

The Texas Commission on Environmental Quality (commission) adopts amendments to §§330.2, 330.111 - 330.117, 330.119 - 330.138, and 330.200. The commission also adopts the repeal of §330.118 and new §330.118. Sections 330.2, 330.111 - 330.120, 330.122 - 330.127, 330.131, 330.133, 330.134, 330.136, 330.137, and 330.200 are adopted *with changes* to the proposed text as published in the August 13, 2004 issue of the *Texas Register* (29 TexReg 7900) and will be republished. Sections 330.121, 330.128 - 330.130, 330.132, 330.135, and 330.138 and the repeal of §330.118 are adopted *without changes* and will not be republished.

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

This rulemaking is needed to comprehensively address which site operating plan requirements should be performance-based standards and where specificity is warranted. The site operating plan issues that need to be addressed include: the level of detail needed; requirements which provide certainty; enforceability; and balancing need for specificity, flexibility, enforceability, and environmental protection.

Clearer rules will assist municipal solid waste facility permit applicants in providing adequate site operating plans and will assist them as applicants and as municipal solid waste facility operators in understanding their responsibilities. Providing greater certainty in requirements will benefit the applicants, the agency, the environment, and the public.

This rulemaking comprehensively addresses which site operating plan requirements should be performance-based standards and where specificity is warranted. The rules modify Chapter 330 to address municipal solid waste site operating plans.

## SECTION BY SECTION DISCUSSION

Administrative changes are adopted throughout the sections to be consistent with *Texas Register* requirements. The words “must” and “shall” are amended as appropriate.

Section 330.2(131), concerning Definitions, is adopted to change the definition of site operating plan to bring the definition into conformity with current program practice. The word “guidance” is changed to “instruction” so that a site operating plan is defined as a document that provides instruction to site management and operating personnel. The phrase “. . . to enable them to conduct day-to-day operations. . .” is deleted, because the site operating plan is not intended to be a comprehensive operating manual. The phrase “. . . and any post-closure care period . . .” is deleted, because operations during that period are addressed separately in the post-closure care plan. The phrase “. . . to protect human health and the environment and prevent nuisances” is added to emphasize the purpose of a site operating plan.

Section 330.111, concerning General, is adopted to obligate landfill permittees to apply for a noticed permit modification in accordance with 30 TAC §305.70(k) to incorporate the requirements of this subchapter. The executive director will determine a schedule for landfill permittees to submit an application to modify their permit. Timely submission of a request for a permit modification will qualify the owners or operators of existing landfills to operate under requirements contained in the existing permit until a final decision is made on the application. A permittee’s initial application will be processed as a modification and any subsequent applications will be processed in accordance with Chapter 305, Subchapter D. The last sentence related to including current requirements in permits is deleted, because it may have been interpreted as being overly broad and because the issue is already

addressed in §305.127(4)(B).

Section 330.112, concerning Pre-Operation Notice, is adopted to give certainty to the timing of when the Soils and Liner Evaluation Report is due to the executive director for review.

Section 330.113, concerning Recordkeeping Requirements, is adopted to require the owner or operator to record occurrences in an operating record within a specific amount of time. The word “promptly” is deleted and replaced with a measurable term of “seven working days of completion or receipt of analytical data, as appropriate” for certainty and for enforceability. The word “prohibited” is inserted to be consistent with language in §330.5(e) which lists prohibited waste. A specific time is added for the owner or operator to provide written notification when adding documents to the operating record; a standard is added regarding maintaining training records; a standard is added regarding maintaining personnel operator licenses; and a standard is added requiring the owner or operator to maintain records related to the annual waste acceptance rate for the facility. Provisions are added for filing an application to modify the landfill permit application if the annual acceptance rate exceeds the rate estimated in the permit application.

Section 330.114, concerning Site Operating Plan, is adopted reflecting changes in the introductory paragraph consistent with changes made to the definition of site operating plan discussed previously. The site operating plan must include provisions to meet the requirements of the subchapter. Changes were also made to add requirements regarding the description of functions and minimum qualifications for each category of key personnel. A standard is added for the description of the equipment to be utilized at the facility based on the estimated waste acceptance rate and operational requirements, and a

description of the provisions for backup equipment during periods of breakdown or maintenance of the listed equipment. The word “detailed” is deleted from §330.114(3). Site operating plan provisions that the commission determined should be more detailed have been revised accordingly. Site operating plan provisions, which are performance-based, may not need to be detailed. Additionally, the word “procedures” is changed to “general instructions” to reflect that site operating plans are not expected to include a comprehensive procedural manual for operating a facility. A standard is added by reference regarding training requirements under 30 TAC §335.586, relating to Personnel Training, which must be followed. Language is added to allow receipt of polychlorinated biphenyls to the extent authorized by the United States Environmental Protection Agency (EPA). Language is also added regarding procedures, inspections, and training. Inclusion of these new standards will assist in compliance and enforcement.

Section 330.115, concerning Fire Protection, is adopted to change the requirement for the location of the source of earthen material so that it is available at all times to extinguish any fire. The previous criteria was within 2,500 feet of the working face. Additionally, standards are added regarding the size of the source of earthen material and the ability to place the material on waste. This requirement is to give greater assurance of efficient fire protection. A functional requirement will better serve the intent of having soil available for fire-fighting efforts. This language adds a clear statement that gives certainty to the requirements of the contents of a site operating plan. Also, a new sentence is added in this section to make it clear that specific requirements, on a site-by-site basis, are required in the site operating plan. A new standard is added that requires the site operating plan to address fire protection measures specific to individual activities. A standard is added that requires contacting the commission’s regional office within four hours by telephone if a fire is not extinguished within ten minutes of

detection, and also contacting the commission's regional office in writing within 14 days with a description of the fire and the resulting response.

Section 330.116, concerning Access Control, is adopted to require that the methods for access control be specified in the site operating plan. The adopted rule indicates that the preferred method of landfill access control is fences and gates. Standards for access control are added to require an inspection and maintenance schedule, notification to the commission's regional office of a breach or temporary repair, and notification to the commission's regional office when a permanent access control breach repair is completed, unless the permanent repair can be made within eight hours of detection. These changes will make certain that the details of how this performance-based criteria will be accomplished are included in the site operating plan for the sake of enforceability.

Section 330.117, concerning Unloading of Waste, is adopted to specify that the site operating plan must specify the maximum size of the unloading areas. Language referencing permit modifications for small municipal solid waste landfill facilities is deleted. A sentence is added to make certain that the details of how this performance-based criteria will be accomplished are included in the site operating plan for the sake of enforceability. A redundant and unnecessary sentence is removed regarding brush and demolition waste. A requirement is added for trained staff to observe each load that is disposed at the facility. The facility staff is given the authority and responsibility to reject unauthorized loads, have unauthorized material removed by the transporter, and/or appropriate surcharges, or have the unauthorized material removed by on-site personnel. Since these new requirements apply to all facilities, the similar existing provisions in §330.117(f)(3), which apply to Type IV landfills that accept rubbish, are repealed. A record of unauthorized material removal is required to be maintained in the

operating A reference to an existing rule regarding prohibited waste is added. A standard for a sign for Type IV facilities is added regarding the receipt of putrescible and household wastes. Sentence structure is changed in several instances for certainty and enforceability.

Section 330.118, concerning Facility Operating Hours, is repealed and replaced by a new section that changes the title of the section from “Hours of Operation” to “Facility Operating Hours.” The existing language of the section has been replaced by new language. Standards are added regarding the hours when a facility may be open to accept waste, the operating hours when materials may be transported on or off site, and the hours when heavy equipment may operate. These activities are being regulated because of their potential to impact the public. “Waste acceptance hours” restrict the time when a facility may be open to accept waste under the existing rules, and the adopted rule regulates when other specified activities may be conducted. If some of those activities are currently being conducted outside of a facility’s authorized “hours of operation,” the facility must conform to the limits on operating hours or request to modify its permit under §330.111(b) to include the operating hours for those activities. The standard hours of operation are added. The concept of operating Monday through Friday, unless otherwise approved in the authorization for the facility, is stated. A provision is added for the approval of alternate operating waste acceptance hours for up to five days in a one-year period to accommodate special occasions, special purpose events, holidays, or other special occurrences as specified in §305.70. A provision is added that allows the commission’s regional offices to approve additional temporary operating hours to address disaster or other emergency situations or other unforeseen circumstances that could result in the disruption of waste receipt at the facility. A standard is added that requires the facility to record in the site operating record when alternate or additional operating hours are used.

Section 330.119, concerning Site Sign, is adopted to require that the site sign include an emergency contact phone number for an individual with the authority to obligate the facility when the site is closed. Adding an emergency telephone number to the site sign is a common sense, practicable, and easily enforced new standard that is not burdensome to an owner or operator. Having an emergency contact phone number posted at the facility entrance will assist the timely notification of site management of the need to respond during an emergency.

Section 330.120, concerning Control of Windblown Solid Waste and Litter, is adopted to change the section title from “Control of Windblown Waste and Litter” to “Control of Windblown Solid Waste and Litter.” A requirement is added to ensure that the working face is maintained and operated in a manner to control windblown solid waste. A standard is added to require the site operating plan to use engineering methods or measures, including portable panels, temporary fencing, and perimeter fencing or comparable engineering controls to control windblown waste. Language is added that indicates that the site operating plan must specify the means for confining windblown waste and litter. The existing two sentences regarding portable fences have been deleted as they were optional and not as enforceable as the amended rules. Pickup of litter scattered throughout the site, along fences and access roads, and at the gate is specified as once a day on days that the facility is in operation instead of the previous weekly criteria. Paragraph (3) is deleted because it was redundant of paragraphs (1) and (2).

Section 330.121, concerning Easements and Buffer Zones, is adopted to add a reference to other requirements for buffer zones. The phrase “unless authorized by the executive director” was deleted because the design standards for buffer zones will be addressed in the comprehensive Chapter 330 rulemaking tentatively scheduled for proposal in June 2005. Deleting this phrase is not intended to

affect existing authorizations for facilities operating with less than a 50-foot buffer zone.

Section 330.122, concerning Landfill Markers and Benchmark, is adopted to specify that landfill markers must be inspected on a monthly basis and repaired or replaced within 15 days of discovery that a marker does not meet regulatory requirements. This standard is added to make certain that the details of how this performance-based criteria will be accomplished are included in the site operating plan.

Section 330.123, concerning Materials Along the Route to the Site, is adopted to add a new standard of at least daily cleanup of waste materials spilled along and within the right-of-way of public access roads serving the facility for a distance of two miles in either direction from any entrances used for the delivery of waste to the facility. The word “ensure” is changed to “encourage” to better reflect the level of control that a facility has regarding the actions of transporters. An alternate cleanup frequency and distance could be approved in the site operating plan. This additional requirement establishes a clear, certain, and enforceable requirement for site access road cleanup. For flexibility, the language allows for alternatives and is consistent with standards set in §330.127.

Section 330.124, concerning Disposal of Large Items, is adopted to add clarity that the requirement is for landfills and to specify how items containing chlorinated fluorocarbon must be handled. A cross-reference to federal regulations is added to provide more flexibility to manage chlorinated fluorocarbon waste consistent with the federal program.

Section 330.125, concerning Air Criteria, is adopted to update a rule reference concerning burning and air pollution control, and to delete a redundant sentence. New requirements for an odor management

plan that address the sources of odors and includes general instructions to control them are added.

Plans for odor management must include the identification of wastes that require special attention such as septage, grease trap waste, dead animals, and leachate collection and disposal. This new requirement will provide a plan to assist in the prevention of off-site odors. This new requirement makes it clear that the applicant shall provide site-specific details in the site operating plan, and makes it clear that the specific requirements, on a site-by-site basis, are required in the site operating plan.

Section 330.126, concerning Disease Vector Control, is adopted to require that the general methods and performance-based frequencies for disease vector control must be specified in the site operating plan.

This requirement is added to make certain that information is included in the site operating plan for the sake of certainty and enforceability. This rule allows the operator to establish site-specific requirements and provides flexibility for the operator.

Section 330.127, concerning Site Access Roads, is adopted to make certain that all-weather roads are provided from the facility to access public roads and a new standard is established to require tracked mud and associated debris at the access to the facility on the public roadways to be removed at least once per day when mud and associated debris is being tracked onto the public roadway. For enforceability, new language is added that requires the methods for controlling mud and associated debris tracked on to public roadways be specified in the site operating plan. A reference to §330.55(a)(2) is added regarding existing provisions for controlling the tracking of mud and associated debris on to public roadways. A new requirement is added that indicates that the frequency of regrading of the site access road must be specified in the site operating plan to make certain that the details of how this performance-based criteria will be accomplished are included in the site operating

plan for the sake of enforceability. These new requirements are intended to provide clear, certain, and enforceable standards for on-site and other access road maintenance.

Section 330.128, concerning Salvaging and Scavenging, is adopted to make a language change that makes certain the distinction between Class 1 industrial and other special wastes.

Section 330.129, concerning Endangered Species Protection, is adopted to add the rule reference for criteria for the protection of endangered species as listed in §330.53(b)(13), and to specify that facilities must be operated in conformance with any endangered or threatened species protection plan required by the commission to help protect endangered species.

Section 330.131, concerning Oil, Gas, and Water Wells, is adopted to revise the section title for consistency. Procedural requirements are added for when written notice of the location of any existing or abandoned water well within the facility is required. A sentence is added to allow water wells used for supply at the facility to remain in use as long as they are located outside of the groundwater monitoring well network or the waste footprint, and are not impacted by landfill operations. A sentence is added to allow producing crude oil or natural gas wells that do not affect or hamper landfill operations to be operated within the facility boundary, if identified as such in the permit for the facility. A differentiation is made between other state agency requirements and commission requirements. Language is added specifying that changes to any liner installation plan require a permit modification.

Section 330.132, concerning Compaction, is adopted to require that the methods for obtaining waste compaction be specified in the site operating plan to allow executive director review of the method of

compaction.

Section 330.133, concerning Landfill Cover, is adopted to add standards requiring intermediate cover to be six inches of suitable earthen material that is capable of sustaining native plant growth that must be seeded or sodded following its application in order to control erosion or a material that will otherwise control erosion. This intermediate cover must be not less than 12 inches of suitable earthen material. The intermediate cover must be graded to prevent ponding of water, and plant growth or other erosion control measures must be maintained. Alternative material daily cover (ADC) requirements are changed to state procedural requirements for authorization by temporary authorization under §305.70(m) followed by a required permit amendment or permit modification in accordance with §305.70(k)(1). A provision is added limiting the use of ADC to a 24-hour period after which either waste or daily cover must be placed.

