who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation, must demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. In doing so, they must provide appropriate documentation (such

as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so and that the recycling activity is legitimate and beneficial.

(J) Materials that are reclaimed from solid wastes and that are used beneficially are not solid wastes and hence are not hazardous wastes under 40 CFR §261.3(c) unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.

(K) Other portions of this chapter that relate to solid wastes that are recycled include §335.6 of this title (relating to Notification Requirements), §§335.17 - 335.19 of this title, §335.24 of this title (relating to Requirements for Recyclable Materials and Nonhazardous Recyclable Materials), and Subchapter H of this chapter (relating to Standards for the Management of Specific Wastes and Specific Types of Materials).

(132) **Sorbent** - A material that is used to soak up free liquids by either adsorption or absorption, or both. Sorb means to either adsorb or absorb, or both.

(133) **Spill** - The accidental spilling, leaking, pumping, emitting, emptying, or dumping of solid waste or hazardous wastes or materials which, when spilled, become solid waste or hazardous wastes into or on any land or water.

(134) **Staging pile** - An accumulation of solid, non-flowing remediation waste, as defined in this section, that is not a containment building and that is used only during remedial operations for temporary storage at a facility. Staging piles must be designated by the executive director according to the requirements of 40 Code of Federal Regulations §264.554, as adopted by reference under §335.152(a) of this title (relating to Standards).

(135) **Storage** - The holding of solid waste for a temporary period, at the end of which the waste is processed, disposed of, recycled, or stored elsewhere.

(136) **Sump** - Any pit or reservoir that meets the definition of tank in this section and those troughs/trenches connected to it that serve to collect solid waste or hazardous waste for transport to solid waste or hazardous waste storage, processing, or disposal facilities; except that as used in the landfill, surface impoundment, and waste pile rules, "sump" means any lined pit or reservoir that serves to collect liquids drained from a leachate collection and removal system or leak detection system for subsequent removal from the system.

(137) **Surface impoundment or impoundment** - A facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well or a corrective action management unit. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons.

(138) **Tank** - A stationary device, designed to contain an accumulation of solid waste which is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) which provide structural support.

(139) **Tank system** - A solid waste or hazardous waste storage or processing tank and its associated ancillary equipment and containment system.

(140) **TEQ** - Toxicity equivalence, the international method of relating the toxicity of various dioxin/furan congeners to the toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin.

(141) **Thermal processing** - The processing of solid waste or hazardous waste in a device which uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the solid waste or hazardous waste. Examples of thermal processing are incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge. (See also "incinerator" and "open burning.")

(142) **Thermostat** - Has the definition adopted under §335.261 of this title (relating to Universal Waste Rule).

(143) **Totally enclosed treatment facility** - A facility for the processing of hazardous waste which is directly connected to an industrial production process and which is constructed and

operated in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment during processing. An example is a pipe in which acid waste is neutralized.

(144) **Transfer facility** - Any transportation-related facility including loading docks, parking areas, storage areas, and other similar areas where shipments of hazardous or industrial solid waste are held during the normal course of transportation.

(145) **Transit country** - Any foreign country, other than a receiving country, through which a hazardous waste is transported.

(146) **Transport vehicle** - A motor vehicle or rail car used for the transportation of cargo by any mode. Each cargo-carrying body (trailer, railroad freight car, etc.) is a separate transport vehicle. Vessel includes every description of watercraft, used or capable of being used as a means of transportation on the water.

(147) **Transporter** - Any person who conveys or transports municipal hazardous waste or industrial solid waste by truck, ship, pipeline, or other means.

(148) **Treatability study** - A study in which a hazardous or industrial solid waste is subjected to a treatment process to determine:

(A) whether the waste is amenable to the treatment process;

(B) what pretreatment (if any) is required;

(C) the optimal process conditions needed to achieve the desired treatment;

(D) the efficiency of a treatment process for a specific waste or wastes; or

(E) the characteristics and volumes of residuals from a particular treatment process. Also included in this definition for the purpose of 40 Code of Federal Regulations §261.4(e) and (f) (§§335.2, 335.69, and 335.78 of this title (relating to Permit Required; Accumulation Time; and Special Requirements for Hazardous Waste Generated by Conditionally Exempt Small Quantity Generators)) exemptions are liner compatibility, corrosion, and other material compatibility studies and toxicological and health effects studies. A treatability study is not a means to commercially treat or dispose of hazardous or industrial solid waste.

(149) **Treatment** - To apply a physical, biological, or chemical process(es) to wastes and contaminated media which significantly reduces the toxicity, volume, or mobility of contaminants and which, depending on the process(es) used, achieves varying degrees of long-term effectiveness.

(150) **Treatment zone** - A soil area of the unsaturated zone of a land treatment unit within which hazardous constituents are degraded, transferred, or immobilized.

(151) **Underground injection** - The subsurface emplacement of fluids through a bored, drilled, or driven well; or through a dug well, where the depth of the dug well is greater than the largest surface dimension. (See also "injection well.")

(152) **Underground tank** - A device meeting the definition of tank in this section whose entire surface area is totally below the surface of and covered by the ground.

(153) **Unfit-for-use tank system** - A tank system that has been determined through an integrity assessment or other inspection to be no longer capable of storing or processing solid waste or hazardous waste without posing a threat of release of solid waste or hazardous waste to the environment.

(154) **Universal waste** - Any of the hazardous wastes defined as universal waste under §335.261(b)(13)(F) of this title (relating to Universal Waste Rule) that are managed under the universal waste requirements of Subchapter H, Division 5 of this chapter (relating to Universal Waste Rule).

(155) **Universal waste handler** - Has the definition adopted under §335.261 of this title (relating to Universal Waste Rule).

(156) **Universal waste transporter** - Has the definition adopted under §335.261 of this title (relating to Universal Waste Rule).

(157) **Unsaturated zone or zone of aeration** - The zone between the land surface and the water table.

(158) **Uppermost aquifer** - The geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected within the facility's property boundary.

(159) **Used oil** - Any oil that has been refined from crude oil, or any synthetic oil, that has been used, and, as a result of such use, is contaminated by physical or chemical impurities. Used oil fuel includes any fuel produced from used oil by processing, blending, or other treatment. Rules applicable to nonhazardous used oil, oil characteristically hazardous from use versus mixing, Conditionally Exempt Small Quantity Generator hazardous used oil, and household used oil after collection that will be recycled are found in Chapter 324 of this title (relating to Used Oil) and 40 Code of Federal Regulations Part 279 (Standards for Management of Used Oil).

(160) **Wastewater treatment unit** - A device which:

(A) is part of a wastewater treatment facility subject to regulation under either the Federal Water Pollution Control Act (Clean Water Act), 33 United States Code, §§466 *et seq.*, §402 or §307(b), as amended;

(B) receives and processes or stores an influent wastewater which is a hazardous or industrial solid waste, or generates and accumulates a wastewater treatment sludge which is a hazardous or industrial solid waste, or processes or stores a wastewater treatment sludge which is a hazardous or industrial solid waste; and

(C) meets the definition of tank or tank system as defined in this section.

(161) **Water (bulk shipment)** - The bulk transportation of municipal hazardous waste or Class 1 industrial solid waste which is loaded or carried on board a vessel without containers or labels.

(162) **Well** - Any shaft or pit dug or bored into the earth, generally of a cylindrical form, and often walled with bricks or tubing to prevent the earth from caving in.

(163) **Zone of engineering control** - An area under the control of the owner/operator that, upon detection of a solid waste or hazardous waste release, can be readily cleaned up prior to the release of solid waste or hazardous waste or hazardous constituents to groundwater or surface water.