Standards are changed for repairing erosion of final or intermediate cover within five days unless approved otherwise based on the extent of the damage requiring repair, or the repairs being delayed because of weather conditions. An additional standard is set regarding the date of detection of erosion and date of completion of repairs, including reasons for any delays, to be documented in the cover inspection report. A requirement is added for the site operating plan to establish a frequency, and identify other occasions, for conducting inspections of the final and intermediate covers to detect the need for repairs. A standard is added to specify that periodic inspections and restorations are required during the entire operational life and for the post-closure maintenance period. A phrase is added to make certain that the details of how a performance-based criteria will be accomplished are included in the site operating plan for the purpose of enforceability. A phrase is added to make it clear that the

specific requirements, on a site-by-site basis, are required in the site operating plan. A requirement is added to specify that the cover inspection report must document inspections, the findings, and corrective action taken when necessary. These changes are made to improve landfill cover installation and maintenance and to improve enforceability to benefit the environment.

Section 330.134, concerning Poned Water, is adopted to add a requirement for a ponding prevention plan in the site operating plan that identifies techniques to be used at the landfill to prevent the ponding of water over waste, an inspection schedule to identify potential ponding locations, corrective actions for ponded water, and general instructions to manage water that has been in contact with waste. This new requirement for a ponding prevention plan will assist in the prevention of off-site odors and the undesirable mixing of water and waste. This language makes it clear that the applicant shall provide site-specific details in the site operating plan.

Section 330.135, concerning Waste in Enclosed Containers or Enclosed Vehicles Accepted at Type IV Landfills, is adopted to correct a reference from the Texas Water Commission to the commission, to correct a reference from executive director to commission, to correct a reference regarding the Solid Waste Disposal Act, and to make related and conforming changes.

Section 330.136, concerning Disposal of Special Wastes, is adopted to better govern the relationship between generators of special waste, disposal facilities, and the commission. While some landfills may have a detailed special waste acceptance plan approved by the commission, some landfills may rely more on seeking approval on a case-by-case basis. If a landfill has an approved special waste acceptance plan, it may receive those types of waste authorized in the plan on an ongoing basis or for

the period approved in its permit. If a landfill does not have an approved plan, or if a type of waste is not addressed in its plan, the receipt of a specific load or type of special waste would be allowed by the executive director based on the waste characterization information created by the generator and the suitability of the landfill to receive the waste. Section 330.136(a)(2) is amended to require generators of special waste to submit requests to the executive director or to a facility with an approved plan. Section 330.136(a)(4) is amended to clarify that if a generator makes a request directly to the executive director, the request must be accompanied by the landfill's agreement to accept the waste. A reference in §330.136(b)(1) is corrected. A standard is set requiring containers or bags holding regulated asbestos-containing material (RACM) to be wrapped with at least six-mil polyethylene. This change helps ensure that this material remains isolated and does not come in contact with humans or the environment. A language change is made regarding landfills authorized for acceptance of municipal hazardous waste from a conditionally exempt small quantity generator. The provision allowing acceptance of this waste "providing the owner or operator is willing to accept the waste" has been revised to allow acceptance of the waste "provided the owner or operator authorizes acceptance of the waste." Language is deleted from the section regarding obsolete time frames.

Section 330.137, concerning Disposal of Industrial Wastes, is adopted to clarify that the executive director cannot approve a permit modification to authorize the receipt of Class 1 industrial solid waste unless it is authorized in the landfill permit. A change is made in the language to make a distinction about the acceptance of a specified type of Class 1 industrial waste. Language in §330.137(c)(1) that was proposed for deletion is retained to provide greater certainty. A requirement is added by reference for a contingency plan to meet the requirements of §335.589. Certain design requirements for trenches that accept Class 1 waste are moved from this section to §330.200, concerning Design Criteria. These

changes improve environmental protection and improve internal consistency.

Section 330.138, concerning Visual Screening of Deposited Waste, is adopted to add “Visual” to the section title and to add language to the section that specifies that the purpose of the rule is to require visual screening.

Section 330.200, concerning Design Criteria, is adopted to incorporate certain existing design requirements for municipal solid waste landfills that accept Class 1 waste. The design criteria are moved from existing §330.137(d) to §330.200(f). This existing design standard for groundwater protection is currently found in the site operating plan rules, but is better located in §330.200 which contains design standards for groundwater protection.

#### FINAL REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the rulemaking is not subject to §2001.0225, because it does not meet the criteria for a “major environmental rule” as defined in that statute. A “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 purpose of this rulemaking is to develop rules that will provide site-specific, performance-based, enforceable site operating plans. The affected regulated community is the current and future municipal

solid waste permit applicants who are required to comply with existing site operating plan rules. The adopted rules revise operational standards, specifically site operating plan requirements for municipal solid waste disposal facilities and therefore, are not anticipated 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 commission concludes that this rulemaking does not meet the definition of a major environmental rule.

Furthermore, even if the rulemaking did meet the definition of a major environmental rule, the amendments are not subject to Texas Government Code, §2001.0225, because they do not meet any of the four applicable requirements specified in §2001.0225(a). Section 2001.0225(a) applies to rules adopted by an agency, the result of which is to: 1) exceed a standard set by federal law, unless the rules are specifically required by state law; 2) exceed an express requirement of state law, unless the rules are 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 rules solely under the general powers of the agency instead of under a specific state law.

In this case, the amendments to Chapter 330, Subchapter F, do not meet any of these requirements. First, the rules are consistent with, and do not exceed, the standards set by federal law. Second, the rules do not exceed an express requirement of state law, because there is no express requirement of state law related to the content of site operating plans. Third, the amendments do not exceed the commission's obligations to implement its federally approved Subtitle D permit program. Fourth, the commission does not adopt these rules under the general powers of the agency but rather under the

authority of Texas Health and Safety Code, §361.061, which authorizes the commission to require and issue permits governing the construction, operation, and maintenance of solid waste facilities used to store, process, or dispose of solid waste. These rules are also adopted under the authority of Texas Health and Safety Code, §361.011 and §361.024, which provide the commission the authority to adopt rules necessary to carry out its powers and duties under the Texas Solid Waste Disposal Act.

Therefore, the commission does not adopt the rules solely under the commission's general powers.

#### TAKINGS IMPACT ASSESSMENT

The commission evaluated the rules and performed an assessment of whether the rules constitute a taking under Texas Government Code, Chapter 2007. The purpose of this rulemaking is to revise the operating standards, specifically the site operating plan requirements, for municipal solid waste disposal facilities. The rules substantially advance this stated purpose by providing new and modified requirements for site operating plans for new, modified, and amended municipal solid waste permits.

The rules will provide a benefit to society through enhanced environmental and public health protection, as well as clearer requirements for the daily operation of municipal solid waste facilities. Promulgation and enforcement of the rules is neither a statutory nor a constitutional taking of private real property because the rules do not affect real property in a manner which restricts or limits the owner's right to the property that would otherwise exist in the absence of the rules or cause a reduction in value by 25% or more beyond that which would otherwise exist in the absence of the rules. Therefore, this rulemaking will not constitute a taking under Texas Government Code, Chapter 2007.

#### CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission reviewed the rulemaking and found that it is identified in the Coastal Coordination Act

Implementation Rules, 31 TAC §505.11(b)(2), relating to rules subject to the Coastal Management Program, and will, therefore, require that goals and policies of the Texas Coastal Management Program (CMP) be considered during the rulemaking process.

The commission reviewed this rulemaking for consistency with the CMP goals and policies in accordance with the regulations of the Coastal Coordination Council, and determined that the rulemaking will have no substantive effect on commission actions subject to the CMP and is therefore consistent with CMP goals and policies.

#### PUBLIC COMMENTS

A public hearing was held on September 1, 2004. The comment period closed on September 13, 2004. Oral comments were received from Allied Waste (AW); the City of Wichita Falls (Wichita Falls); Lone Star Chapter of the Solid Waste Association in North America (TXSWANA); Texas Campaign for the Environment (TCE); Walsh Ranches Limited Partnership (Walsh Ranches); and five individuals.

Written comments were received from Allied Waste (AW); CETCO Lining Technologies (CETCO); the City of Cleburne (Cleburne); the City of Corpus Christi (Corpus Christi); the City of Lubbock (Lubbock); IESI Corporation (IESI); TXSWANA; Lowerre and Kelly (LK); McElroy, Sullivan, and Miller, on behalf of Republic Waste Services of Texas Ltd. (RWS); National Solid Waste Management Association (NSWMA); Panhandle Regional Planning Commission (PRPC); Russell, Moorman, and Rodriguez (RMR); Sandy Land Underground Water Conservation District (SLUWCD); Vinson and Elkins, on behalf of Waste Management of Texas (WMTX); Walsh Ranches; and two individuals.

All commenters either opposed portions of the rulemaking or supported the rulemaking with suggested changes.

## RESPONSE TO COMMENTS

### General Comments

#### *Comment*

TXSWANA, Corpus Christi, AW, NSWMA, SLUWCD, Cleburne, WMTX, PRPC, and IESI commented that the cost estimates in the fiscal note are too low. AW and PRPC commented that the commission significantly underestimated the costs of preparing a new or revised site operating plan in the proposed rules. AW estimated that the cost to prepare a new or revised site operating plan will exceed \$50,000. Commenters requested that the fiscal implications of the rule be recalculated and more accurately estimated in the fiscal note in the preamble to the final rule.

#### **Response**

**The commission does not agree that the cost estimates to prepare a revised or new site operating plan under the rules are too low. The commission estimated that it would cost between \$1,000 and \$5,000 to update an existing site operating plan under the amendments, and between \$1,000 and \$5,000 to develop a new site operating plan under the amendments above the current cost to develop a new site operating plan. The agency's estimates are based on the assumption that many of the new requirements simply require municipal solid waste facilities to document existing operational practices. Although the cost to develop a new or revised site operating plan for a specific facility may exceed the estimated amount in some cases, the commission expects that the**

**costs for most facilities to comply with the new rules will not exceed the estimates provided. In addition, the commission has modified selected rule language to better delineate variables and better describe the intent of the original rule language. For example, AW assumed facilities would have the responsibility for removal of mud on two miles of public roadway, while the intent of the rules is to control/remove mud at the facility entrance. Additionally, §330.117 has been modified to reflect the commission's intent that a facility's staff are required to observe each load of waste being deposited, as opposed to conducting a thorough inspection of each load of waste. By better describing the intent of the rules, the commission concludes that the original cost estimates are consistent with the intent of the original language and the adoption language. The commission intends to prepare a guidance document that will assist facilities with preparing a new or revised site operating plan. This guidance document should reduce the cost of complying with the new requirements by reducing the uncertainty associated with implementing the new requirements. The commission acknowledges that the revised rules may result in additional costs due to the increased frequency for collecting windblown waste, spilled waste, and mud on public roadways; however, these additional costs should be offset to some extent by the reduced time required for these tasks because of the increased frequency. No changes to the cost estimate were made in response to this comment.**

*Comment*

AW commented that the commission has significantly underestimated the cost of complying with the proposed rules. AW stated that the proposed rules require increased inspection frequencies and reporting requirements which will require the hiring of additional personnel, and require immediate vegetation of intermediate cover. AW estimates that the increased annual operating costs will be at

least \$100,000 per facility. AW commented that the costs would also be higher due to a lack of prior experience in implementing the new requirements by the agency and the regulated community. The new requirements will require more paperwork, larger on-site personnel costs, and additional costs to obtain odor management plans, vector management plans, and public notice costs associated with permit modifications.

### **Response**

**The commission does not agree that the estimate of the cost to comply with the amended site operating plan requirements is too low. The commission stated that the rules established new requirements for municipal solid waste facilities and increased the required frequency for some existing requirements. The commission estimated that there would be an additional cost to most facilities to comply with the new requirements, and that the average increase is not expected to exceed \$50,000 per facility. However, the commission expects that the cost to most facilities will be less than this amount. The commission acknowledges that the amended rules will result in additional costs due to the increased frequency for collecting windblown waste, spilled waste, and mud on public roadways; however, these additional costs should be offset to some extent by the reduced time required for these tasks because of the increased frequency. In addition, the commission has modified selected rule language to better delineate variables and better describe the intent of the rule language. For example, AW assumed facilities would have the responsibility for removal of mud on two miles of public roadway, while the intent of the rules was to remove mud at the facility entrance. Section 330.133(b) has also been changed by deleting the word “immediately” for applying intermediate cover erosion control and an option has been added allowing for other types of erosion control. By better describing the intent of the rules, the**

**commission concludes that the cost estimates are consistent with the intent of the proposed language and the adopted language. The commission intends to prepare a guidance document to assist facilities with implementing the new site operating plan requirements. This guidance document should help reduce the cost of complying with the new requirements. No changes to the cost estimate were made in response to this comment.**

*Comment*

AW challenged the commission's conclusion that the proposed rulemaking does not meet the definition of a major environmental rule. AW commented that the rules have the potential to materially affect the solid waste service industry in Texas, because the rules will cost approximately \$150,000 per facility to implement. AW also stated that the proposed rules will adversely affect the economy and public health by interfering with the efficient delivery of solid waste services and by potentially increasing illegal dumping. AW stated that the proposed rules exceed standards set by federal law and are adopted under the agency's general powers.

**Response**

**The commission does not agree that the rules meet the definition of a major environmental rule. A major environmental rule means a rule, the specific intent of which is to protect the environment or reduce the risks to human health from environmental exposure and that may adversely affect in a material way the economy, jobs, the environment, or the public health and safety of the state or a sector of the state. The specific intent of this rulemaking is to address the following issues relating to site operating plans: the level of detail needed; increasing the level of certainty and enforceability; and balancing the need for specificity, flexibility, enforceability, and**

**environmental protection. While more specific requirements have been added to some of the rules, more flexibility has been added to others.**

**In addition, the commission disagrees with the comment that the rules will adversely affect a sector of the economy by imposing a cost of approximately \$150,000 per facility. The commission acknowledges that the cost to comply with the revised requirements will vary from facility to facility, and the average increase in cost is not expected to exceed \$50,000 per facility. However, that is simply the average expected cost; the commission expects this cost to be significantly lower for most facilities and does not expect this cost to create an excessive burden for any facility.**

**The commission disagrees with the comment that the rules will adversely affect the economy and public health by interfering with the efficient delivery of solid waste services and by potentially increasing illegal dumping. The intent of the rules is to address the following issues regarding site operating plans: the level of detail needed; increasing the level of certainty and enforceability; and balancing the need for specificity, flexibility, enforceability, and environmental protection. Any increased costs are expected to be generally commensurate with the size and waste acceptance rate of the facilities, not to affect delivery of solid waste services, and not to adversely affect customers or potential customers who would otherwise use the facility. The commission does not intend for the amended rules to establish volume restrictions or to limit the currently authorized operating hours of a facility. As a result, the commission does not expect the rules to interfere with the delivery of solid waste service or to increase illegal dumping.**

**The rules do not exceed standards set by federal law and are not being adopted under the agency's general powers. Federal Subtitle D requirements do include criteria for daily cover, disease vector control, air criteria, access requirements, and recordkeeping that are addressed by the current and adopted site operating plan rules; however, the amendments to the site operating plan rules are consistent with, and do not exceed, these operating criteria. This rulemaking is adopted under the authority of several statutes, including Texas Health and Safety Code, §361.024. This section is not a general grant of authority to the agency, because it specifically authorizes the commission to adopt rules and establish minimum standards of operation for the management and control of solid waste. Therefore, these rules are not being adopted solely under the general powers of the agency.**

**The commission concludes that the regulatory analysis required by Texas Government Code, §2001.0225 is not required for this rulemaking. No changes have been made in response to these comments.**

*Comment*

AW commented that the rules may constitute a taking because of the proposed regulation of hours of heavy equipment operation and off-site transportation of materials. LK commented that the rules will increase the burden on private property adjacent to landfills and that the commission did not do the required assessment of these burdens.

**Response**

**The intent of the rules is to require that a facility's site operating plan accurately reflects the hours when the facility will accept waste, allow materials to be transported on or off site, and the hours when heavy equipment may operate. The rules do not change the operating hours authorized in a facility's current permit. If a facility elects to continue a current practice of allowing materials to be transported on or off site, or operating heavy equipment beyond the standard hours expressed in the rules or outside the hours currently authorized in the facility permit, it may submit a request to modify its site operating plan under §330.111(b). The adopted rules include additional requirements designed to address the impact a landfill may have on surrounding properties. As a result, the commission concludes that the adopted rules do not result in an increased burden on these properties.**

**The rules do not result in a constitutional taking, because they do not involve a physical invasion of property, a dedication of or easement on any part of the property, or a deprivation of all economically viable uses of the property. Further, the rules will not reduce by 25% the market value of the property that is the subject of the rules. The commission concludes that this rulemaking does not constitute a taking under Texas Government Code, Chapter 2007. No changes were made in response to these comments.**

*Comment*

LK commented that the rules should make it clear that privileges and immunity under Texas law do not apply to conditions brought to the attention of the operator by routine operator inspections, complaints, or inspections by the commission or local governments. LK added that, with a few exceptions for

historic contamination, the rules should make it clear that the Texas audit privilege law cannot be used for ongoing violations of site operating plans.

### **Response**

**The Texas Environmental, Health, and Safety Audit Privilege Act (the Act) specifically defines what is covered by the Act and how the Act is to be applied. The suggested limitations on the applicability of the Act are beyond the scope of this rulemaking. No changes have been made in response to these comments.**

### *Comment*

Wichita Falls, WMTX, RMR, Cleburne, and NSWMA commented that a one-size-fits-all approach is not a fair approach, and that certain proposed revisions are too specific. AW and NSWMA stated that the rule amendments reduce operational flexibility. AW, TXSWANA, Corpus Christi, and IESI expressed a need for flexibility without adding constraints, including economic constraints.

### **Response**

**The commission agrees with some of these commenters about a one-size-fits-all approach and reduced operational flexibility, and the commission has addressed these points by modifying rule language in various sections. Each point modified or retained is discussed in the following paragraphs to give details and the reasons for whether or not the rules were changed.**

### *Comment*

AW and TXSWANA stated that the commission should not rush to adopt rules.

**Response**

**The commission responds that adequate time has been allowed for holding stakeholder meetings including meetings held on April 19, 2004 and September 22, 2004. A thorough discussion of the rules occurred at the Municipal Solid Waste Advisory Council meeting on August 19, 2004, and a public hearing was held on September 1, 2004 for the proposed rules. There has been time for numerous stakeholder comments to be written and received, and for these commenters to be addressed. No changes were made in response to these commenters.**

*Comment*

Wichita Falls and PRPC commented that the rules only serve as an opportunity for inspectors to find something wrong.

**Response**

**The commission disagrees with this comment. The rules address the level of detail needed, the level of certainty, and enforceability, while balancing the need for specificity, flexibility, enforceability, and environmental protection. Specificity was added to the rules to make them enforceable and to protect the public and the environment. Some of the rules were changed based on these types of comments, including §330.116 by providing more flexibility for time needed to repair access prevention structures, and §330.133(f) by authorizing the commission's regional office to allow additional time needed to repair erosion. No changes were made in response to these commenters.**

*Comment*

Wichita Falls stated that the location of the facility should determine the amount of regulation, and facilities in rural areas should have less regulation than facilities in urban areas, especially if near a water source. Most of the problems such as debris, odor, noise, dust, runoff, and falling property values are based on the location of landfills which are too close to homes and neighborhoods.

**Response**

**The commission recognizes that different facilities will have different operational issues depending on factors such as the size and location of the facility. However, the commission concludes that the rules allow adequate flexibility for facilities, including small and rural facilities, to design a site operating plan to comply with the rules in a manner to be protective of the surrounding community relative to the location of the facility.**

*Comment*

One individual stated that Type I landfills should not accept Type IV waste and should recycle grease trap waste and dead animal waste, as examples.

**Response**

**The commission encourages recycling of these types of materials in other agency rules; however, prohibiting the receipt of these wastes is not within the scope of this rulemaking that deals with site operations. The preference for recycling these wastes does not justify prohibiting their disposal. No changes were made in response to these comments.**

*Comment*

Two commenters stated that landfills that operate 24 hours a day are not limiting the size and cover of the working face or controlling standing water or runoff on a daily basis.

**Response**

**This comment pertains to how an existing standard is enforced, and the commission will rely on the executive director's staff to provide proper enforcement. Section 330.117 has been amended to require the maximum size of the unloading area to be specified in the site operating plan, and §330.134 has been amended to require that site operating plans include a ponding prevention plan.**

*Comment*

AW and TXSWANA questioned why a noticed permit modification as referenced in §305.70(k) is required for updating site operating plans, but Subtitle D upgrades were not noticed modifications. They questioned why noticed permit modifications are required when it takes so much more time for both owners and commission staff. TXSWANA requested confirmation that the only part of a permit that would have to be changed in response to this rulemaking is the site operating plan. TCE and LK showed concern that facilities will be able to make substantive changes to their site operating plans using a notice modification during their site operating plan upgrade. A commenter suggested that site operating plan upgrades be done as a major amendment.

**Response**

**With respect to the concerns about the noticed permit modification level of authorization for site operating plans, the commission has chosen the noticed permit modification level of authorization**

**for site operating plans, because it is appropriate for waste facilities' neighbors to have an opportunity to provide input related to site operating plan provisions that have the potential to affect them. The noticed permit modification level of authorization allows public input, but does not provide an opportunity for a hearing. The commission confirms that the only part of a permit needed to be changed by this rulemaking is the site operating plan. The commission did not require a major amendment to upgrade site operating plans because the commission expects these upgrades to improve operations and requiring major amendments would result in significant delays and expense. No changes have been made in response to these comments.**

*Comment*

Walsh Ranches suggested an annual review of the site operating plans and a more comprehensive five-year review. Walsh Ranches further stated that all procedures that a facility uses to comply with the rules should be included in the site operating plan, and suggested specific requirements.

**Response**

**The commission does not consider it necessary to amend the rules to add annual or five-year reviews of site operating plans. Under amended §330.113(h), whenever the waste acceptance rate as established by the sum of the previous four quarterly summary reports exceeds the rate estimated in the permit application, and the waste increase is not due to a temporary occurrence, the owner or operator shall file an application to modify the permit application within 90 days of the exceedance as triggered by the quarterly summary report. The application must propose any needed changes in the site operating plan to manage the increased waste acceptance rate to protect**

**public health and the environment. The commission considers this requirement adequate to ensure that a facility's site operating plan remains adequate.**

**In addition, the Waste Permits Division reviews municipal solid waste permits every year under Texas Health and Safety Code, §361.088(g), to assess the permit holder's compliance history. Facilities with a compliance history in the poor category will have their permits reviewed to determine if revised permit provisions are needed. The commission does not agree that all procedures, including non-operational requirements, that a facility uses to comply with the rules should be included in the site operating plan. The commission concludes that requiring this level of detail is inconsistent with the purpose of a site operating plan, which is to provide a flexible, useful plan that has been tailored to fit a particular facility. No changes have been made in response to these comments.**

*Comment*

Walsh Ranches commented that neither existing rules nor proposed amendments adequately address the prevention of disposal of prohibited wastes.

**Response**

**The commission has amended the site operating plan rules to require procedures to detect and prevent disposal of prohibited waste, in addition to unauthorized hazardous waste and polychlorinated biphenyl waste. In addition, the rules now require that a landfill employee observe each load that is disposed at the landfill. This observer must have the authority to reject unauthorized loads. Additionally, the adopted rules allow a municipal solid waste facility to**

**charge the transporter if unauthorized waste is detected. As a result of these changes, the commission expects that updated site operating plans will help reduce the disposal of prohibited wastes. No changes have been made in response to this comment.**

*Comment*

Individual commenters, LK, and Walsh Ranches were concerned with the issue of the permit boundary because there are several kinds of operations happening outside the permit boundaries relating to the waste facilities, and they want to make sure that all of those operations are covered by the site operating plan.

**Response**

**The commenters are correct that landfill-associated operations occur outside of the permit boundary at some facilities, but the commission disagrees that those activities should be required to be conducted within the permit boundary. The commission notes that some specific requirements in the site operating plan rules, such as the collection of spilled waste and the removal of mud and litter from public roadways at the facility entrance, apply outside of the permit boundary. These provisions are enforceable and are needed to protect facilities' neighbors. The commission regulates these activities because they are very closely related to the management of waste at a facility. The commission agrees that other activities, such as waste hauling trucks waiting to enter a facility or borrow pits being used to supply cover material, are related to waste facilities' operation. The commission does not intend to regulate every activity regardless of the degree of the relationship it has to the operation of a facility. The degree of the relationship of these activities referenced in the comments does not justify requiring them to be**

**addressed in site operating plans. If the commission were to consider regulating how waste hauling trucks can park or wait outside of a facility boundary, those issues would most likely be addressed in Subchapter C of this chapter (relating to Municipal Solid Waste Collection and Transportation). No changes have been made in response to this comment.**

*Comment*

Commenters requested that the commission consider the impacts on the budgets of permittees, especially permittees who are public entities, when assessing how soon site operating plans must be upgraded to comply with the new rules. Public entities must budget far in advance in order to set into motion the finance mechanisms needed to provide the funding and thus need considerable advance warning of any significant anticipated costs.

**Response**

**The commission may consider the impacts on the budgets of permittees when assessing the timing for site operating plan upgrades. No changes have been made in response to these comments.**

*Comment*

One individual commented that the proposed rules should be modified to afford the opportunity of electronic or Web-based communication where communication with the agency is required.

**Response**

**It is common for the commission's permitting staff to communicate with applicants and other persons by e-mail, including exchanging forms and documents. The commission may provide**

**more opportunities for electronic submittals in the future, but no changes were made in response to this comment.**

**§330.2(131). Definitions.**

*Comment*

TXSWANA supported the revised definition.

**Response**

**The commission thanks TXSWANA for its comments and support.**

*Comment*

RWS and others commented that the definition of site operating plan as proposed does not address the problems created by the Tessman Road case (*BFI Waste Systems of North America, Inc. v. Martinez Environmental Group*). RWS indicated that the court's opinion concluded that the level of detail specified requires a site operating plan for a municipal solid waste facility to be a type of "owner's manual" for operating the facility, in which operating activities and practices must be spelled out in specific detail. RWS suggested that the definition, as proposed, would simply substitute another unreasonable and unworkable standard. RWS explained that any document that would, by itself, enable personnel to meet the requirements of this subchapter would have to be an incredibly detailed and complex document describing the implementation of each activity necessary to maintain compliance with the operating requirements. LK and other commenters requested that the phrase "in sufficient detail" be left in the definition.

**Response**

**The commission agrees, in principle, with the comment about the uncertainty created by court interpretations regarding the level of detail required to be included in site operating plans. The definition of site operating plan has been changed by removing the phrase “in sufficient detail to enable them to conduct day-to-day operations.” The commission recognizes that a site operating plan should not be a document containing comprehensive owner’s manual-type instructions for all aspects of operating a municipal solid waste facility. While some of the specific site operating plan rules are more prescriptive, some of the rules have been amended to provide more discretion to meet a more performance-based standard. To meet these standards, the commission’s rules require experienced, trained, or certified facility operating personnel. A municipal solid waste facility cannot be properly operated from a manual, and trained personnel with appropriate experience are required to apply their knowledge and experience to meet performance standards. The commission has modified language in this section and in other sections to reflect the concept regarding the level of detail and performance standards.**

*Comment*

Corpus Christi and AW commented that the requirements of site operating plans should not include post-closure care requirements and that the phrase “and any post-closure care period” be deleted from the definition of site operating plan because post-closure care is addressed in other parts of the permit. WMTX commented that site operating plans should not be for the life of the facility.

**Response**

**The commission agrees with the comment about post-closure care not being a part of the site operating plan definition and has deleted the phrase “and any post-closure care period” from the definition of site operating plan, because this concept of post-closure care is best addressed in a part of the permit other than the site operating plan. Changes have been made to the definition of site operating plan to limit its applicability to the operating life of the facility.**

*Comment*

One commenter requested new definitions for contaminated water, rejected load, construction, construction-demolition debris or Type IV waste, unauthorized waste removal, and heavy equipment.

**Response**

**The commission appreciates the comment requesting definitions for several additional terms, but defining terms would be more appropriate under the more comprehensive Chapter 330 rulemaking tentatively scheduled for proposal in June 2005. No changes were made in response to this comment.**

*Comment*

WMTX suggested changes to the definition of site operating plan to remove the requirement that it be prepared by any particular party.

**Response**

**It is appropriate for the rules to require that the site operating plan be prepared by an engineer in collaboration with the site operator in order to create a technically sound site operating plan that can actually be implemented at a facility. No changes were made in response to this comment.**

**§330.111. General.**

*Comment*

Commenters, including Walsh Ranches, commented about the applicability of the subchapter, because the title only speaks of landfill disposal operating standards. The commenters were concerned that by limiting the rules to landfills, other facilities would fall through the cracks and not be covered by Subchapter F or Subchapter G of this chapter and remain exposed to being challenged under the decision in the Tessman Road case. A suggestion was made to change the title as well as other rule amendments to reflect a broader applicability to include non-landfill facilities or to specify when the requirements only apply to landfills. Walsh Ranches commented that Subchapter F should not be applicable to only landfills and should address site operating plans for other municipal solid waste facilities.

**Response**

**Under these rules, non-landfill facilities are subject to these rules to the extent that they were subject to Subchapter F before this amendment, but they are not required to file an application to modify their authorizations to comply with these rules. The commission is not requiring the non-landfill facilities to initiate a modification to comply with the amended rules, because the commission has initiated another rulemaking to address operating requirements for non-landfill**

**facilities without relying on cross-references to Subchapter F. It would be unreasonable to require these facilities to initiate permit modifications during the interim period between the time that these rules are adopted and when the rules for non-landfill facilities are adopted. As to changing the title, the title has not been changed because non-landfill facilities can be subject to rules in Subchapter F without changing the title if required by another rule. Retaining the title will also be preferable, because the commission plans to create an independent subchapter for non-landfill operating requirements in a future rulemaking. The word “landfill” was deleted from the first sentence of the rule to clarify that non-landfill facilities subject to the rule can continue to operate under existing site operating plans.**

*Comment*

The last sentence in §330.111(b) provides: “Any applicable statutory or regulatory requirements which take effect prior to final administrative disposition . . . shall be included in the permit.” Most commenters, including TXSWANA, Corpus Christi, AW, RWS, Cleburne, NSWMA, and WMTX, stated that the intent of this sentence is unclear and should be clarified or the sentence should be removed. The commenters stated that as written, “final administrative disposition” could occur long after the application has been declared technically complete and could result in an unending cycle of revision and hearing. The commenters recommended that the sentence be stricken, and it instead be made clear that the regulations to be considered are only those that are in effect when the application is declared technically complete.