### **§335.2. Permit Required.**

(a) Except with regard to storage, processing, or disposal to which subsections (c) - (h) of this section apply, and as provided in §335.45(b) of this title (relating to Effect on Existing Facilities), and

in accordance with the requirements of §335.24 of this title (relating to Requirements for Recyclable Materials and Nonhazardous Recyclable Materials) and §335.25 of this title (relating to Handling, Storing, Processing, Transporting, and Disposing of Poultry Carcasses), and as provided in §332.4 of this title (relating to General Requirements), no person may cause, suffer, allow, or permit any activity of storage, processing, or disposal of any industrial solid waste or municipal hazardous waste unless such activity is authorized by a permit, amended permit, or other authorization from the Texas Commission on Environmental Quality (commission) or its predecessor agencies, the Texas Department of Health (TDH), or other valid authorization from a Texas state agency. No person may commence physical construction of a new hazardous waste management facility without first having submitted Part A and Part B of the permit application and received a finally effective permit.

(b) In accordance with the requirements of subsection (a) of this section, no generator, transporter, owner or operator of a facility, or any other person may cause, suffer, allow, or permit its wastes to be stored, processed, or disposed of at an unauthorized facility or in violation of a permit. In the event this requirement is violated, the executive director will seek recourse against not only the person who stored, processed, or disposed of the waste, but also against the generator, transporter, owner or operator, or other person who caused, suffered, allowed, or permitted its waste to be stored, processed, or disposed.

(c) Any owner or operator of a solid waste management facility that is in existence on the effective date of a statutory or regulatory change that subjects the owner or operator to a requirement to obtain a hazardous waste permit who has filed a hazardous waste permit application with the

commission in accordance with the rules and regulations of the commission, may continue the storage, processing, or disposal of hazardous waste until such time as the commission approves or denies the application, or, if the owner or operator becomes subject to a requirement to obtain a hazardous waste permit after November 8, 1984, except as provided by the EPA or commission rules relative to termination of interim status. If a solid waste facility which has become a commercial hazardous waste management facility as a result of the federal toxicity characteristic rule effective September 25, 1990, and is required to obtain a hazardous waste permit, such facility that qualifies for interim status is limited to those activities that qualify it for interim status until the facility obtains the hazardous waste permit. Owners or operators of municipal hazardous waste facilities which satisfied this requirement by filing an application on or before November 19, 1980, with the EPA are not required to submit a separate application with the TDH. Applications filed under this section shall meet the requirements of §335.44 of this title (relating to Application for Existing On-Site Facilities). Owners and operators of solid waste management facilities that are in existence on the effective date of statutory or regulatory amendments under the TSWDA (Vernon's Supplement 1991), Texas Civil Statutes, Article 4477-7, or the RCRA, 42 United States Code, §§6901 *et seq.*, that render the facility subject to the requirement to obtain a hazardous waste permit, may continue to operate if Part A of their permit application is submitted no later than six months after the date of publication of regulations by the EPA under RCRA, which first require them to comply with the standards set forth in Subchapter E of this chapter (relating to Interim Standards for Owners and Operators of Hazardous Waste Storage, Processing, or Disposal Facilities), or Subchapter H of this chapter (relating to Standards for the Management of Specific Wastes and Specific Types of Facilities); or 30 days after the date they first become subject to the standards set forth in these subchapters, whichever first occur; or for generators who generate greater

than 100 kilograms but less than 1,000 kilograms of hazardous waste in a calendar month and who process, store, or dispose of these wastes on-site, a Part A permit application shall be submitted to the EPA by March 24, 1987, as required by 40 Code of Federal Regulations (CFR) §270.10(e)(1)(iii).

This subsection shall not apply to a facility if it has been previously denied a hazardous waste permit or if authority to operate the facility has been previously terminated. Applications filed under this section shall meet the requirements of §335.44 of this title. For purposes of this subsection, a solid waste management facility is in existence if the owner or operator has obtained all necessary federal, state, and local preconstruction approvals or permits, as required by applicable federal, state, and local hazardous waste control statutes, regulations, or ordinances; and either:

(1) a continuous physical, on-site construction program has begun; or

(2) the owner or operator has entered into contractual obligations, which cannot be cancelled or modified without substantial loss, for construction of the facility to be completed within a reasonable time.

(d) No permit shall be required for:

(1) the processing or disposal of nonhazardous industrial solid waste, if the waste is processed or disposed on property owned or otherwise effectively controlled by the owner or operator of the industrial plant, manufacturing plant, mining operation, or agricultural operation from which the waste results or is produced; the property is within 50 miles of the plant or operation; and the waste is

not commingled with waste from any other source or sources (An industrial plant, manufacturing plant, mining operation, or agricultural operation owned by one person shall not be considered an "other source" with respect to other plants and operations owned by the same person.);

(2) the storage of nonhazardous industrial solid waste, if the waste is stored on property owned or otherwise effectively controlled by the owner or operator of the industrial plant, manufacturing plant, mining operation, or agricultural operation from which the waste results or is produced, and the waste is not commingled with waste from any other source or sources (An industrial plant, manufacturing plant, mining operation, or agricultural operation owned by one person shall not be considered an "other source" with respect to other plants and operations owned by the same person.);

(3) the storage or processing of nonhazardous industrial solid waste, if the waste is processed in an elementary neutralization unit, or a wastewater treatment unit;

(4) the collection, storage, or processing of nonhazardous industrial solid waste, if the waste is collected, stored, or processed as part of a treatability study;

(5) the storage of nonhazardous industrial solid waste, if the waste is stored in a transfer facility in containers for a period of ten days or less, unless the executive director determines that a permit should be required in order to protect human health and the environment; or

(6) the storage or processing of nonhazardous industrial solid waste, if the waste is processed in a publicly owned treatment works with discharges subject to regulation under the Clean Water Act, §402, as amended through October 4, 1996, if the owner or operator has a National Pollutant Discharge Elimination System permit and complies with the conditions of that permit.

(e) No permit shall be required for the on-site storage of hazardous waste by a person who is a conditionally exempt small quantity generator as described in §335.78 of this title (relating to Special Requirements for Hazardous Waste Generated by Conditionally Exempt Small Quantity Generators).

(f) No permit under this chapter shall be required for the storage, processing, or disposal of hazardous waste by a person described in §335.41(b) - (d) of this title (relating to Purpose, Scope, and Applicability) or for the storage of hazardous waste under the provisions of 40 CFR §261.4(c) and (d).

(g) No permit under this chapter shall be required for the storage, processing, or disposal of hazardous industrial waste or municipal hazardous waste which is generated or collected for the purpose of conducting treatability studies. Such samples are subject to the requirements set out at 40 CFR §261.4(e) and (f), as amended and adopted in the CFR through February 18, 1994, as published in the *Federal Register* (59 FR 8362), which are adopted herein by reference.

(h) A person may obtain authorization from the executive director for the storage, processing, or disposal of nonhazardous industrial solid waste in an interim status landfill which has qualified for interim status in accordance with 40 CFR Part 270, Subpart G, and which has complied with the

standards set forth in Subchapter E of this chapter, by complying with the notification and information requirements as set forth in §335.6 of this title (relating to Notification Requirements). The executive director may approve or deny the request for authorization or grant the request for authorization subject to conditions which may include, without limitation, public notice, and technical requirements. A request for authorization for the disposal of nonhazardous industrial solid waste under this subsection shall not be approved unless the executive director determines that the subject facility is suitable for disposal of such waste at the facility as requested. At a minimum, a determination of suitability by the executive director must include approval by the executive director of construction of a hazardous waste landfill meeting the design requirements of 40 CFR §265.301(a). In accordance with §335.6 of this title, such person shall not engage in the requested activities if denied by the executive director or unless 90 days' notice has been provided and the executive director approves the request except where express executive director approval has been obtained prior to the expiration of the 90 days.

Authorization may not be obtained under this subsection for:

(1) nonhazardous industrial solid waste, the storage, processing, or disposal of which is expressly prohibited under an existing permit or site development plan applicable to the facility or a portion of the facility;

(2) Polychlorinated biphenyl compounds wastes subject to regulation by 40 CFR Part 761;

(3) explosives and shock-sensitive materials;

(4) pyrophorics;

(5) infectious materials;

(6) liquid organic peroxides;

(7) radioactive or nuclear waste materials, receipt of which will require a license from the TDH or the commission or any other successor agency; and

(8) friable asbestos waste unless authorization is obtained in compliance with the procedures established under §330.136(b)(6)(B) - (E) of this title (relating to Disposal of Special Wastes). Authorizations obtained under this subsection shall be effective during the pendency of the interim status and shall cease upon the termination of interim status, final administrative disposition of the subject permit application, failure of the facility to operate the facility in compliance with the standards set forth in Subchapter E of this chapter, or as otherwise provided by law.

(i) Owners or operators of hazardous waste management units must have permits during the active life (including the closure period) of the unit. Owners or operators of surface impoundments, landfills, land treatment units, and waste pile units that received wastes after July 26, 1982, or that certified closure (according to 40 CFR §265.115) after January 26, 1983, must have post-closure permits, unless they demonstrate closure by removal or decontamination as provided under 40 CFR §270.1(c)(5) and (6), or obtain an order in lieu of a post-closure permit, as provided in subsection (m)

of this section. If a post-closure permit is required, the permit must address applicable provisions of 40 CFR Part 264, and Subchapter F of this chapter (relating to Permitting Standards for Owners and Operators of Hazardous Waste Storage, Processing, or Disposal Facilities) provisions relating to Groundwater Monitoring, Unsaturated Zone Monitoring, Corrective Action, and Post-closure Care Requirements. The denial of a permit for the active life of a hazardous waste management facility or unit does not affect the requirement to obtain a post-closure permit under this section.

(j) Upon receipt of the federal Hazardous and Solid Waste Act (HSWA) authorization for the commission's Hazardous Waste Program, the commission shall be authorized to enforce the provisions that the EPA imposed in hazardous waste permits that were issued before the HSWA authorization was granted.

(k) Any person who intends to conduct an activity under subsection (d) of this section shall comply with the notification requirements of §335.6 of this title.

(l) No permit shall be required for the management of universal wastes by universal waste handlers or universal waste transporters, in accordance with the definitions and requirements of Subchapter H, Division 5 of this chapter (relating to Universal Waste Rule).

(m) Order in lieu of a post-closure permit. At the discretion of the commission, an owner or operator may obtain a post-closure order in lieu of a post-closure permit for interim status units, a corrective action management unit unless authorized by a permit, or alternative corrective action

requirements for contamination commingled from RCRA and solid waste management units. The post-closure order must address the facility-wide corrective action requirements of §335.167 of this title (relating to Corrective Action for Solid Waste Management Units) and groundwater monitoring requirements of §335.156 of this title (relating to Applicability of Groundwater Monitoring and Response).

**§335.7. Financial Assurance Required.**

Authority to store, process, or dispose of industrial solid waste or municipal hazardous waste in accordance with a permit or post-closure order issued by the commission is contingent upon the execution and maintenance of financial assurance for the amount(s) specified in its permit in accordance with Chapter 37, Subchapter P of this title (relating to Financial Assurance for Hazardous and Nonhazardous Industrial Solid Waste Facilities), which provides for the closing of the solid waste storage, processing, or disposal facility in accordance with the permit or post-closure order issued for the facility and all other rules of the commission. The commission may require the execution and maintenance of financial assurance in accordance with Chapter 37, Subchapter P of this title for the closing of any solid waste facility exempt from the requirement of a permit under this chapter, but subject to the requirement of a permit or post-closure order under Texas Water Code, Chapter 26. Persons storing, processing, or disposing of hazardous waste are subject to further requirements concerning financial assurance and closure and post-closure contained in Subchapter F of this chapter (relating to Permitting Standards for Owners and Operators of Hazardous Waste Storage, Processing, or Disposal Facilities). If the executive director determines that there is a significant risk to human health

and the environment from sudden or nonsudden accidental occurrences resulting from the operations of a solid waste storage, processing, or disposal facility, the owner or operator may be required to provide coverage for sudden and/or nonsudden accidental occurrences in accordance with Chapter 37, Subchapter P of this title.

**SUBCHAPTER E: INTERIM STANDARDS FOR OWNERS AND OPERATORS OF  
HAZARDOUS WASTE STORAGE, PROCESSING, OR DISPOSAL FACILITIES**

**§§335.111, 335.112, 335.116, 335.118, 335.119**

**STATUTORY AUTHORITY**

The amendments are adopted under TWC, §5.103, which provides the commission with the authority to adopt rules necessary to carry out its power and duties under this code and other laws of this state; §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; §7.031, which authorizes the commission to issue an order for the closure, post-closure care, or other remediation of hazardous waste or hazardous waste constituents from a solid waste management unit at a solid waste processing, storage, or disposal facility; Solid Waste Disposal Act, THSC, §361.024, which authorizes the commission to adopt rules consistent with Chapter 361; and THSC, §361.082, which authorizes the commission to issue an order for the closure, post-closure care, or other remediation of hazardous waste or hazardous waste constituents from a solid waste management unit at a solid waste processing, storage, or disposal facility.

**§335.111. Purpose, Scope, and Applicability**

(a) The purpose of this subchapter is to establish minimum requirements that define the acceptable management of hazardous waste prior to the issuance or denial of a hazardous waste permit and until certification of final closure or, if the facility is subject to post-closure requirements, until post-closure responsibilities are fulfilled. Except as provided in 40 Code of Federal Regulations (CFR)

§265.1080(b), this subchapter and the standards of 40 CFR §§264.552, 264.553, and 264.554 apply to owners and operators of hazardous waste storage, processing, or disposal facilities who have fully complied with the requirements for interim status under the RCRA, §3005(e), except as specifically provided for in §335.41 of this title (relating to Purpose, Scope and Applicability).

(b) EPA Hazardous Waste Numbers F020, F021, F022, F023, F026, or F027 must not be managed at facilities subject to regulation under this subchapter, unless:

(1) the wastewater treatment sludge is generated in a surface impoundment as part of the plant's wastewater treatment system;

(2) the waste is stored in tanks or containers;

(3) the waste is stored or processed in waste piles that meet the requirements of 40 CFR §264.250(c) as well as all other applicable requirements of 40 CFR Part 265, Subpart L, and §335.120 of this title (relating to Containment for Waste Piles);

(4) the waste is burned in incinerators that are certified pursuant to the standards and procedures in 40 CFR §265.352; or

(5) the waste is burned in facilities that thermally process the waste in a device other than an incinerator and that are certified pursuant to the standards and procedures in 40 CFR §265.383.

(c) The requirements of this section apply to owners or operators of all facilities which process, store or dispose of hazardous waste referred to in 40 CFR Part 268, and the 40 CFR Part 268 standards are considered material conditions or requirements of the Part 265 interim status standards incorporated by reference in §335.112 of this title (relating to Standards).