**Response**

**The last sentence of §330.111(b) has been deleted in response to these comments, because it was unnecessary and could have been interpreted as being overly broad to require updating of permit provisions other than site operating plans. The last sentence of §330.111(b) was included in the proposal to reflect an existing requirement located in §305.127(4)(B). This requirement generally applies to permits for injection wells, waste discharge, radioactive material disposal, and solid waste management as stated in §305.121. This sentence was proposed to be included in §330.111(b) to reflect the existing baseline requirement, since the adopted rule exceeds this baseline by requiring some types of facilities (landfills) to initiate a modification to comply with the new site operating plan requirements. Under the baseline provision alone, these facilities would not have to initiate a modification, but would only have to comply with the new requirements when they chose to amend or modify their authorizations as is now the case for non-landfill facilities.**

*Comment*

Several commenters stated that it is a burden to have a requirement to prepare new and/or update site operating plans for all existing permitted facilities. One commenter suggested a staggered schedule for submittal based on facility volume. RMR suggested that permit modifications be due one year after the effective date of the revised rules. Lubbock, LK, and Walsh Ranches requested a clearly stated timeline. Lubbock recommended a minimum time frame of two years to submit and implement all changes in the site operating plans. IESI suggested a single deadline for all facilities to submit a permit modification at least six months after the effective date of the amended rules.

**Response**

**The requirement to prepare new or updated site operating plans is justified by increased protection being provided for communities located near facilities and the benefit to applicants to have clearer rule requirements. As to requests to set a schedule for filing modification applications, the commission has delegated this task to the executive director to avoid applicants wasting resources and to retain flexibility. It would be unreasonable to require all permittees to file applications at one time, since it is expected to take the executive director several years to process the applications. A staggered schedule was not set, because the commission does not have a reliable estimate of the time needed for applicants to submit and for the commission to process the applications. No changes were made in response to these comments.**

*Comment*

PRPC stated that the permit modification process needs to be streamlined.

**Response**

**The commission has not changed the rule in response to this comment, since the rules governing processing modifications are not included in this rulemaking and consequently the permit modification process is not in the scope of this rulemaking.**

**§330.112. Pre-Operation Notice.**

*Comment*

TXSWANA, Corpus Christi, and AW commented that the second sentence in §330.112 provides that the “operator may begin placing waste” if no written response has been received from the executive

director up to 14 days following the submission of the Soils and Liner Evaluation Report (SLER) and Flexible Membrane Liner Evaluation Report (FMLER). A number of commenters asked that a language change be made to the rule to indicate that a lack of response from the commission in 14 days is considered to be an approval of the SLER and FMLER. Corpus Christi and AW commented that this rule leaves open the possibility of the executive director disapproving the SLER and FMLER after waste has been placed in the disposal area and requiring the excavation of the waste.

#### **Response**

**The commission has changed the rule in response to these comments to state that the executive director has 14 days to provide a verbal or written response. This change clarifies the commission's intent that the executive director's authority to review a SLER or FMLER is limited to the 14-day period.**

#### *Comment*

Corpus Christi commented that the term "FMLER" needs to be replaced with the currently used term "Geomembrane Liner Evaluation Report."

#### **Response**

**The commission agrees with the comment that the term "FMLER" is an outdated term, but the other rules using and defining the term would also need to be changed along with this change. Since those other rules are not under consideration, no changes were made in response to this comment.**

*Comment*

IESI requested that the phrase “in the new disposal area” be added after “the operator may begin placing waste.”

**Response**

**The commission disagrees with the comment because the concept of “new area” is used in a previous sentence and is implied in this sentence. No changes were made in response to these comments.**

**§330.113. Recordkeeping Requirements.**

*Comment*

For §330.113(b), TXSWANA, AW, WMTX, and Corpus Christi commented that the proposal language replaces the term “promptly” with the specific term “within seven days” as a clarification for when an operator shall record and retain certain information in the operating record. TXSWANA and Corpus Christi indicated that it is not clear whether the intent is to record and retain information within seven days of the beginning of an event or within seven days of the completion of the event. Some of the monitoring, testing, and analytical analysis is an ongoing process which is dependent upon a wide range of variables such as weather, complexity of the process or procedure, and the length of time required for lab analysis. In addition, the seven days needs to be identified as either working days or calendar days and whether the specific time requirement allows for any other unforeseen delays such as holidays, natural disasters, strikes, etc. TXSWANA and Corpus Christi recommended that the commission abandon this proposed change and that the original word “promptly” not be modified.

**Response**

**The rule has been changed in response to these comments to specify that the information shall be recorded “. . . within seven working days of completion or receipt of analytical data . . .” This change is intended to clarify that the seven days are work days instead of calendar days, and the period begins upon completion of the event or upon receipt of analytical data.**

*Comment*

For §330.113(c), one individual suggested defining “annually” to clarify the rule requirement and stated that the recordkeeping requirements appear incomplete. The individual also requested that the word “detailed” be retained.

**Response**

**The term “annually” is generally understood to mean once per year, and it is not necessary to define the term. The recordkeeping requirements include all of the information that the commission needs permittees to maintain. The word “detailed” was not in this rule, so it cannot be retained. No changes were made in response to this comment.**

*Comment*

For §330.113(f), AW commented that provisional letters should be recognized as sufficient to meet the requirements of an operator license.

**Response**

**The commission disagrees with the comment, because it is reasonable to maintain operator licenses. In addition, operators' licenses and their documentation are determined by other commission rules that are not under consideration in this rulemaking. No changes were made in response to this comment.**

*Comment*

For §330.113(h), Corpus Christi, WMTX, RWS, RMR, Cleburne, PRPC, Lubbock, IESI, AW, Wichita Falls, and NSWMA were concerned about the waste acceptance rate requirements. Some commenters stated that the requirements will be a burden and result in a form of waste flow control and will limit a landfill's ability to accept waste. Some commenters expressed a concern that landfill waste acceptance rates vary seasonally, that these landfills would be constantly modifying their permit, and that tying equipment, personnel, fire plans, etc. to a waste acceptance rate just gives the inspectors one more item to write up. TCE commented that the waste acceptance rate will help maintain landfill operations to be current, which could also be accomplished by requiring a five-year renewal for permits or site operating plans. A commenter stated that the amount of daily waste that is received should be limited and based on personnel. RMR suggested that a permit modification application should only be required if the waste acceptance rate exceeds two consecutive quarterly periods. TXSWANA and other commenters asked that the language in §330.113(h) be modified to show that it is acceptable for an applicant to provide a table showing the anticipated range of waste acceptance rates. TXSWANA recommended abandoning the proposed §330.113(h) or asked that the language in §330.113(h) be modified regarding waste acceptance rates being averaged over a year, so that the requirement to step up personnel and equipment would only go into effect in the year following a documented average

increase in daily waste acceptance rates. WMTX commented that a provision be made to allow a facility to modify its waste acceptance rate at the time it applies to modify its site operating plan.

TXSWANA, NSWMA, RMR, and Corpus Christi commented that the requirement in §330.114(2) for providing a description of the minimum number, size, type, and function of the equipment to be utilized at the facility “based on the maximum waste acceptance rate” and “a description of the provisions for back-up equipment during periods of breakdown or maintenance” of that equipment should not be based upon the maximum waste acceptance rate allowed in the permit. The maximum waste acceptance rate is not likely to be the initial waste-acceptance rate and/or it might be a high-end estimate to avoid having to undertake numerous modifications as required by the proposed §330.113(h). TXSWANA, WMTX, and RMR indicated that it will not be necessary to require the minimum number of pieces of equipment for that level, if the actual acceptance is at a lower level than the authorized level of acceptance. TXSWANA asked for a language change to allow an applicant to set out what equipment will be required initially and to provide a schedule which allows the number of required equipment to increase in response to the actual waste-intake rates as discussed under §330.113.

### **Response**

**The annual waste acceptance rate for a facility should be determined at the time of application or by permit modification. The maximum waste acceptance rate is a key component used in judging the adequacy of a facility’s site operating plan. Therefore, it is important that the rate remain current to be protective of the neighboring community. Elements of site operation that are related to the waste acceptance rate, such as number of personnel, necessary equipment, compaction, procedures, etc., need to remain current as well. The method of determining an exceedance has**

been established as a rolling average based on the sum of the previous four quarterly summary reports. The method should remove variations due to seasonal rate changes and unforeseen events. Applicants could submit a table as part of an application reflecting different estimated waste acceptance rates and corresponding site operating plan provisions. A facility operating under such a table could adjust its site operating plan provisions based on the sum of the previous four quarterly summary reports.

The reference to an annual waste acceptance rate is strictly for obtaining the correct balance of on-site equipment, personnel, and other site operating plan provisions relative to the amount of waste being received. The commission intends to develop a guidance document which will assist facilities with preparing a new or revised site operating plan. The rule is not intended to make the estimated waste acceptance rate a limiting parameter of a facility permit, and this concept has been added to the rule language. Additionally, the commission has modified the rule to clarify that the requirement to modify a site operating plan based on an increased waste acceptance rate does not apply until after a facility has been issued its one-time upgrade modification to comply with the amended site operating plan rules. A provision has also been added to the rule to exclude a rate exceedance caused by a temporary occurrence from triggering the requirement to modify a site operating plan.

*Comment*

TCE and others commented that the commission should consider requiring a major amendment to upgrade a site operating plan due to a significant increase in their waste acceptance rate.

## **Response**

**The commission has chosen the noticed permit modification level of authorization for upgrading site operating plans, because it is appropriate for waste facilities' neighbors to have an opportunity to provide input related to site operating plan provisions that have the potential to affect them. While the opportunity for public input is appropriate, providing an opportunity for a contested case hearing would be expected to cause a significant delay in approving and implementing upgraded site operating plan provisions. Providing the opportunity for a hearing could also cause a significant financial impact on permittees and the commission on a regular basis. No changes have been made in response to these comments.**

## **§330.114. Site Operating Plan.**

### *Comment*

Several commenters stated that the proposed rule amendments to §330.114 do not resolve the problems created by the Tessman Road case (*BFI Waste Systems of North America, Inc. v. Martinez Environmental Group*). The commenters indicated that the court's opinion concluded that the level of detail specified requires a site operating plan for a municipal solid waste facility to be a type of "owner's manual" for operating the facility, in which operating activities and practices must be spelled out in specific detail. RWS and RMR explained that any document that would, by itself, enable personnel to meet the requirements of this subchapter would have to be an overly complex document describing the implementation of each activity necessary to maintain compliance with the operating requirements and should be left to the trained personnel. PRPC stated that this section does not take small rural landfills into consideration.

### **Response**

**The commission agrees, in principle, with the comment about the uncertainty created by court interpretations regarding the level of detail required to be included in site operating plans.**

**Changes have been made to the first paragraph of §330.114 that correspond to similar changes made in the definition of site operating plan discussed previously. These changes take into consideration the impact on small rural landfills, and provide relief to those landfills and larger landfills. The terms “to enable” and “in sufficient detail to enable them to conduct the day-to-day operations of the facility” have been deleted, because the site operating plan is not intended to be a comprehensive operating manual for a facility. The broad requirement that the site operating plan include “. . . specific guidance, procedures, instructions, and schedules . . .” to meet the subchapter requirements has been deleted. Instead of this overly broad requirement, specific site operating plan rules have been changed to be more prescriptive, and some of the rules have been amended to provide more discretion to meet more performance-based standards. To meet these standards, the commission’s rules require experienced, trained, or certified facility operating personnel. A municipal solid waste facility cannot be properly operated from a manual, and trained personnel with appropriate experience are required to apply their knowledge and experience to meet performance standards. The commission has modified language in this section and in other sections to reflect the concept regarding the level of detail and performance standards.**

### *Comment*

Walsh Ranches commented that personnel training should be a new section.

**Response**

**The commission has retained the requirements for personnel training in its originally existing location in §330.114 for the convenience of cross-referencing.**

*Comment*

TXSWANA and Corpus Christi commented that §330.114(1) requires a description of not only the functions of on-site personnel, but also the “minimum position qualifications” of on-site personnel, which appears to require reviewing and approving job descriptions for each person working at a solid waste facility. TXSWANA and Corpus Christi indicated that the “minimum qualifications” for any position should be based upon the “functions” of that position; therefore, it would be redundant to require separate approvals for the function and the qualifications.

**Response**

**The word “position” has been deleted and the word “key” has been added in response to comments to confirm that the site operating plan is required to include a description of functions and minimum qualifications for each category of key personnel and does not require a description for each person. The categories of personnel, or functional operating areas, is limited and it is reasonable for the commission to be informed of the functions and be provided information to confirm that qualified personnel are available to perform those functions.**

*Comment*

TXSWANA and Corpus Christi commented that the requirement in §330.114(2) needs to be modified to indicate that back-up equipment is only required in situations where a front line machine is down for

an extended period of time for a major repair and not the case for a minor repair which may take an hour or so. TXSWANA and Corpus Christi asked that the rule be modified to indicate that back-up provisions are only required if essential equipment is going to be out-of-service for an extended period of time.

### **Response**

**The rule language “. . . provisions for back-up equipment . . .” is intended to be broad enough for facilities to tailor their site operating plan relative to their facility and options available to them for maintaining compliance when faced with periods of equipment breakdown or maintenance. The commission generally agrees that back-up equipment would only be required in situations where a front line machine is down for an extended period of time for a major repair, and additional back-up equipment would generally not be required during a minor repair to front line equipment. The commission plans to address this concept further in the corresponding guidance document.**

### *Comment*

TXSWANA, Corpus Christi, and others commented about language in §330.114(5)(A) indicating the difficulty to ensure that all incoming loads do not contain prohibited wastes.

### **Response**

**The rule language requiring site operating plans to ensure that incoming waste does not contain prohibited waste has been changed in response to this comment to require that site operating plans include procedures to control the receipt of prohibited waste.**

*Comment*

One individual questioned if documentation is required for training to recognize prohibited wastes.

**Response**

**Section 330.113(b)(2), in conjunction with §330.114(5)(C), requires that records be kept documenting how facility personnel are trained to recognize prohibited waste. No changes were made in response to this comment.**

*Comment*

TXSWANA questioned if “inspections” in §330.114(5)(A) are the same as the inspections required in §330.117(b). NSWMA and RMR also stated that this provision is inconsistent with random inspections.

**Response**

**The commission agrees with this comment, and has amended §330.117(b) to reflect the commission’s intent that a facility’s staff are required to observe each load of waste being deposited, as opposed to the more thorough inspection of random loads under §330.114(5)(A).**

**§330.115. Fire Protection.**

*Comment*

Many commenters indicated that fire protection should be a performance-based standard.