(d) Owners and operators who are subject to the requirements to obtain a post-closure permit under §335.2 and §335.43 of this title (relating to Permit Required), but who obtain a post-closure order in lieu of a post-closure permit as provided in §335.2(m) of this title, must:

(1) submit information about the facility listed in §305.50(b) of this title (relating to Additional Requirements for an Application for a Hazardous or Industrial Solid Waste Permit and for a Post-Closure Order);

(2) comply with facility-wide corrective action requirements of §335.167 of this title (relating to Corrective Action for Solid Waste Management Units);

(3) comply with the groundwater monitoring requirements of §§335.156 - 335.166 of this title (relating to Applicability of Groundwater Monitoring and Response; Required Programs; Groundwater Protection Standard; Hazardous Constituents; Concentration Limits; Point of Compliance; Compliance Period; General Groundwater Monitoring Requirements; Detection Monitoring Program; Compliance Monitoring Program; and Corrective Action Program); and

(4) comply with the financial assurance requirements of Chapter 37, Subchapter P of this title (relating to Financial Assurance for Hazardous and Nonhazardous Industrial Solid Waste Facilities).

(e) The commission may replace all or part of the closure requirements of 40 CFR Part 265 Subpart G (related to Closure and Post-Closure), as amended and adopted in §335.112(a)(6) of this title and the unit specific standards in §335.123 of this title (related to Closure and Post-Closure (Land Treatment Facilities)) applying to a regulated unit with alternative requirements for closure set out in a permit or a post-closure order where the commission determines that:

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

(2) it is not necessary to apply the closure requirement of this subchapter because the alternative requirements will be protective of human health and the environment and will satisfy the closure performance standards of §335.8 of this title (related to Closure and Remediation) and §335.167 of this title.

**§335.112. Standards.**

(a) The following regulations contained in 40 Code of Federal Regulations (CFR) Part 265 (including all appendices to Part 265) (except as otherwise specified herein) are adopted by reference as amended and adopted in the CFR through June 1, 1990 (55 FR 22685) and as further amended as indicated in each paragraph of this subsection:

(1) Subpart B - General Facility Standards (as amended through December 8, 1997 (62 FR 64636));

(2) Subpart C - Preparedness and Prevention;

(3) Subpart D - Contingency Plan and Emergency Procedures, except 40 CFR §265.56(d);

(4) Subpart E - Manifest System, Recordkeeping and Reporting (as amended through December 8, 1997 (62 FR 64636)), except 40 CFR §§265.71, 265.72, 265.75, 265.76, and 265.77;

(5) Subpart F - Groundwater Monitoring (as amended through October 22, 1998, (63 FR 56709)), except 40 CFR §265.90 and §265.94;

(6) Subpart G - Closure and Post-Closure (as amended through October 22, 1998, (63

FR 56709)); except 40 CFR §265.112(d)(3) and (4) and §265.118(e) and (f);

(7) Subpart H - Financial Requirements (as amended through September 16, 1992 (57 FR 42832)); except 40 CFR §§265.140, 265.141, 265.142(a)(2), 265.142(b) - (c), 265.143(a) - (g), 265.144(b) - (c), 265.145(a) - (g), 264.146, 265.147(a) - (d), 265.147(f) - (k), 265.148, 265.149, and 265.150;

(8) Subpart I - Use and Management of Containers (as amended through November 25, 1996 (61 FR 59932));

(9) Subpart J - Tank Systems (as amended through November 25, 1996 (61 FR 59932));

(10) Subpart K - Surface Impoundments (as amended through November 25, 1996 (61 FR 59932));

(11) Subpart L - Waste Piles (as amended through January 29, 1992 (57 FR 3493)), except 40 CFR §265.253;

(12) Subpart - Land Treatment, except 40 CFR §§265.272, 265.279, and 265.280;

(13) Subpart N - Landfills (as amended through July 10, 1992 (57 FR 30658)), except 40 CFR §§265.301(f) - 265.301(i), 265.314, and 265.315;

(14) Subpart O - Incinerators (as amended through September 30, 1999 (64 FR 52828));

(15) Subpart P - Thermal Treatment (as amended through July 17, 1991 (56 FR 32692));

(16) Subpart Q - Chemical, Physical, and Biological Treatment;

(17) Subpart R - Underground Injection;

(18) Subpart W - Drip Pads (as amended through December 24, 1992 (57 FR 61492));

(19) Subpart AA - Air Emission Standards for Process Vents (as amended through December 8, 1997 (62 FR 64636));

(20) Subpart BB - Air Emission Standards for Equipment Leaks (as amended through December 8, 1997 (62 FR 64636));

(21) Subpart CC - Air Emission Standards for Tanks, Surface Impoundments, and Containers (as amended through January 21, 1999 (64 FR 33820));

(22) Subpart DD - Containment Buildings (as amended through August 18, 1992 (57 FR 37194));

(23) Subpart EE - Hazardous Waste Munitions and Explosives Storage (as amended through February 12, 1997 (62 FR 6622)); and

(24) the following appendices contained in 40 CFR Part 265:

(A) Appendix I - Recordkeeping Instructions (as amended through March 24, 1994 (59 FR 13891));

(B) Appendix III - EPA Interim Primary Drinking Water Standards;

(C) Appendix IV - Tests for Significance;

(D) Appendix V - Examples of Potentially Incompatible Waste; and

(E) Appendix VI - Compounds With Henry's Law Constant Less Than 0.1

Y/X.

(b) The regulations of the EPA that are adopted by reference in this section are adopted subject to the following changes.

(1) The term "regional administrator" is changed to the "executive director" of the Texas Commission on Environmental Quality or to the commission, consistent with the organization of the commission as set out in Texas Water Code, Chapter 5, Subchapter B.

(2) The term "treatment" is changed to "processing."

(3) Reference to RCRA, §3008(h) is changed to Texas Water Code, §7.031(c) - (e) (Corrective Action Relating to Hazardous Waste).

(4) Reference to:

(A) 40 CFR §260.10 is changed to §335.1 of this title (relating to Definitions);

(B) 40 CFR §264.90 is changed to §335.156 of this title (relating to Applicability of Groundwater Monitoring and Response);

(C) 40 CFR §264.101 is changed to §335.167 of this title (relating to Corrective Action for Solid Waste Management Units);

(D) 40 CFR §264.310 is changed to §335.174 of this title (relating to Closure and Post-Closure Care (Landfills));

(E) 40 CFR §265.1 is changed to §335.111 of this title (relating to Purpose, Scope, and Applicability);

(F) 40 CFR §265.90 is changed to §335.116 of this title (relating to Applicability of Groundwater Monitoring Requirements);

(G) 40 CFR §265.94 is changed to §335.117 of this title (relating to Recordkeeping and Reporting);

(H) 40 CFR §265.314 is changed to §335.125 of this title (relating to Special Requirements for Bulk and Containerized Waste);

(I) 40 CFR §270.1 is changed to §335.2 of this title (relating to Permit Required);

(J) 40 CFR §270.28 is changed to §305.50 of this title (relating to Additional Requirements for an Application for a Hazardous or Industrial Solid Waste Permit);

(K) 40 CFR §270.41 is changed to §305.62 of this title (relating to Amendment); and

(L) 40 CFR §270.42 is changed to §305.69 of this title (relating to Solid Waste Permit Modification at the Request of the Permittee).

(5) 40 CFR Parts 260 - 270 means the commission's rules including, but not limited to, Chapters 50, 305, and 335 of this title (relating to Action on Applications and Other Authorizations; Consolidated Permits; and Industrial Solid Waste and Municipal Hazardous Waste), as applicable.

(6) Reference to 40 CFR Part 265, Subpart D (Contingency Plan and Emergency Procedures) is changed to §335.112(a)(3) of this title (relating to Standards) and §335.113 of this title (relating to Reporting of Emergency Situations by Emergency Coordinator).