**Response**

**The commission generally agrees with these comments and has rewritten this section to be more performance-based and to be less prescriptive. The rule changes include not specifying a maximum distance for a source of earthen material to be located relative to the working face, and a requirement that sufficient equipment be available to cover the exposed waste within one hour.**

*Comment*

TXSWANA, Corpus Christi, RWS, RMR, Cleburne, PRPC, Lubbock, WMTX, and NSWMA stated that the soil stockpile distance requirements are an unnecessary cost and operational difficulty. Many commenters opposed the proposed requirement that a soil stockpile be located within 600 feet of the active disposal area, because locating the stockpile within 600 feet could interfere with regular operations and it would not necessarily improve fire protection.

**Response**

**The commission generally agrees with these comments and has rewritten this section to be more performance-based and to be less prescriptive. The 600-foot distance was proposed to reduce the amount of time it would take to move the earthen material onto a fire. The commission agrees that specifying a distance requirement could interfere with regular operations, and that it may not**

**improve fire protection. The rule has been changed by removing the minimum distance requirement for the source of earthen material and creating a requirement that the operator be able to place a six-inch cover of earthen material over the uncovered disposal area within one hour.**

*Comment*

Many commenters stated that the 30-minute maximum time limit to extinguish a fire is not practical nor reasonable, and fire fighting should not be placed upon a timetable.

**Response**

**The requirement to extinguish all fires within 30 minutes was proposed so operators would act quickly to extinguish fires and prevent fires from spreading. The commission agrees that it is not always possible to extinguish a landfill fire within 30 minutes, so this requirement has been deleted. A requirement has been added for the operator to initiate procedures in accordance with the fire protection plan upon detection of a fire.**

*Comment*

Wichita Falls commented that the type of material stockpiled for fire protection should not be limited to soil, since soil is scarce in some areas and other materials can provide comparable fire protection.

**Response**

**With respect to the type of material used for fire protection, the commission agrees that landfills should be allowed to use other materials that provide comparable performance, so the term “soil” has been replaced by the term “earthen material.”**

*Comment*

Many commenters stated that small fires are common and operators should not have to report every fire to the commission.

**Response**

**The commission agrees that it would be unreasonable to have to report all fires and that it does not need to be notified of every small fire. The rule has been revised to exclude those fires that are extinguished within ten minutes from notice requirements. This exclusion is justified since such small fires are not likely to create significant threats to public health and the environment.**

**§330.116. Access Control.**

*Comment*

TXSWANA, Corpus Christi, and NSWMA commented that it would be very difficult to specify a time to complete a permanent access control feature (fence) repair.

**Response**

**The commission agrees with the comments expressing concern about specifying a time in a site operating plan to complete a permanent access control repair, and a language change has been**

**made to §330.116 to require that the permanent repair be made by the time specified to the commission's regional office.**

*Comment*

PRPC commented that the access control requirements seem irrelevant.

**Response**

**Adequate access control is an important feature for safety purposes and for prevention of unauthorized waste disposal, and accordingly these requirements are not irrelevant. No changes were made in response to this comment.**

*Comment*

One individual asked if this section requires documentation of inspections and maintenance to perimeter barriers.

**Response**

**Section 330.116 requires site operating plans to include provisions for notice of an access breach, provisions for temporary and permanent repairs, and notice when a repair is completed. These notices would be required to be retained in the operating record in accordance with §330.113(b)(9). The rules do not require records to be generated or retained to document when access inspections are conducted; however, the commission recommends that a log of this activity be maintained for the purpose of demonstrating compliance. No changes have been made in response to this question.**

*Comment*

WMTX recommended that the reporting requirement only apply to breaches that cannot be temporarily repaired within 24 hours of detection. IESI commented that the regional office should only be notified in the event of a breach that results in actual injury or a release to the environment, or which cannot be permanently repaired within 24 hours.

**Response**

**The rule has been changed in response to these comments to provide that no notice is required if a permanent repair can be made within eight hours of detection. Eight hours is a reasonable amount of time to conduct a minor repair. The commission disagrees that the regional office only needs to be notified in the case of actual injury or a release because the commission is concerned about preventing those events.**

*Comment*

AW commented that the rule should require fences and gates instead of stating that these means of access control are the preferred methods.

**Response**

**The commission disagrees with the comment because fences and gates are a commission preference. The commission is allowing operators flexibility in situations where other means of access control are available. No changes have been made in response to this comment.**

**§330.117. Unloading of Waste.**

*Comment*

For §330.117(a), TXSWANA, Corpus Christi, SLUWCD, WMTX, and PRPC commented that “unloading of solid waste must be confined to as small an area as practical” is adequate to convey the intended requirement of the rule. The commenters stated that specifying that the maximum size of the unloading area, the number and types of working faces, and a qualified attendant at each working face is excessive.

**Response**

**In regard to the comment about specifying the maximum size of the unloading area and the number and types of working faces at each working face being excessive, these requirements are necessary for controlling working faces, to reduce odors, to reduce blowing paper, and to control vector populations. No changes have been made in response to this comment.**

*Comment*

For §330.117(b), TXSWANA, WMTX, and Corpus Christi questioned what is meant by a “qualified” attendant and how that person is supposed to “inspect” each load. Similarly, the commenters asked if the qualified attendant can be the same person as the spotter or equipment operator.

**Response**

**The commission agrees with some of these commenters, and the rule has been changed to reflect that the person monitoring incoming loads of waste material should be a trained staff person and should observe each load. The person responsible for observing each load can be a person already**

**on staff such as an equipment operator. It is possible that existing staff could continue to perform existing responsibilities and this additional function.**

*Comment*

For §330.117(b), TXSWANA, WMTX, and Corpus Christi commented that despite all best efforts, prohibited waste is sometimes unloaded and it may not be possible to determine who is the responsible transporter or generator. In such a situation, the operator must assume responsibility for properly disposing of such waste and should be allowed to manage them until reasonable to properly dispose of them. TXSWANA commented that the rule should allow for these occasions and provide for the operator to assume that responsibility.

**Response**

**The commission agrees with some of these commenters, and language has been added to §330.117(b) authorizing the facility's personnel to remove the unauthorized material and allow the waste to be otherwise properly managed by the facility.**

*Comment*

For §330.117(b), AW commented that unauthorized waste cannot always be immediately removed; therefore, the rule should allow the site manager some flexibility in when to remove the waste, up to 24 hours after disposal.

**Response**

**Although the requirement to remove the waste immediately has been retained, the phrase “otherwise properly managed by the landfill” has been added recognizing that some temporary storage may be appropriate before the waste is transported off site.**

*Comment*

IESI commented that the requirement to immediately remove and dispose of improperly deposited waste should be subject to compliance with other laws and regulations (e.g., waste characterization).

**Response**

**The commission agrees with the comment that the immediate removal and disposal of improperly deposited waste should be subject to compliance with other laws and regulations. The phrase “otherwise properly managed by the landfill” has been added to provide flexibility.**

*Comment*

One individual questioned the meaning of the phrase “. . . the unloading of waste in unauthorized areas is prohibited.” The individual also asked what point in time does a violation exist and requested that the word “immediately” be defined.

**Response**

**In response to the question about the meaning of the phrase “. . . the unloading of waste in unauthorized areas is prohibited,” the commission responds that there are areas of the site that are designated for unloading of waste and elsewhere would not be authorized to deposit waste. No changes have been made in response to this question.**

**In response to the question about what point in time does a violation exist, a case-by-case determination would have to be made by an inspector to determine whether a facility failed to remove such waste immediately. No changes have been made in response to this question.**

**In response to the question about what the word “immediately” means as it pertains to the requirement to remove waste deposited in an unauthorized area, the commission responds that the word takes on the plain meaning. No changes have been made in response to this question.**

*Comment*

For §330.117(c), AW commented that the rule should prohibit the disposal of unauthorized waste instead of the unloading of this waste because it is not always possible to recognize the waste as unauthorized until after it is unloaded.

**Response**

**The commission disagrees with this comment. The unloading of prohibited wastes at the municipal solid waste facility must not be allowed. This concept is not new and is in the existing rules. The site operating plan should include provisions to prevent unloading of these wastes. Many of the unauthorized waste materials, such as hazardous waste, should not be taken to the facility and certainly should not be allowed to be unloaded. It is the intent of the agency not to have unauthorized waste stored at a facility any longer than necessary prior to proper disposal. A means of enforcing the requirement through surcharges is given to the landfill by new rule language. No changes have been made in response to this comment.**

**§330.118. Facility Operating Hours.**

*Comment*

Commenters, including those from TXSWANA, IESI, Corpus Christi, Allied Waste, Republic, Lubbock, WMTX, Cleburne, and NSWMA, stated that the amendments to operating hours were confusing and too restrictive. Some of these commenters requested that rules include operational flexibility to respond to events so as to assure environmental protection and compliance with regulations. Some of these commenters stated that the expanded specification of the operating hours limits the activities inherent in operating the facility, including activities outside of the commission's jurisdiction including noise and light. Some of these commenters stated that the commission should not attempt to specifically regulate the time periods in which all conceivable solid waste management activities will take place at landfills, and that regulating these activities may be inconsistent with the statutory directive that the commission's methods for solid waste control be practical and economically feasible. Some of these commenters stated that the standard operating hours of 7:00 a.m. to 7:00 p.m. should be expanded to better reflect the operating hours at existing facilities. The commenters stated that the five-day limit in §330.118(b) for alternative operating hours should be removed or expanded to allow alternative hours to be authorized as needed. Some of these commenters requested the commission define "waste management activities" and "heavy equipment," so facilities will know what activities are restricted. SLUWCD commented that the operating hours for its landfill permit are 8:00 a.m. to 5:00 p.m., Monday through Friday; and 8:00 a.m. to 12:00 noon, Saturday, so nothing changes for its facility under the proposed rule, except it will have to do more paperwork. Some of these commenters indicated that the new hours of operation will restrict operations and cause air pollution because trucks will add traffic congestion during peak traffic times, trucks will queue up outside

landfills, and it may be better to operate heavy equipment at night. Some of these commenters stated that the commission must balance nearby residents' needs with those of the larger community. Some of these commenters stated that restricting waste acceptance hours will result in more illegal disposal in unauthorized locations. Some of these commenters stated that §330.118(b) should be changed to include additional reasons for granting alternative operating hours, including emergencies, natural disasters, other unique weather events, or to prevent the disruption of solid waste management activities. Some of these commenters stated that periodic activities like liner construction or emergency response activities should not be restricted.

Comments, including those from LK, Walsh Ranches, and TCE, generally stated that the rule should be more restrictive of activities that have the potential to be a nuisance to neighbors. Some of these commenters stated that "waste management activities" should include activities that can create nuisance conditions, including odor, noise, traffic congestion, dust, and lights. Some of these commenters stated that §330.118 would allow operations outside the permitted hours, but there is no requirement to document operations outside permitted hours. Some of these commenters stated that there should be a process that includes public input, and suggested a possible five-year review period. Some of these commenters stated that operating hours of landfills near residential areas should be restricted and that landfills should be required to abide by agreements made with neighborhood associations. Some of these commenters stated that a variance from the operating hours designated in the rule should only be granted on a showing of good cause. Some of these commenters stated that a 24-hour operation should not be authorized at a downtown landfill or in a populated area. Some of these commenters stated that the term "facility operating hours" is not used consistently in Subchapter F. An individual commented

that the term “heavy equipment” should be defined, and that allowing the regional office to authorize emergency operating hours would be helpful.

### **Response**

**In regard to the rule being confusing and too restrictive, the commission has changed this rule to show that facility operating hours include waste acceptance hours, hours when materials may be transported on or off site, and hours when heavy equipment may operate. The rule has also been changed to indicate that transportation of materials and heavy equipment operation must not be conducted between the hours of 9:00 p.m. and 5:00 a.m., unless otherwise approved in the authorization for the facility, and that operating hours for other activities within the 9:00 p.m. to 5:00 a.m. weekday span do not require other specific approval. These changes provide operational flexibility in response to comments.**

**In regard to the commission regulating waste management activities and use of heavy equipment, the commission has jurisdiction to regulate those activities inherent to managing waste that have the potential to be a nuisance to neighbors. The rule has been amended to limit regulation of facility operating hours to the activities identified in §330.118(a), and the term “conduct on-site waste management activities” has been deleted. The commission has not modified the rules to define heavy equipment at this time, because equipment varies for different facilities, and it is more appropriate to identify it on a permit-by-permit basis. The rule is not intended to restrict the use of lights at a facility. As to the statutory directive in Texas Health and Safety Code, §361.011(b), that the commission use practical and economically feasible methods to regulate the**

**management of municipal solid waste, adopting and enforcing this rule is a reasonable exercise of the commission's powers and duties.**

**In regard to comments that the standard 7:00 a.m. to 7:00 p.m. operating hours allowed should be expanded to better reflect current industry standards, the rule has not been changed as to the standard hours allowed for waste acceptance. These hours are used because they include the times when most people are likely to be out of their residences at work or social activities. The standard operating hours for when materials may be transported on or off site, and when heavy equipment may operate have been adopted in consideration of comments requesting flexibility and extended operating hours. Waste facility operations outside of these hours are more likely to disturb people in residential areas.**

**In regard to requests to remove or expand the five-day limit in §330.118(b), related to the executive director approving alternative operating hours for special occasions, the commission has not changed this rule. It is reasonable to require facilities to anticipate most of these occasions, including holidays, and to provide notice to its neighbors by requesting those hours to be included in their permits. In addition, the limit of five days in subsection (b) does not limit authorizations for additional hours under subsection (c), related to disasters or emergencies, or under subsection (d), related to major repairs or construction.**

**In response to the comment from SLUWCD about it continuing to operate within the operating hours authorized in its existing permit, SLUWCD is correct that its existing authorization will remain in force. So even though the adopted standard operating hours do not include Saturday,**

**SLUWCD can continue to operate under the hours authorized in its existing permit. As to SLUWCD's comment that it has to do more paperwork, recordkeeping has only been required to the extent it is needed to protect public health and the environment. No changes have been made in response to this comment.**

**As to comments that restricted operating hours can aggravate other problems like traffic congestion and air pollution, the commission has made some changes to the rule. The extended operating hours for when materials may be transported on or off site, and hours when heavy equipment may operate enables a facility to make full use of its waste acceptance hours. A facility can use those hours outside of its waste acceptance hours so it can be ready to receive waste upon opening the gates and can continue to receive waste up until closing its gate. In addition, the standard hours specified in the rule do not prevent facilities from requesting additional hours in its permit if needed to avoid traffic congestion or to protect air quality. No changes have been made in response to these comments.**

**In regard to comments that the commission must balance nearby residents' needs with those of the larger community for waste disposal, the commission is not authorized to consider the need for a municipal solid waste facility in deciding whether to issue a permit. The commission is authorized to consider whether issuing a permit is incompatible with land use in the area. The adopted rule is a reasonable exercise of the commission's responsibility to protect the community around municipal solid waste facilities. No changes have been made in response to these comments.**

**In response to comments that restricting waste acceptance hours will result in more illegal disposal in unauthorized locations, the commission has not changed the rule. It is reasonable to have some limits on waste facility operating hours to protect communities in the area.**

**In regard to comments that additional reasons for granting alternative operating hours should be added and that periodic activities like liner construction or emergency response activities should not be restricted, the rules have been amended by adding subsection (c), related to disasters, emergencies, and other unforeseen circumstances that could result in the disruption of waste receipt. These additional provisions are expected to provide adequate mechanisms to manage the concerns expressed in these comments.**

**In regard to comments that the rule should be more restrictive of activities that have the potential to be a nuisance to neighbors, the commission has amended the rule to regulate the hours when materials may be transported on or off site and the hours when heavy equipment may operate. The amended rule provides reasonable restrictions for protecting neighbors from being affected by a facility.**

**In regard to documenting operations outside permitted operating hours, the rule has been changed by adding subsection (e), which requires the facility to record in the site operating record the dates and times when any alternate or additional operating hours are utilized.**

**In regard to comments that there should be a process that includes public input and a five-year review period as to authorized operating hours, the commission has not changed the rule. There**

is already an opportunity for public input in the permitting process, including the right to a hearing for a new permit or major amendment. The commission does not agree that a five-year review process is needed to reconsider authorized operating hours for a facility. The commission's authority to initiate a permit amendment and its enforcement authority can be used to remedy problems caused to a community related to excessive operating hours.

In regard to the comment that landfills should be required to abide by agreements made with neighborhood associations, the rule has not been changed. The provision in §330.111(b) that allows a facility to modify its permit to comply with these rules does not negate the limitation in §305.70(a) that restricts a facility's authority to change conditions in a permit that were incorporated in the permit as a result of negotiations between the applicant and interested persons. If the agreement with the neighborhood association is not incorporated in the permit, the commission does not have the authority to enforce the agreement.

The rule has not been changed in regard to comments that a variance from the operating hours designated in the rule should only be granted on a showing of good cause, and that a 24-hour operation should not be authorized in a populated area. Adding a requirement to show good cause would not add any objective criteria for making a determination. The commission will continue to make these decisions on a case-by-case basis considering the potential impact on surrounding communities. The commission can consider whether a facility is located in a residential area, downtown area, or rural area under existing rules. No changes have been made in response to these comments.

**In regard to comments that the term “facility operating hours” is not used consistently throughout Subchapter F, the commission has checked for these inconsistencies and concludes that the use is consistent. No changes have been made in response to these comments.**

**In regard to the comment that changing the rule to allow the regional office to authorize emergency operating hours will be helpful, the rule has been changed to provide this authority.**

**§330.119. Site Sign.**

*Comment*

RMR and WMTX commented that this section is unclear and suggested that the language be rewritten.

**Response**

**The commission agrees to some extent with the comment that the section is not clear. The rule has been modified to state that the facility sign must be readable from the facility entrance.**

*Comment*

PRPC commented that posting someone’s phone number is begging for prank calls, and would not serve the public in rural West Texas, and suggested using 9-1-1 or other means. IESI commented that a facility should be able to post the number for a 24-hour call service that can reach an authorized company representative instead of the number for a specific individual.

**Response**

**In regard to the comment that posting someone's phone number on the site sign is begging for prank calls, the commission notes that the facility phone number is generally available to the public in the telephone book. The phone number could be a mobile phone issued to an on-call person or a phone number of a 24-hour response center that is responsible for relaying calls. The importance of a timely response to an after-hours emergency exceeds the desire to avoid prank calls. No changes were made in response to these comments.**

#### **§330.120. Control of Windblown Solid Waste and Litter**

##### *Comment*

Many commenters indicated that daily pickup of waste throughout the site is unreasonable. Once a pick-up crew leaves an area, more waste can blow back in. One commenter requested clarification of the intention of the rule.

##### **Response**

**The daily pickup of waste throughout the site is a means to limit the availability of waste to be blown off site. The requirement to pick up waste daily does not mean that at any one point in time all waste will be picked up, but rather that the picking up of the waste will be an ongoing activity each day of operation. In reality, the operator should pick up litter as necessary, regardless of the frequency required. On the other hand, if there is no windblown waste, it is not necessary to have a litter collection crew patrol the area on a daily basis. No changes were made in response to these comments.**

*Comment*

Wichita Falls questioned why is it necessary to pick up waste in drainage structures.

**Response**

**With respect to picking up waste in drainage structures, the commission is concerned that waste should not be transported off site via storm water. No changes were made in response to this comment; however, the language dealing with picking up waste in drainage structures has been deleted, because it is redundant with other language that requires picking up waste on site and off site.**

*Comment*

RMR requested clarification of the terms “active disposal area,” “working face,” and “unloading area.”

**Response**

**The commission made changes to the rule language to use these terms more consistently in response to this comment. The active disposal area includes all working faces and areas covered with alternative material daily cover. The working face includes areas where waste has been deposited for disposal, but has not been covered. Unloading areas are areas designated for unloading, including all working faces, active disposal area, storage areas, and other processing areas.**

*Comment*

WMTX recommended clarifying that the waste must be visible to the naked eye.

**Response**

**The commission agrees that the responsibility to collect waste under this rule is limited to visible waste. No changes were made in response to this comment, because the reasonable interpretation of the rule is that it applies to visible waste.**

*Comment*

LK requested adding provisions for windblown waste on private lands, including insurance and formal written agreements.

**Response**

**The commission disagrees with providing provisions for collecting windblown waste on private lands. The commission would not knowingly enforce a requirement where the operator was denied access to collect windblown waste. The operator should seek an agreement to enter private lands for waste pickup. No changes were made in response to this comment.**

*Comment*

Another commenter asked if the rule required documentation of litter clean-up activities in a log.

**Response**

**The commission has not specifically required documentation of litter clean-up activities in a log, but recommends that a log of this activity be maintained for the purpose of demonstrating compliance with the once a day pick-up requirement. No changes were made in response to this comment.**

*Comment*

Lubbock requested that the commission consider the cost of complying with this rule as it pertains to the climate in West Texas.

**Response**

**The cost analysis included in the rule proposal preamble considered costs for facilities located throughout the state. The commission has provided flexibility within the rule for site-specific means of handling windblown material. No changes were made in response to this comment.**

*Comment*

AW commented that litter along fences and at other facility locations should only be collected when weather conditions allow for scattering of windblown waste. AW commented that it is impractical and unsafe to collect windblown waste during rainfall or storm conditions.

**Response**

**The commission disagrees with the comment for collecting windblown waste. The commission has provided flexibility within the rule for site-specific means of handling windblown material. The requirement to pick up waste daily does not mean that at any one point in time all waste will be**

**picked up, but rather that the picking up of the waste will be an ongoing activity each day of operation. If there is no windblown waste, it is not necessary to have a litter collection crew patrol the area once a day. No changes were made in response to this comment.**

*Comment*

IESI commented that the proposal unnecessarily restricts the ability of operators to adapt to inclement weather, emergency conditions, and reasonably unforeseen circumstances.

**Response**

**The commission disagrees with the comment about the rules unnecessarily restricting the ability of operators to adapt to inclement weather, emergency conditions, and reasonably unforeseen circumstances. The commission has written the rule so that flexibility exists for operators in a way that would allow each operator to have a site-specific plan that could include adapting to inclement weather, emergency conditions, and reasonably unforeseen circumstances. No changes have been made in response to this comment.**

**§330.121. Easements and Buffer Zones.**

*Comment*

Individual commenters were concerned that 50 feet is not a large enough buffer. Individual commenters stated that the size of buffers should increase with the size of landfill. LK suggested a minimum of 500 feet with greater buffers for any elevation above ground surface.

**Response**

**The commission is concerned about buffer zone sizing; however, the design of a buffer zone is best addressed in the design requirements of a landfill and, consequently, the commission plans to consider this issue in the pending comprehensive Chapter 330 rulemaking. No changes were made in response to this comment.**

*Comment*

AW commented that §330.56 currently does not address buffer zone requirements.

**Response**

**The commission included the cross-reference in this rule, because the design of buffer zones will appear on the attachments to the site development plan, and the requirements for these attachments are found in §330.56. The commission plans to consider this issue in the pending comprehensive Chapter 330 rulemaking. No changes were made in response to this comment.**

**§330.122. Landfill Markers and Benchmark.**

*Comment*

TXSWANA, PRPC, WMTX, and Corpus Christi commented that the requirement of repainting and weekly recorded inspections of landfill markers is burdensome. They indicate that the needed frequency to repaint will vary with such things as weather conditions and type of paint, and that the additional cost of weekly recorded inspections is unjustified. TXSWANA recommended that the

markers need to be inspected monthly, at most, to ensure that the landfill operation would not be impacted.

**Response**

**The amended rule requires that all markers must be maintained to retain visibility and, consequently, the word “repainted” has been changed to “maintained.” The commission agrees with the recommendation that the markers need to be inspected only monthly, and consequently, has changed the weekly requirement to a monthly requirement.**

**§330.123. Materials Along the Route to the Site.**

*Comment*

Many commenters expressed concern that the daily cleanup of litter along the side of a road would sometimes not be needed and were concerned with the extra costs of increased manpower. WMTX suggested the frequency should be no more than three times a week.

**Response**

**The commission is aware of spilled and windblown waste along access roads being an ongoing problem that justifies amending the rule to require at least daily cleanup. Picking up litter along the route to the site each day that the facility is in operation does not mean that at any one point in time all waste along the side of the road will be picked up, but rather that picking up waste will be an ongoing activity each day of operation. On the other hand, if observation shows there is no**

**waste needing pickup, then a litter collection crew does not need to be sent to pick up litter. No changes were made in response to these comments.**

*Comment*

Walsh Ranches commented that uncovered loads contribute to safety hazards and should be addressed.

**Response**

**The commission agrees with the commenter that uncovered loads may contribute to safety hazards. The commission, however, concludes that sufficient rules exist to address this issue, and consequently, has not made any changes in response to this comment.**

*Comment*

Many commenters expressed concern that weather conditions can make it impossible to perform daily cleanup of litter along the side of a road.

**Response**

**If waste hauling operations continue, then clean-up activities should be able to continue. If known weather conditions in an area are expected to make clean-up activities overly difficult or dangerous at times, the facility could request an alternative clean-up frequency to be approved in its site operating plan. No changes were made in response to this comment.**

*Comment*

WMTX stated that the facility should not be responsible if it does not receive approval from the Texas Department of Transportation (TxDOT).

### **Response**

**The reference in the rule requiring the facility to consult with TxDOT and local governments concerning road cleanup is included to recognize that a facility must make an effort to have roads cleaned up. The commission can accommodate arrangements between a facility and these governmental entities in the site operating plan or when considering compliance issues. The commission and TxDOT routinely correspond about this subject on each new permit and each new permit amendment. No changes were made in response to this comment.**

### **§330.124. Disposal of Large Items.**

#### *Comment*

TXSWANA commented regarding §330.124(c) that provides that items that enter a facility with ruptured lines or holes in the chlorinated fluorocarbon (CFC) unit must not be accepted unless the generator or transporter provides written certification that the CFC has been evacuated from the unit and that it was not knowingly allowed to escape into the atmosphere. TXSWANA and Corpus Christi commented that this rule does not make it clear what constitutes a written certification and what the landfill operator is required to do with the written certification. TXSWANA and Corpus Christi questioned the level of certification required. Also, in the event that a municipality or county landfill ends up with an illegally dumped CFC unit with ruptured lines, it appears that this rule either creates a solid waste stream which may not be disposed of in the landfill and/or requires the landfill operator to

pay for the transportation to and the processing of these items at an approved CFC disposal site. If this is the intended result, the commission will need to supply each solid waste facility with an up-to-date list of approved CFC disposal sites in order for the facility to comply with this new rule. PRPC commented that this section is too stringent for small rural landfills. One individual requested that the word “nuisance” be defined and asked if it is allowable to recover CFCs at the facility.

**Response**

**The rule has been changed in response to comments to require that items containing CFC be handled in accordance with the federal requirements codified at 40 Code of Federal Regulations (CFR) §82.156(f), as amended. Under this rule, landfill operators disposing of refrigerant containing appliances must either recover any remaining refrigerant from the appliance in accordance with 40 CFR §82.156, or verify that the refrigerant has been evacuated from the appliance previously in accordance with the requirements of 40 CFR §82.156.**

**§330.125. Air Criteria.**

*Comment*

TCE was concerned that changes might be made to odor controls through permit modifications rather than a permit amendment process without full public input.

**Response**

**A noticed permit modification level of authorization is the proper level of authorization for complying with this new requirement. While the opportunity for public input is appropriate, providing an opportunity for a contested case hearing would be expected to cause a significant delay in approving and implementing upgraded site operating plan provisions. The authorization level for subsequent changes to an odor management plan will be determined in accordance with Chapter 305, Subchapter D of this title.**

*Comment*

Commenters were concerned that the requirements for odor control are not clear and need to be specific, enforceable, and included in the site operating plan. PRPC commented that the requirement for an odor management plan needs to be site-specific based on the location of the facility and its proximity to residential areas.

**Response**

**The commission agrees that odor management plans need to be site-specific and has written the rule to allow flexibility for addressing site-specific and waste-specific issues in the site operating plan. No changes have been made in response to this comment.**

*Comment*

One commenter questioned what is the content of an odor control plan. Several commenters indicated that an odor control plan should be more prescriptive, similar to other sections of the site operating plan rules. TXSWANA and Corpus Christi commented that clarification of what is required of such a plan

would be helpful. SLUWCD commented that odor from a landfill should be a problem “before you require a fix.” IESI suggested that odor control plans should first assess any existing or likely sources of off-site odors, after which the active management of odors may or may not be necessary.

### **Response**

**Odor management plans need to be site-specific, so the rule has been written to allow flexibility for addressing site-specific and waste-specific issues in the site operating plan. Plans for odor management must include the identification of wastes that require special attention such as septage, grease trap waste, dead animals, and leachate. Means of handling these materials on a timely basis should be part of the plan. One way of handling particularly odorous wastes would be to bury them immediately upon receipt. The commission intends to address supplemental information to assist with odor management in an agency guidance document. No changes have been made in response to these comments.**

### *Comment*

Walsh Ranches commented that §330.125(a) is unclear on whether it covers only open burning, or all aspects of relevant air pollution control and compliance with the state implementation plan (SIP). The rule should encompass the broader compliance issue.

### **Response**

**The rule states that the owner or operator shall ensure that the facility does not violate any applicable requirement of the SIP, which includes nuisance, outdoor burning, visible emissions,**

**and particulate matter control requirements. (See 40 CFR §52.2270.) No change has been made to the rule.**

*Comment*

Walsh Ranches suggested changes to §330.125(b) addressing odor nuisance. Odor nuisance plagues many of the state's municipal solid waste facilities, and the current rule and the agency's current odor nuisance enforcement policy do little to address the problem. Under §330.125, the facility must establish odor control practices. Walsh Ranches suggested that the rule state that the facility is subject to commission rules and the Texas Clean Air Act concerning odor nuisance. Additionally, Walsh Ranches suggested that the facility be required to annually review the effectiveness of its odor control practices, based on the number of complaints received, and be required to make changes as necessary to increase its effectiveness.