(7) Reference to 40 CFR §§265.71, 265.72, 265.76, and 265.77 is changed to §335.12 of this title (relating to Shipping Requirements Applicable to Owners or Operators of Storage, Processing, or Disposal Facilities), §335.12(c)(1) and (2) of this title, §335.15(3) of this title (relating to Recordkeeping and Reporting Requirements Applicable to Owners or Operators of Storage, Processing, or Disposal Facilities), and §335.115 of this title (relating to Additional Reports), respectively.

(8) Reference to 40 CFR Part 264, Subpart F is changed to §335.156 of this title, §335.157 of this title (relating to Required Programs), §335.158 of this title (relating to Groundwater Protection Standard), §335.159 of this title (relating to Hazardous Constituents), §335.160 of this title (relating to Concentration Limits), §335.161 of this title (relating to Point of Compliance), §335.162 of this title (relating to Compliance Period), §335.163 of this title (relating to General Groundwater Monitoring Requirements), §335.164 of this title (relating to Detection Monitoring Program), §335.165 of this title (relating to Compliance Monitoring Program), §335.166 of this title (relating to Corrective Action Program), and §335.167 of this title.

(9) Reference to 40 CFR Part 265, Subpart F is changed to include §335.116 and §335.117 of this title, in addition to the reference to 40 CFR Part 265, Subpart F, except §265.90 and §265.94.

(10) Reference to the EPA is changed to the Texas Commission on Environmental Quality.

(c) A copy of 40 CFR Part 265 is available for inspection at the library of the Texas Commission on Environmental Quality, located on the first floor of Building A at 12100 Park 35 Circle, Austin, Texas.

**§335.116. Applicability of Groundwater Monitoring Requirements.**

(a) On November 19, 1981, the owner or operator of a surface impoundment, landfill, or land treatment facility which is used to manage hazardous waste must implement a groundwater monitoring program capable of determining the facility's impact on the quality of groundwater in the uppermost aquifer underlying the facility, except as provided in subsection (c) of this section.

(b) Except as provided in subsections (c), (d), and (g) of this section, the owner or operator must install, operate, and maintain a groundwater monitoring system which meets the requirements of 40 Code of Federal Regulations (CFR) §265.91, and must comply with 40 CFR §265.92 and §265.93, and §335.117 of this title (relating to Recordkeeping and Reporting). This groundwater monitoring program must be carried out during the active life of the facility, and for disposal facilities during the post-closure care period as well.

(c) All or part of the groundwater monitoring requirements of this subchapter may be waived if the owner or operator can demonstrate that there is a low potential for migration of hazardous waste or hazardous waste constituents from the facility via the uppermost aquifer to water supply wells (domestic, industrial, or agricultural) or to surface water. This demonstration must be in writing and must be kept at the facility. This demonstration must be certified by a qualified geologist or geotechnical engineer and must establish the following:

(1) the potential for migration of hazardous waste constituents from the facility to the uppermost aquifer, by an evaluation of:

(A) a water balance of precipitation, evapotranspiration, runoff, and infiltration; and

(B) unsaturated zone characteristics (i.e., geologic materials, physical properties, and depth to ground water); and

(2) the potential for hazardous waste or hazardous waste constituents which enter the uppermost aquifer to migrate to a water supply well or surface water, by an evaluation of:

(A) saturated zone characteristics (i.e., geologic materials, physical properties, and rate of groundwater flow); and

(B) the proximity of the facility to water supply wells or surface water.

(d) If an owner or operator assumes (or knows) that groundwater monitoring of indicator parameters in accordance with 40 CFR §265.91 and §265.92 would show statistically significant increases (or decreases in the case of pH) when evaluated under 40 CFR §265.93(b), he may install, operate, and maintain an alternate groundwater monitoring system (other than the one described in 40 CFR §265.91 and §265.92). If the owner or operator does decide to use an alternate groundwater

monitoring system he must:

(1) prior to November 19, 1981, submit to the executive director a specific plan certified by a qualified geologist or geotechnical engineer which satisfies the requirements of 40 CFR §265.93(d)(3), for an alternate groundwater monitoring system;

(2) prior to November 19, 1981, initiate the determinations specified in 40 CFR §265.93(d)(4);

(3) prepare and submit a written report in accordance with 40 CFR §265.93(d)(5);

(4) continue to make the determinations specified in 40 CFR §265.93(d)(4) on a quarterly basis until final closure of the facility; and

(5) comply with the recordkeeping and reporting requirements in §335.117 of this title.

(e) The groundwater monitoring requirements of this subchapter may be waived with respect to any surface impoundment that:

(1) is used to neutralize wastes which are hazardous solely because they exhibit the corrosivity characteristic under 40 CFR §261.22 or are listed as hazardous wastes in 40 CFR Part 261, Subpart D, only for this reason; and

(2) contains no other hazardous wastes, if the owner or operator can demonstrate that there is no potential for migration of hazardous wastes from the impoundment. The demonstrations must establish, based upon consideration of the characteristics of the wastes and the impoundment, that the corrosive wastes will be neutralized to the extent that they no longer meet the corrosivity characteristic before they can migrate out of the impoundment. The demonstration must be in writing and must be certified by a qualified professional.

(f) For owners and operators who have not established background concentrations or values in accordance with 40 CFR §265.92(c) by November 19, 1982, the executive director may require the implementation of a groundwater assessment plan under 40 CFR §265.93, whenever he determines that existing data indicates that there is a substantial likelihood that hazardous waste or hazardous constituents from the facility have entered the uppermost aquifer.

(g) The commission may replace all or part of the requirements of this subchapter applying to a regulated unit with alternative requirements developed for groundwater monitoring set out in a permit or a post-closure order where the commission determines that:

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

(2) it is not necessary to apply the requirement of this subchapter because the

alternative requirements will be protective of human health and the environment. The alternative standards for the regulated unit must meet the requirements of §335.8 and §335.167 of this title (related to Closure and Remediation and Corrective Action for Solid Waste Management Units).

**§335.118. Closure Plan; Submission and Approval of Plan.**

(a) Except as provided in this section, the owner or operator must submit his closure plan to the executive director in accordance with the procedures outlined in 40 Code of Federal Regulations (CFR) §265.112. The owner or operator must submit his closure plan to the executive director 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 compliance order under the RCRA or Texas Health and Safety Code, Chapter 361, to cease receiving wastes or close.

(b) Except as provided in subsection (c) of this section, the executive director will provide the owner or operator and the public, through newspaper notice, the opportunity to submit written comments on the plan and request modifications of the plan within 30 days of the date of the notice. The owner or operator is responsible for the cost of publication. The executive director may, 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 executive director 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 executive director will approve, modify, or disapprove the plan within 90 days of receipt. If the executive director 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 within 30 days after receiving such written statement. The executive director will approve or modify this plan in writing within 60 days. If the executive director modifies the plan, this modified plan becomes the approved closure plan. The executive director's decision must assure that the approved closure plan is consistent with 40 CFR §§265.111 - 265.115, and the applicable closure requirements contained in this chapter for specific waste management methods, and contained in 40 CFR §264.1102. A copy of this modified plan with a detailed statement of reasons for the modifications must be mailed to the owner or operator.

(c) Closure plans submitted in an application for a post-closure order in accordance with §305.50(b) of this title (relating to Additional Requirements for an Application for a Hazardous or Industrial Solid Waste Permit and for a Post-Closure Order) must comply with the public notice and comment requirements specified in Chapter 39, Subchapter N of this title (regarding Public Notice of Post Closure Orders).