**Response**

**The commission disagrees with the suggested change. Nuisance requirements in the commission rules in 30 TAC §101.4 apply to all persons in the state. This prohibition on the discharge of air contaminants in such concentration that may interfere with normal use and enjoyment of property covers odor. Air contaminant is statutorily defined in the Texas Clean Air Act to include odor. As to the request for annual review, the commission's authority to amend permits and enforce rules and permit provisions is adequate to protect communities located near facilities. No change has been made to the rule in response to this comment.**

*Comment*

Walsh Ranches commented that a problem that is not currently addressed in the rules is the practice of allowing waste transporters to queue outside the gates of a closed municipal solid waste facility while they wait for the facility to open to accept waste. This practice often causes odor nuisance and increases tailpipe emissions from idling vehicles and this practice should not be allowed. This practice should be addressed in several sections of Subchapter F, including §330.125.

### **Response**

**As stated previously, the commission's air rules prohibit any person from causing a nuisance due to air contaminants. As mobile sources, the commission does not have the authority to control emissions from trucks. Mobile source regulation is under the purview of the EPA. However, state and federal rules on diesel fuel standards and federal engine standards are addressing mobile source emissions. No change has been made to the rule in response to this comment.**

### *Comment*

Walsh Ranches believes that facilities should be required to have a plan for minimizing dust and particulate matter (PM). Dust and PM are problems at many municipal solid waste facilities, especially landfills and transfer stations. Walsh Ranches suggested adding a subsection to §330.125 requiring dust and PM control practices designed to minimize dust and other particulates. As with methods to control uncovered loads and odor, these practices should be evaluated annually and the facility should be required to change the practices if the evaluation shows that they are not effective. This subsection is needed because Texas facilities must comply with the National Ambient Air Quality Standards (NAAQS), as promulgated under Federal Clean Air Act, §109, which include a standard for PM<sub>10</sub>. In addition to the NAAQS for PM<sub>10</sub>, the State of Texas has promulgated a state standard for PM. Even

though the commission has established standard air permits for municipal solid waste landfills, a covered landfill must still comply with all air quality rules and the intent of the Texas Clean Air Act and rules in 30 TAC §116.615(1). Thus, landfills must comply with the NAAQS for PM<sub>10</sub> and the Texas PM standard.

### **Response**

**The commission disagrees that PM controls should be added to the site operating plan rules. Section 330.127(b) already requires site operating plans to include dust control measures for on-site and other access roadways. As stated by the commenter, the commission has an air quality standard permit for municipal solid waste landfills. The commission agrees with the commenter that landfill facilities must comply with air quality rules, including PM regulations in 30 TAC Chapter 111, but not for the reasons the commenter mentions. The federal NAAQS for PM is not a point source-specific emission rate or standard; it is an area-wide standard. Therefore, site operating plan controls are not necessary to meet the PM NAAQS. Furthermore, only one area in Texas, El Paso, is in violation of the PM NAAQS. The commission responds that current state air quality rules and permit authorization processes adequately address PM emissions from landfills. No changes were made in response to this comment.**

### *Comment*

LK requested that the sentence "The methods and frequencies for odor control must be specified in the site operating plan." be added to the end of §330.125(b).

### **Response**

**The commission has not added this sentence to the rule because the rule specifies that a plan for odor management must be included in the site operating plan and to add this phrase would create a redundancy. No changes were made in response to this comment.**

**§330.126. Disease Vector Control.**

*Comment*

TXSWANA and Corpus Christi commented that an indication of what is required for the method and frequencies for disease vector control as specified in the site operating plan would be helpful.

**Response**

**The rule has been changed in response to comments to require site operating plans to include general methods and performance-based frequencies for disease vector control. The rule language has been modified to clarify that the agency requires that general methods and frequencies of implementing disease vector controls could be written as performance-based standards. The variable nature of vector issues at facilities throughout the state dictates that permittees be allowed discretion to develop vector control provisions on a site-specific basis. The commission plans to address disease vector control issues further in an agency guidance document.**

*Comment*

IESI commented that the mere existence of vectors should not constitute a violation per se of this section.

**Response**

**The commission agrees with the commenter. The existence of vectors in small quantities should not constitute a violation. A change has been made in response to this comment to remove the word “prevent” in order to allow the “control” of on-site populations of disease vectors.**

*Comment*

Commenters stated that the rules should not allow landfills near neighborhoods to use bird cannons to scare birds away because of the nuisance caused to nearby neighbors.

**Response**

**The rules controlling the use of bird cannons is not within the scope of this rulemaking. To the extent that the use of bird cannons is related to site operating plan issues, the commission will consider limiting the use of bird cannons under existing rules on a case-by-case basis relative to the potential impact to neighbors and the necessity for using the cannons as a bird control measure. No changes were made in response to this comment.**

*Comment*

WMTX commented that the language should be clarified because the words “prevent” and “control” are inconsistent.

**Response**

**The commission agrees with the commenter and has modified the language to delete the words “prevent and” which would cause confusion when used with “control.”**

**§330.127. Site Access Roads.**

*Comment*

TXSWANA, SLUWCD, WMTX, and Corpus Christi expressed great difficulty with cleaning mud from public roads. RMR, Lubbock, and PRPC commented that a daily standard is unreasonable. IESI commented that the requirement to remove tracked mud should be limited to roadways within 500 feet of the facility.

**Response**

**With respect to cleaning mud from public roads, the commission has modified the language to indicate that mud and associated debris must be cleaned when it has been tracked onto a public roadway. Some of the commenters misunderstood the proposed rules to require that mud and associated debris had to be removed for two miles, similar to the requirement in §330.123 for cleanup of waste along roads. Also, the commission has modified the language to indicate that the cleanup must be accomplished at least once per day, but only on days when mud would be tracked onto the public roadway. The rule is intended to deter the tracking of mud onto public roads. There are many ways to prevent mud from being tracked onto public roads such as low-tech wheel washes, and extra lengths of on-site paved roads between the unloading areas and the public road. The commission also plans to address this issue further in a guidance document.**

*Comment*

TXSWANA and Corpus Christi commented that §330.127(c) provides that access roadways must be regraded to minimize depressions, ruts, and potholes and that there may be circumstances where minimizing ruts in the road is not the best operational practice. PRPC and one individual suggested that a performance standard, such as potholes greater than eight inches, would be more effective.

**Response**

**With respect to regrading roadways, the rule is written to be site-specific; the aspects of regrading should be covered in each site operating plan; and the case-by-case specifics can be determined by the operator. The rule language is performance-based in that it requires maintaining clean and safe conditions, and minimizing depressions, ruts, and potholes. No changes were made in response to this comment.**

*Comment*

One individual questioned at what point does tracked mud and trash become a violation and suggested a recordkeeping requirement.

**Response**

**The commission concludes that mud and associated debris must be cleaned at the access to the facility on the public roadway. In regard to recordkeeping, the commission has not specifically required recordkeeping for this issue but would recommend it to demonstrate compliance with the requirement. The commission intends to address this issue in a guidance document. No changes have been made in response to this comment.**

*Comment*

IESI commented that the requirement to remove tracked mud should be subject to securing authorization from TxDOT and/or county officials.

**Response**

**The commission agrees with the commenter and has added language requiring the facility operator to consult with the TxDOT, county, and/or local governments with maintenance authority over the roads concerning cleanup of state highways and right-of-ways. This new language is located in §330.123 and will affect removal of tracked mud. The reference in the rule requiring the facility to consult with TxDOT and local governments concerning road cleanup is included to recognize that a facility must make an effort to have roads cleaned up. The commission can accommodate arrangements between a facility and these governmental entities in a site operating plan. The commission and TxDOT routinely correspond about this subject on each new permit and each new permit amendment.**

**§330.131. Oil, Gas, and Water Wells.**

*Comment*

An individual commented that the phrase “may remain in use . . . are not subject to impact from landfill operations” is not clear, and similarly WMTX commented that this section needed to be clarified so that water wells that are not drawing water from the monitored zone may remain in use.

IESI commented that the types of permissible wells should be expanded to include water wells that are

not withdrawing water from the same formation and zone being monitored and the installation or reworking of oil and gas wells that do not hamper operations.

### **Response**

**The commission has added language to this phrase, “may remain in use . . . are not subject to impact from landfill operations,” to show the intent that water wells that will be used at the facility may remain in use as long as they are located outside of the groundwater monitoring well network or the waste footprint, and are not impacted by landfill operations. The commission’s concerns include whether such wells would interfere with the accuracy of groundwater monitoring data, that water wells could provide a pathway for contaminants to migrate between water-bearing zones, and that water extracted from wells could pose health hazards to consumers of the water. As to allowing wells to draw water from zones other than the monitoring zone, the commission will consider such authorizations under the rule based on these underlying concerns.**

### **§330.133. Landfill Cover.**

#### *Comment*

TXSWANA and Corpus Christi commented about §330.133(a) that allows the executive director to require a chemical analysis of any landfill cover. TXSWANA commented that this allowance is unclear and causes concern. TXSWANA questioned what would such a “chemical analysis” consist of, how frequently could a chemical analysis be required, and what would be the purpose of the analysis?

### **Response**

**The sentence authorizing the executive director to request a chemical analysis has been deleted from §330.133(a) in response to comments, because the commission's concern about using contaminated materials for cover is adequately addressed in §330.133(c)(1)(D), relating to alternative material daily cover. The commission does not have a concern about cover materials applied under §330.133(a) being contaminated, because that rule already specifies that the earthen material used under that section has not been mixed with garbage, rubbish, or other solid waste.**

*Comment*

RMR requested that the rule identify standards that the executive director would utilize in making a determination that daily cover should be applied more frequently.

**Response**

**The rule states that the commission, as opposed to the executive director, can approve another schedule for applying daily cover. A specific standard is not provided in the rule, because it is not practical to identify a standard to address all conditions that would warrant requiring cover to be applied more often. The commission does not believe additional standards are necessary for this already existing rule where no recent changes have been proposed. The commission intends to provide supplemental information related to this issue in guidance. No changes were made in response to this comment.**

*Comment*

Commenters requested that local governments that have jurisdiction are noted at every spot where they have jurisdiction.

**Response**

**Statutory and rule language exists governing when a local government is allowed to enforce a statute or commission rule. Local governments' authority is based on statutes, and it is not necessary for the commission to reflect that authority throughout its rules. No changes were made in response to this comment.**

*Comment*

A commenter stated that vegetative cover should be in correlation to the size of the facility and percent full.

**Response**

**In response to the comment that vegetative cover should be in correlation to the size of the facility and percent full, the commission has modified §330.133(b) to allow other erosion control methods. Some facilities may choose to use this option based on the stage of landfill development or landfill size. Landfills need to provide adequate erosion control measures regardless of the stage of development or landfill size.**

*Comment*

A commenter stated that tarps should not be allowed.

**Response**

**The commission has not prohibited the use of tarps as alternate daily cover, because temporary use of tarps may be prudent on occasions. The potential for negative impacts resulting from using tarps does not outweigh the benefits, and tarps can be used in a manner protective of the public and the environment. No changes were made in response to this comment.**

*Comment*

TXSWANA commented that it is not clear from the proposed rule what “seeded or sodded immediately” is intended to require and when seeding or sodding is required. Is seeding or sodding required at the completion of the application of intermediate cover over an entire area or at the end of each day that it is being applied? It should clearly not be at the end of each day, however, the proposed language is unclear. TXSWANA recommended adding language to require seeding or sodding “within 60 days following the completion of intermediate cover application” or similar language if the requirement to seed or sod remains in the proposed rule. TXSWANA indicated that it is not clear for what period of time plant growth must be maintained, and will the landfill need to plant seasonally so that some form of vegetative growth is maintained throughout all seasons of the year?

**Response**

**In response to the comment that it is not clear when the seeding or sodding is required, the commission has modified the rule by deleting the word “immediately” to be more flexible. Seeding or sodding should occur on a site-specific basis within a reasonably expedient manner to prevent erosion. As to what triggers the need to begin implementing these erosion control measures, they should be implemented after intermediate cover has been applied to a discrete**

**disposal area or sector. The commission plans to supplement information related to this issue in a guidance document. As to how long the cover has to be maintained, it has to be maintained throughout the seasons and until the sector receives final cover or waste.**

*Comment*

TXSWANA and WMTX commented on §330.133(f), which requires that final or intermediate cover must be repaired within five days of detection, unless the executive director approves otherwise.

TXSWANA, WMTX, and Corpus Christi indicated that the addition of the requirement that final or intermediate cover repair occur “within five days of detection” is not feasible or realistic in many instances. For example, in many cases the cover may still be too wet to operate earth moving equipment within five days of a rain event and doing so would cause damage to the cover. TXSWANA and WMTX commented that §330.133(f) is vague in that it appears to provide for a mechanism to vary from this requirement in the form of an approval from the executive director, and the proposed rule is silent as to how such approval can be accomplished and whether or not some realistic time frame for a response from the executive director is required or whether or not a landfill is allowed to presume approval in the absence of a response within a specified time frame.

**Response**

**A provision has been added to §330.133(f) in response to comments which allows the commission’s regional office to allow more time to repair erosion based on the extent of damage that would require more time to repair or the repairs being delayed by weather conditions. In the absence of these justifications for an extension, five days should be more than sufficient time to repair erosion for cover that is an integral part of an engineered system that is designed to prevent**

**intrusion of water into the waste and is designed to prevent waste from being exposed to the environment for odor and vector control measures. As to how to obtain approval from the commission's regional office, it would be adequate for regional office personnel to provide approval over the phone. The commission also plans to address this issue further in a guidance document.**

*Comment*

One individual commented that erosion situations requiring repair should be further defined to provide a threshold that would trigger repair work and subsequent recordkeeping.

**Response**

**Waste being exposed and visible is definitely a threshold that triggers the need for repair work and subsequent recordkeeping. Other lesser signs of erosion will have to be determined on a case-by-case basis. The commission plans to address this issue further in a guidance document. No changes were made in response to this comment.**

*Comment*

Wichita Falls stated that topsoil for intermediate cover is difficult to obtain in some parts of the state and that earthen material would be the preferred cover material. TXSWANA and Corpus Christi questioned what is meant by topsoil. Corpus Christi also stated that the proposed language is not appropriate nor is it feasible. RMR, PRPC, Lubbock, WMTX, Wichita Falls, and Cleburne requested that the rule allow other methods to minimize erosion.

**Response**

**In response to comments about the requirement to use topsoil for intermediate cover, the commission has changed the language in the rule from topsoil to earthen material to differentiate that intermediate cover is not required to be topsoil. In response to the request to allow other methods to minimize erosion, the commission agrees and has made an amendment to the rule to allow the executive director to approve other methods to control erosion.**

**§330.134. Ponded Water.**

*Comment*

One commenter suggested that the ponded water requirements should apply to municipal solid waste facilities and transfer stations.