**§335.119. Post-Closure Plan; Submission and Approval of Plan.**

(a) The owner or operator of a facility with hazardous waste management units subject to the post-closure care requirements in 40 Code of Federal Regulations (CFR) Part 265, Subpart G, must submit his post-closure plan to the executive director at least 180 days before the date he expects to begin partial or final closure of the first hazardous waste disposal unit. The date when he expects to begin closure must be either within 30 days after the date on which the 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 waste 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 his post-closure plan to the executive director 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 compliance order under the Resource Conservation and Recovery Act of 1976, §3008, as amended, or Texas Health and Safety Code, Chapter 361, to cease receiving wastes or close.

(b) Except as provided in subsection (c) of this section, the executive director 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 of the plan, including modification of the

30-year post-closure period required in 40 CFR §265.117 within 30 days of the date of the notice. The owner or operator is responsible for the cost of publication. The executive director may, 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 executive director 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.) The executive director will approve, modify, or disapprove the plan within 90 days of its receipt. If the executive director 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 executive director will approve or modify this plan in writing within 60 days. If the executive director modifies the plan, this modified plan becomes the approved post-closure plan. The executive director must ensure that the approved post-closure plan is consistent with 40 CFR §§265.117 - 265.120. A copy of this modified plan with a detailed statement of reasons for the modifications must be mailed to the owner or operator. If an owner or operator plans to begin closure before November 19, 1981, he must submit the post-closure plan by May 19, 1981.

(c) Post-closure plans submitted in an application for a post-closure order in accordance with §305.50(b) of this title (relating to Additional Requirements for an Application for a Hazardous or Industrial Solid Waste Permit and for a Post-Closure Order) must comply with the public notice and comment requirements specified in Chapter 39, Subchapter N of this title (regarding Public Notice of Post-Closure Orders).

**SUBCHAPTER F: PERMITTING STANDARDS FOR OWNERS AND OPERATORS OF  
HAZARDOUS WASTE STORAGE, PROCESSING, OR DISPOSAL FACILITIES**

**§§335.151, 335.152, 335.156, 335.167, 335.179**

**STATUTORY AUTHORITY**

The amendments are adopted under TWC, §5.103, which provides the commission with the authority to adopt rules necessary to carry out its power and duties under this code and other laws of this state; §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; §7.031, which authorizes the commission to issue an order for the closure, post-closure care, or other remediation of hazardous waste or hazardous waste constituents from a solid waste management unit at a solid waste processing, storage, or disposal facility; Solid Waste Disposal Act, THSC, §361.024, which authorizes the commission to adopt rules consistent with Chapter 361; and THSC, §361.082, which authorizes the commission to issue an order for the closure, post-closure care, or other remediation of hazardous waste or hazardous waste constituents from a solid waste management unit at a solid waste processing, storage, or disposal facility.

**§335.151. Purpose, Scope, and Applicability.**

(a) The purpose of this subchapter is to establish minimum standards to define the acceptable management of hazardous waste. These standards are to be applied in the evaluation of an application for a permit to manage hazardous waste, in accordance with TSWDA, and in the evaluation of an investigation report to implement groundwater protection requirements relating to compliance

monitoring and corrective action; and in the evaluation of corrective action measures to be instituted in accordance with §335.167 of this title (relating to Corrective Action for Solid Waste Management Units). For facilities that store, process, or dispose of industrial solid waste, in addition to hazardous waste, nothing herein shall be construed to restrict or abridge the commission's authority to implement the provisions of Texas Water Code, Chapter 26, and §335.4 of this title (relating to General Prohibitions), with respect to those activities.

(b) The standards in this subchapter apply to owners and operators of all facilities which process, store, or dispose of hazardous waste, except as specifically provided for in §335.41 of this title (relating to Purpose, Scope, and Applicability).

(c) A facility owner or operator who has fully complied with the requirements for interim status, as defined in the RCRA, §3005(e), and §335.2 and §335.43 of this title (relating to Permit Required), must comply with the requirements of Subchapter E of this chapter (relating to Interim Standards for Owners and Operators of Hazardous Waste Storage, Processing, or Disposal Facilities) in lieu of the requirements of this subchapter, until final administrative disposition of his permit application is made, except as provided under 40 Code of Federal Regulations (CFR) Part 264, Subpart S.

(d) The regulations of this subchapter apply to all owners and operators subject to the requirements of §335.2(m) of this title when the commission issues either a post-closure permit or a post-closure order at the facility. When the commission issues a post-closure order, references in this

subchapter to “in the permit” also mean “in the order.”

(e) The commission may replace all or part of the requirements of 40 CFR Part 264 Subpart G (related to Closure and Post-Closure), as amended and adopted in §335.152(a)(5) of this title (relating to Standards) and the unit specific standards in §§335.169, 335.172, and 335.174 of this title (relating to Closure and Post-Closure Care (Surface Impoundments); Closure and Post-Closure Care (Land Treatment Units), and Closure and Post-Closure Care (Landfills)) applying to regulated units, with alternative requirements as set out in a permit or order where the commission determines that:

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

(2) it is not necessary to apply the closure requirements of this subchapter (and those referenced herein) because the alternative requirements will be protective of human health and the environment and will satisfy the performance standards of §335.8 of this title (relating to Closure and Remediation) and §335.167 of this title (relating to Corrective Action for Solid Waste Management Units).

(f) If a permitted facility obtains an order setting out alternative requirements provided in subsection (e) of this section, then the alternative requirements shall also be referenced in the facility’s permit.

**§335.152. Standards.**

(a) The following regulations contained in 40 Code of Federal Regulations (CFR) Part 264 (including all appendices to Part 264) are adopted by reference as amended and adopted in the CFR through June 1, 1990 (55 FR 22685) and as further amended and adopted as indicated in each paragraph of this subsection:

(1) Subpart B - General Facility Standards (as amended through December 8, 1997 (62 FR 64636)); in addition, the facilities which are subject to 40 CFR Part 264, Subpart X, are subject to regulation under 40 CFR §264.15(b)(4) and §264.18(b)(1)(ii);

(2) Subpart C - Preparedness and Prevention;

(3) Subpart D - Contingency Plan and Emergency Procedures, except 40 CFR §264.56(d);

(4) Subpart E - Manifest System, Recordkeeping, and Reporting (as amended through December 8, 1997 (62 FR 64636)), except 40 CFR §§264.71, 264.72, 264.76 and 264.77; facilities which are subject to 40 CFR Part 264, Subpart X, are subject to 40 CFR §264.73(b)(6);

(5) Subpart G - Closure and Post-Closure (as amended through October 22, 1998, (63 FR 56709)); facilities which are subject to 40 CFR Part 264, Subpart X, are subject to 40 CFR

§§264.90(d), 264.111(c), 264.112(a)(2), 264.114, 264.117(a)(1)(i) and (ii), and 264.118(b)(1) and (2)(i) and (ii);

(6) Subpart H - Financial Requirements (as amended through June 10, 1994 (59 FR 29958)); except 40 CFR §§264.140, 264.141, 264.142(a)(2), 264.142(b) - (c), 264.143(a) - (h), 264.144(b) - (c), 264.145(a) - (h), 264.146, 264.147(a) - (d), 264.147(f) - (k), 264.148, 264.149, 264.150, and 264.151; and subject to the following limitations: facilities which are subject to 40 CFR Part 264, Subpart X, are subject to 40 CFR §§264.142(a), 264.144(a), and 37.6031(c) of this title (relating to Financial Assurance Requirements for Liability);

(7) Subpart I - Use and Management of Containers (as amended through November 25, 1996 (61 FR 59932));

(8) Subpart J - Tank Systems (as amended through November 25, 1996 (61 FR 59932));

(9) Subpart K - Surface Impoundments (as amended through November 25, 1996 (61 FR 59932)), except 40 CFR §264.221 and §264.228:

(A) reference to 40 CFR §264.221 is changed to §335.168 of this title (relating to Design and Operating Requirements (Surface Impoundments));

(B) reference to 40 CFR §264.228 is changed to §335.169 of this title (relating to Closure and Post-Closure Care (Surface Impoundments));

(10) Subpart L - Waste Piles (as amended and adopted through January 29, 1992 (57 FR 3462)), except 40 CFR §264.251;

(11) Subpart M - Land Treatment, except 40 CFR §264.273 and §264.280;

(12) Subpart N - Landfills (as amended through November 18, 1992 (57 FR 54452)), except 40 CFR §§264.301, 264.310, 264.314, and 264.315;

(13) Subpart O - Incinerators (as amended through September 30, 1999 (64 FR 52828));

(14) Subpart S - Corrective Action for Solid Waste Management Units (as amended through February 16, 1993 (58 FR 8683)), and 40 CFR §264.554 (as amended through November 30, 1998 (63 FR 65874));

(15) Subpart W - Drip Pads (as amended through December 24, 1992 (57 FR 61492));

(16) Subpart X - Miscellaneous Units (as amended through September 30, 1999 (64 FR 52828));

(17) Subpart AA - Air Emission Standards for Process Vents (as amended through January 21, 1999 (64 FR 3382));

(18) Subpart BB - Air Emission Standards for Equipment Leaks (as amended through December 8, 1997 (62 FR 64636));

(19) Subpart CC - Air Emission Standards for Tanks, Surface Impoundments, and Containers (as amended through January 21, 1999 (64 FR 3382));

(20) Subpart DD - Containment Buildings (as amended through August 18, 1992 (57 FR 37194));

(21) Subpart EE - Hazardous Waste Munitions and Explosives Storage (as amended through February 12, 1997 (62 FR 6622)); and

(22) the following appendices contained in 40 CFR Part 264:

(A) Appendix I - Recordkeeping Instructions (as amended through March 24, 1994 (59 FR 13891));

(B) Appendix IV - Cochran's Approximation to the Behrens-Fisher Students' T-Test;

(C) Appendix V - Examples of Potentially Incompatible Waste;

(D) Appendix VI - Political Jurisdictions in Which Compliance With  
§264.18(a) Must Be Demonstrated; and

(E) Appendix IX - Ground-Water Monitoring List (as amended through June  
13, 1997 (62 FR 32451)).

(b) The provisions of 40 CFR §264.18(b) are applicable to owners and operators of hazardous waste management facilities, for which a permit is being sought, which are not subject to the requirements of §§335.201 - 335.206 of this title (relating to Location Standards for Hazardous Waste Storage, Processing, or Disposal). A copy of 40 CFR §264.18(b) is available for inspection at the library of the Texas Commission on Environmental Quality, located on the first floor of Building A at 12100 Park 35 Circle, Austin, Texas.

(c) The regulations of the EPA that are adopted by reference in this section are adopted subject to the following changes.

(1) The term "regional administrator" is changed to the "executive director" of the Texas Commission on Environmental Quality or to the commission, consistent with the organization of the commission as set out in Texas Water Code, Chapter 5, Subchapter B.

(2) The term "treatment" is changed to "processing."

(3) Reference to RCRA, §3008(h) is changed to Texas Water Code, §7.031(c) - (e)  
(relating to Corrective Action Relating to Hazardous Waste).

(4) Reference to:

(A) 40 CFR §260.10 is changed to §335.1 of this title (relating to Definitions);

(B) 40 CFR §264.1 is changed to §335.151 of this title (relating to Purpose,  
Scope, and Applicability);

(C) 40 CFR §264.280 is changed to §335.172 of this title (relating to Closure  
and Post-Closure Care (Land Treatment Units));

(D) 40 CFR §264.90 is changed to §335.156 of this title (relating to  
Applicability of Groundwater Monitoring and Response);

(E) 40 CFR §264.101 is changed to §335.167 of this title (relating to  
Corrective Action for Solid Waste Management Units);

(F) 40 CFR §264.310 is changed to §335.174 of this title (relating to Closure and Post-Closure Care (Landfills));

(G) 40 CFR §270.41 is changed to §305.62 of this title (relating to Amendment); and

(H) 40 CFR §270.42 is changed to §305.69 of this title (relating to Solid Waste Permit Modification at the Request of the Permittee).

(5) 40 CFR Parts 260 - 270 means the commission's rules including, but not limited to, Chapters 50, 305, and 335 of this title (relating to Action on Applications and Other Authorizations; Consolidated Permits; and Industrial Solid Waste and Municipal Hazardous Waste), as applicable.

(6) Reference to 40 CFR Part 264, Subpart D is changed to §335.152(a)(3) of this title (relating to Standards) and §335.153 of this title (relating to Reporting of Emergency Situations by Emergency Coordinator).

(7) Reference to 40 CFR §§264.71, 264.72, 264.76, and 264.77 is changed to §335.12 of this title (relating to Shipping Requirements Applicable to Owners or Operators of Storage, Processing, or Disposal Facilities), §335.12(c)(1) and (2) of this title, §335.15(3) of this title (relating to Recordkeeping and Reporting Requirements Applicable to Owners or Operators of Storage, Processing, or Disposal Facilities), and §335.155 of this title (relating to Additional Reports),

respectively.

(8) Reference to 40 CFR Part 264, Subpart F is changed to §335.156 of this title, §335.157 of this title (relating to Required Programs), §335.158 of this title (relating to Groundwater Protection Standard), §335.159 of this title (relating to Hazardous Constituents), §335.160 of this title (relating to Concentration Limits), §335.161 of this title (relating to Point of Compliance), §335.162 of this title (relating to Compliance Period), §335.163 of this title (relating to General Groundwater Monitoring Requirements), §335.164 of this title (relating to Detection Monitoring Program), §335.165 of this title (relating to Compliance Monitoring Program), §335.166 of this title (relating to Corrective Action Program), and §335.167 of this title.

(9) Reference to 40 CFR Part 265, Subpart F is changed to include §335.116 of this title (relating Applicability of Groundwater Monitoring Requirements) and §335.117 of this title (relating to Recordkeeping and Reporting), in addition to the reference to 40 CFR Part 265, Subpart F, except §265.90 and §265.94.

(10) Reference to the EPA is changed to the Texas Commission on Environmental Quality.

(d) A copy of 40 CFR Part 264 is available for inspection at the library of the Texas Commission on Environmental Quality, located on the first floor of Building A at 12100 Park 35 Circle, Austin.

**§335.156. Applicability of Groundwater Monitoring and Response.**

(a) Except as provided in subsection (b) of this section, the rules pertaining to groundwater monitoring and response apply to owners and operators of facilities that process, store, or dispose of hazardous waste.

(1) The owner or operator must satisfy those requirements of paragraph (2) or (3) of this subsection for all wastes (or constituents thereof) contained in any such waste management unit at the facility, regardless of the time at which waste was placed in the units.

(2) Except as provided in paragraph (3) of this subsection, all solid waste management units must comply with the requirements in §335.167 of this title (relating to Corrective Action for Solid Waste Management Units). A surface impoundment, waste pile, land treatment unit, or landfill that receives hazardous waste after July 26, 1982, (hereinafter referred to as a regulated unit) must comply with the requirements of §§335.157 - 335.166 of this title (relating to Required Program; Groundwater Protection Standard; Hazardous Constituents; Compliance Period; General Groundwater Monitoring Requirements; Detection Monitoring Program; Compliance Monitoring Program; and Corrective Action Program) in lieu of §335.167 of this title for purposes of detecting, characterizing, and responding to releases to the uppermost aquifer. The financial responsibility requirements of §335.167 of this title apply to regulated units.

(3) The commission may replace all or part of the requirements of §§335.157 - 335.166 of this title with alternative requirements for groundwater monitoring and corrective action for releases to groundwater set out in the permit or in a post-closure order where the commission determines that:

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

(B) it is not necessary to apply the groundwater monitoring and corrective action requirements of §§335.157 - 335.166 of this title because the alternative requirements will be protective of human health and the environment.

(4) If a permitted facility obtains an order setting out alternative requirements provided in §335.151(e) of this title (relating to Purpose, Scope, and Applicability), then the alternative requirements shall also be referenced in the facility's permit.

(b) The owner or operator's regulated unit or units are not subject to regulation for releases into the uppermost aquifer under this section and §§335.157 - 335.166 of this title if:

(1) he is exempted under 40 Code of Federal Regulations (CFR) §264.1;

(2) All solid waste management units must comply with the requirements in §335.167 of this title (relating to Corrective Action for Solid Waste Management Units). A surface impoundment, waste pile, land treatment unit or landfill that receives hazardous waste after July 26, 1982 (hereinafter referred to as a regulated unit) must comply with the requirements of §§335.157 - 335.166 of this title (relating to Required Program; Groundwater Protection Standard; Hazardous Constituents; Compliance Period; General Groundwater Monitoring Requirements; Detection Monitoring Program; Compliance Monitoring Program; and Corrective Action Program) in lieu of §335.167 of this title (relating to Corrective Action for Solid Waste Management Units) for purposes of detecting, characterizing, and responding to releases to the uppermost aquifer. The financial responsibility requirements of §335.167 of this title (relating to Corrective Action for Solid Waste Management Units) apply to regulated units.

(3) the commission finds, in accordance with 40 CFR §264.280(d), that the treatment zone of a land treatment unit that qualifies as a regulated unit does not contain levels of hazardous constituents that are above background levels of those constituents by an amount that is statistically significant, and if an unsaturated zone monitoring program meeting the requirements of 40 CFR §264.278 has not shown a statistically significant increase in hazardous constituents below the treatment zone during the operating life of the unit. An exemption under this paragraph can only relieve an owner or operator of responsibility to meet the requirements of this subchapter relating to groundwater monitoring and response during the post-closure care period;

(4) the commission finds that there is no potential for migration of liquid from a regulated unit to the uppermost aquifer during the active life of the regulated unit (including the closure period) and the post-closure care period specified under 40 CFR §264.117. This demonstration must be certified by a qualified geologist or geotechnical engineer. In order to provide an adequate margin of safety in the prediction of potential migration of liquid, the owner or operator must base any predictions on assumptions that maximize the rate of liquid migration; or

(5) he designs and operates a pile in compliance with 40 CFR §264.250(c).

(c) Sections 335.157 - 335.166 of this title apply during the active life of the regulated unit (including the closure period). After closure of the regulated unit, these sections:

(1) do not apply if all waste, waste residues, contaminated containment system components, and contaminated subsoils are removed or decontaminated at closure;

(2) apply during the post closure care period under 40 CFR §264.117 if the owner or operator is conducting a detection monitoring program under §335.164 of this title; or

(3) apply during the compliance period under §335.162 of this title if the owner or operator is conducting a compliance monitoring program under §335.165 of this title or a corrective action program under §335.166 of this title.

**§335.167. Corrective Action for Solid Waste Management Units.**

(a) The owner or operator of a facility seeking a permit or post-closure order for the processing, storage, or disposal of hazardous waste must institute corrective action as necessary to protect human health and the environment for all releases of hazardous waste or constituents from any solid waste management unit at the facility, regardless of the time at which waste was placed in such unit.

(b) Corrective action at a permitted facility will be specified in the compliance plan under §305.401 of this title (relating to Compliance Plan) and in accordance with this section, 40 Code of Federal Regulations (CFR) Part 264, Subpart S, and §335.152 of this title (relating to Standards). The plan will contain schedules of compliance for such corrective action where such corrective action cannot be completed prior to issuance of the permit or plan. Financial assurance for such corrective action shall be established and maintained in accordance with Chapter 37, Subchapter P of this title (relating to Financial Assurance for Hazardous and Nonhazardous Industrial Solid Waste Facilities) in an amount acceptable to the executive director.

(c) Corrective action at a facility under a post-closure order will be specified in the facility's post-closure order in accordance with this section, 40 CFR Part 264, Subpart S, and §335.152 of this title. The post-closure order will contain schedules of compliance for such corrective action where such corrective action cannot be completed prior to issuance of the post-closure order. Financial assurance for such corrective action shall be established and maintained in accordance with Chapter 37,

Subchapter P of this title in an amount acceptable to the executive director.

(d) The owner or operator must implement corrective actions beyond the facility boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates to the satisfaction of the executive director that, despite the owner's or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action. The owner/operator is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis. Financial assurance for such corrective action shall be established and maintained in accordance with Chapter 37, Subchapter P of this title, in an amount acceptable to the executive director.

**§335.179. Financial Assurance.**

(a) Before a permit or post-closure order may be issued, amended, extended, or renewed for a solid waste facility for storage, processing, or disposal of hazardous waste, the commission shall determine the type or types of financial assurance which may be used by the applicant to comply with applicable regulations.

(b) Before hazardous waste may be stored, processed, or disposed of at a solid waste facility subject to this subchapter, the permittee must:

(1) establish financial assurance for the amount of the closure cost estimate in a manner that meets the requirements of Chapter 37, Subchapter P of this title (relating to Financial Assurance for Hazardous and Nonhazardous Industrial Solid Waste Facilities), in addition to the requirements specified in §335.152(a)(6) of this title (relating to Standards); and

(2) establish financial assurance for the amount of the post closure cost estimate in a manner that meets the requirements of Chapter 37, Subchapter P of this title, in addition to the requirements specified in §335.152(a)(6) of this title, if the facility:

(A) includes a disposal facility;

(B) includes a pile, and/or surface impoundment 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 §335.169 of this title (relating to Closure and Post-Closure Care (Surface Impoundments)) and 40 Code of Federal Regulations, §264.258;

(C) includes a tank system that is required under §335.152 of this title, to meet the requirements for landfills;

(D) includes a containment building that is required under §335.152 of this title, to meet the requirements for landfills; or

(E) is notified by the executive director of the need for post closure financial assurance for another type of unit.

(c) Before hazardous waste may be stored, processed, or disposed of at a solid waste facility or a group of such facilities subject to this subchapter, the owner or operator must establish financial assurance for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities in a manner that meets the requirements of Chapter 37 of this title (relating to Financial Assurance).

(d) Before hazardous waste may be stored, processed, or disposed of at a solid waste facility containing a hazardous waste surface impoundment, landfill, land treatment facility, or disposal miscellaneous unit used to manage hazardous waste or a group of such facilities subject to this subchapter, the owner or operator must establish financial assurance for nonsudden liability coverage for bodily injury and property damage to third parties caused by nonsudden accidental occurrences arising from operations of the facility or group of facilities in a manner that meets the requirements of Chapter 37 of this title.

(e) If the executive director determines that there is a significant risk to human health and the environment from nonsudden accidental occurrences resulting from the operations of a facility that is not a surface impoundment, landfill, or land treatment facility, the owner or operator may be required to comply with subsection (d) of this section.