**Response**

**The commission agrees with the comment that the ponded water requirements should apply to municipal solid waste facilities and transfer stations, to the extent other rules specify that §330.134 is applicable to those facilities. This rulemaking is not intended to form the basis for these rules being applicable to non-landfill facilities. No changes were made in response to this comment.**

*Comment*

Corpus Christi commented that a separate ponding prevention plan is unnecessary.

**Response**

**The commission disagrees with the comment about a separate ponding prevention plan being unnecessary. The ponding prevention plan is necessary to control infiltration of water into the waste. Additionally, a ponded water plan can be used to control sources of odor from ponded water; can be used to control breeding grounds for vectors in ponded water; and can be used to control sources of harborage for vectors in ponded water. No changes were made in response to this comment.**

*Comment*

WMTX requested the removal of the words “contaminated water.”

**Response**

**The commission agrees with the comment regarding “contaminated water” being removed and consequently has replaced “contaminated water” with “water that has been in contact with waste,” because it is a more specific term.**

*Comment*

One individual suggested reformatting the section.

**Response**

**The purpose of this rulemaking does not include reformatting. However, the commission intends to address the restructuring of Chapter 330 in a subsequent rulemaking. No changes have been made in response to this comment.**

*Comment*

One individual suggested adding a provision to allow documentation of extended wet weather circumstances that would justify delaying compliance with the seven-day repair requirement. Lubbock commented that ponding of water must be prevented and a plan must be provided in the site operating plan, but cannot be prevented entirely and that seven days is too restrictive. Lubbock also objected to the amount of time to accomplish the rule.

**Response**

**The commission agrees that flexibility should be allowed for extended wet weather periods. The needed flexibility exists under the rule provision that requires the ponding prevention plan to identify corrective actions to remove ponded water. Corrective action provisions can be written to account for actions to be taken during and after wet weather conditions. The commission plans to address this issue in a guidance document. No changes have been made in response to this comment.**

*Comment*

IESI commented that it is unreasonable to propose a strict liability standard, particularly if the owner/operator has followed a ponded water plan.

**Response**

**The commission disagrees that reducing liability standards should be allowed because an operator has followed a ponded water plan. No changes have been made in response to this comment.**

**§330.135. Waste in Enclosed Containers or Enclosed Vehicles Accepted at Type IV Landfills.**

*Comment*

One individual asked for clarification of the phrase “. . . a facility in violation of this rule if waste in enclosed containers is accepted without the presence of a commission inspector.”

**Response**

**This aspect of the rule is a requirement of Texas Health and Safety Code, §361.091. No changes were made in response to this comment.**

**§330.136. Disposal of Special Wastes.**

*Comment*

Corpus Christi and WMTX commented that requests for approval to accept special wastes should also be allowed to be submitted by the owner or operator of the landfill and the transporter of the waste.

**Response**

**The generator is held responsible for the waste and proper disposal. Additionally, the generator is held responsible for characterizing its waste as special waste for disposal. The generator cannot delegate its responsibility to a transporter or landfill. No changes were made in response to this comment.**

**§330.137. Disposal of Industrial Wastes.**

*Comment*

One individual requested more public notice for industrial waste and asbestos.

**Response**

**The commission responds that the level of public involvement for industrial waste and asbestos is currently at the appropriate level. No changes were made in response to this comment.**

*Comment*

One individual requested that a sentence be rewritten to be gender neutral.

**Response**

**In response to the comment about a sentence needing to be written in gender neutral, the commission has amended the text of this sentence to reflect gender neutrality.**

*Comment*

AW commented that construction and demolition waste that meet the definition of Class 2 waste should be allowed at Type IV landfills.

**Response**

**The commission agrees that Class 2 waste should be allowed at Type IV landfills. Current rules do not allow Type IV landfills to receive this waste. However, it is not in the scope of this rulemaking to change this requirement. The commission plans to address this concept in the subsequent rulemaking for Chapter 330. No changes were made in response to this comment.**

**§330.138. Visual Screening of Deposited Waste.**

*Comment*

Corpus Christi requested that standards be added for instances where landscape screening would be required.

**Response**

**The commission disagrees that standards are needed for landscape screening. It is more appropriate to tailor reasonable screening based on the specific facility and surrounding community. The commission plans to address this issue further in a guidance document which will assist facilities with preparing a new or revised site operating plan. No changes were made in response to this comment.**

**§330.200. Design Criteria.**

*Comment*

CETCO, Corpus Christi, and two individuals requested design changes and clarifications to liners regarding this section.

**Response**

**The commission is concerned with the design of landfill liners; however, the scope of this rulemaking is to address the operations of facilities rather than their design. Although language in §330.200 addresses liner design, this language has simply been moved from §330.137 to**

**§330.200, regarding design requirements from its previously inappropriate location in the site operating plan requirements. No changes were made in response to this comment.**

## SUBCHAPTER A: GENERAL INFORMATION

### §330.2

#### STATUTORY AUTHORITY

The amendment is adopted under Texas Water Code, §5.103, which authorizes the commission to adopt any rules necessary to carry out its powers and duties; Texas Health and Safety Code, §361.011, which establishes the commission's jurisdiction over all aspects of the management of municipal solid waste with all powers necessary or convenient to carry out the responsibilities of that jurisdiction; §361.024, which provides the commission with rulemaking authority; and §361.061, which authorizes the commission to require and issue permits governing the construction, operation, and maintenance of solid waste facilities used to store, process, or dispose of solid waste.

#### **§330.2. Definitions.**

Unless otherwise noted, all terms contained in this section are defined by their plain meaning. This section contains definitions for terms that appear throughout this chapter. Additional definitions may appear in the specific section to which they apply. As used in this chapter, words in the masculine gender also include the feminine and neuter genders, words in the feminine gender also include the masculine and neuter genders; words in the singular include the plural and words in the plural include the singular. The following words and terms, when used in this chapter, have the following meanings.

(1) **100-year flood** - A flood that has a 1.0% or greater chance of recurring in any given year or a flood of a magnitude equalled or exceeded once in 100 years on the average over a significantly long period.

(2) **Acid** - A substance containing hydrogen that will release hydrogen (hydronium) ions when dissolved in water. Acids will have a pH of less than 7.0 and usually have a sour taste and will cause blue litmus dye to turn red.

(3) **Active life** - The period of operation beginning with the initial receipt of solid waste and ending at certification/completion of closure activities in accordance with §§330.250 - 330.253 of this title (relating to Applicability; Closure Requirements for MSWLF Units That Stop Receiving Waste Prior to October 19, 1991, and MSW Sites; Closure Requirements for MSWLF Units That Receive Waste on or after October 9, 1991, But Stop Receiving Waste Prior to October 9, 1993; and Closure Requirements for MSWLF Units That Receive Waste on or after October 9, 1993, and MSW Sites).

(4) **Active portion** - That part of a facility or unit that has received or is receiving wastes and that has not been closed in accordance with §§330.250 - 330.253 of this title.

(5) **Airport** - A public-use airport open to the public without prior permission and without restrictions within the physical capacities of available facilities.

(6) **Aquifer** - A geological formation, group of formations, or portion of a formation capable of yielding significant quantities of groundwater to wells or springs.

(7) **Areas susceptible to mass movements** - Areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where the movement of earth material at, beneath, or adjacent to the municipal solid waste landfill unit, because of natural or man-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, soil fluctuation, block sliding, and rock fall.

(8) **Asbestos-containing materials** - Include the following.

(A) Category I nonfriable asbestos-containing material (ACM) means asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1.0% asbestos as determined using the method specified in Appendix A, Subpart F, 40 Code of Federal Regulations (CFR), Part 763, §1, Polarized Light Microscopy (40 CFR Part 763, §1).

(B) Category II nonfriable ACM means any material, excluding Category I nonfriable ACM, containing more than 1.0% asbestos as determined using the methods specified in 40 CFR Part 763, §1, that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

(C) Friable ACM means any material containing more than 1.0% asbestos that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.

(D) Nonfriable ACM means any material containing more than 1.0% asbestos that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

(9) **ASTM** - The American Society of Testing and Materials.

(10) **Battery** - An electrochemical device that generates electric current by converting chemical energy. Its essential components are positive and negative electrodes made of more or less electrically conductive materials, a separate medium, and an electrolyte. There are four major types:

(A) primary batteries (dry cells);

(B) storage or secondary batteries;

(C) nuclear and solar cells or energy converters; and

(D) fuel cells.

(11) **Battery acid (also known as electrolyte acid)** - A solution of not more than 47% sulfuric acid in water suitable for use in storage batteries, which is water white, odorless, and practically free from iron.

(12) **Battery retailer** - A person or business location that sells lead-acid batteries to the general public, without restrictions to limit purchases to institutional or industrial clients only.

(13) **Battery wholesaler** - A person or business location that sells lead-acid batteries directly to battery retailers, to government entities by contract sale, or to large-volume users, either directly or by contract sale.

(14) **Bird hazard** - An increase in the likelihood of bird/aircraft collisions that may cause damage to an aircraft or injury to its occupants.

(15) **Brush** - Cuttings or trimmings from trees, shrubs, or lawns and similar materials.

(16) **Buffer zone** - A zone free of municipal solid waste processing and disposal activities adjacent to the site boundary.

(17) **CFR** - Code of Federal Regulations.

(18) **Citizens' collection station** - A facility established for the convenience and exclusive use of residents (not commercial or industrial users or collection vehicles). The facility may consist of one or more storage containers, bins, or trailers.

(19) **Class I industrial solid waste** - See industrial solid waste.

(20) **Collection** - The act of removing solid waste (or materials that have been separated for the purpose of recycling) for transport elsewhere.

(21) **Collection system** - The total process of collecting and transporting solid waste. It includes storage containers; collection crews, vehicles, equipment and management; and operating procedures. Systems are classified as municipal, contractor, or private.

(22) **Commercial solid waste** - All types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes.

(23) **Compacted waste** - Waste that has been reduced in volume by a collection vehicle or other means including, but not limited to, dewatering, composting, incineration, and similar processes, with the exception of waste that has been reduced in volume by a small, in-house compactor device owned and/or operated by the generator of the waste.

(24) **Composite liner** - A liner system consisting of two components: the upper component must consist of a minimum 30-mil flexible membrane liner (FML) or minimum 60-mil high-density polyethylene and the lower component must consist of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than  $1 \times 10^{-7}$  cm/sec. The FML component must be installed in direct and uniform contact with the compacted soil component.

(25) **Compost** - The stabilized product of the decomposition process that is used or sold for use as a soil amendment, artificial top soil, growing medium amendment, or other similar uses.

(26) **Composting** - The controlled biological decomposition of organic materials through microbial activity.

(27) **Conditionally exempt small-quantity generator** - A person who generates no more than 220 pounds of hazardous waste in a calendar month.

(28) **Construction-demolition waste** - Waste resulting from construction or demolition projects; includes all materials that are directly or indirectly the by-products of construction work or that result from demolition of buildings and other structures, including, but not limited to, paper, cartons, gypsum board, wood, excelsior, rubber, and plastics.

(29) **Contaminate** - The man-made or man-induced alteration of the chemical, physical, biological, or radiological integrity of ground or surface water.

(30) **Controlled burning** - The combustion of solid waste with control of combustion air to maintain adequate temperature for efficient combustion; containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; and control of the emission of the combustion products, i.e., incineration in an incinerator.

(31) **Discard** - To abandon a material and not use, reuse, reclaim, or recycle it. A material is abandoned by being disposed of; burned or incinerated (except where the material is being burned as a fuel for the purpose of recovering usable energy); or physically, chemically, or biologically treated (other than burned or incinerated) in lieu of or prior to being disposed.

(32) **Discharge** - Includes deposit, conduct, drain, emit, throw, run, allow to seep, or otherwise release, or to allow, permit, or suffer any of these acts or omissions.

(33) **Discharge of dredged material** - Any addition of dredged material into the waters of the United States. The term includes, without limitation, the addition of dredged material to a specified disposal site located in waters of the United States and the runoff or overflow from a contained land or water disposal area.

(34) **Discharge of fill material** - The addition of fill material into waters of the United States. The term generally includes placement of fill necessary to the construction of any structure in waters of the United States: the building of any structure or improvement requiring rock, sand, dirt, or other inert material for its construction; the building of dams, dikes, levees, and riprap.

(35) **Discharge of pollutant** - Any addition of any pollutant to navigable waters from any point source or any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source.

(36) **Displacement** - The measured or estimated distance between two formerly adjacent points situated on opposite walls of a fault (synonymous with net slip).

(37) **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 groundwater.

(38) **Dredged material** - Material that is excavated or dredged from waters of the United States.

(39) **Drinking-water intake** - The point at which water is withdrawn from any water well, spring, or surface water body for use as drinking water for humans, including standby public water supplies.

(40) **Elements of nature** - Rainfall, snow, sleet, hail, wind, sunlight, or other natural phenomenon.

(41) **Endangered or threatened species** - Any species listed as such under Federal Endangered Species Act, §4, 16 United States Code, §1536, as amended or under the Texas Endangered Species Act.

(42) **Essentially insoluble** - Any material that, 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 the maximum contaminant levels in 40 Code of Federal Regulations (CFR) Part 141, Subparts B and G, and 40 CFR Part 143 for total dissolved solids.

(43) **Existing municipal solid waste landfill unit** - Any municipal solid waste landfill unit that received solid waste as of October 9, 1993. Waste placement in existing units must be consistent with past operating practices or modified practices to ensure good management.

(44) **Experimental project** - Any new proposed method of managing municipal solid waste, including resource and energy recovery projects, that appears to have sufficient merit to warrant commission approval.

(45) **Facility** - All contiguous land and structures, other appurtenances, and improvements on the land used for the storage, processing, or disposal of solid waste.

(46) **Fault** - A fracture or a zone of fractures in any material along which strata, rocks, or soils on one side have been displaced with respect to those on the other side.

(47) **Fill material** - Any material used for the primary purpose of filling an excavation.

(48) **Floodplain** - The lowland and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands, that are inundated by the 100-year flood.

(49) **Garbage** - Solid waste consisting of putrescible animal and vegetable waste materials resulting from the handling, preparation, cooking, and consumption of food, including waste materials from markets, storage facilities, handling, and sale of produce and other food products.

(50) **Gas condensate** - The liquid generated as a result of any gas recovery process at a municipal solid waste facility.

(51) **Generator** - Any person, by site or location, whose act or process produces a solid waste or first causes it to become regulated.

(52) **Grit Trap** - A unit/chamber that allows for the sedimentation of solids from an influent liquid stream by reducing the flow velocity of the influent liquid stream. In a grit trap, the inlet and the outlet are both located at the same vertical level, at, or very near, the top of the unit/chamber;

the outlet of the grit trap is connected to a sanitary sewer system. A grit trap is not designed to separate oil and water.

(53) **Grit trap waste** - Waste collected in a grit trap. Grit trap waste includes waste from grit traps placed in the drains prior to entering the sewer system at maintenance and repair shops, automobile service stations, car washes, laundries, and other similar establishments. The term does not include material collected in an oil/water separator or in any other similar waste management unit designed to collect oil.

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

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

(56) **Holocene** - The most recent epoch of the Quaternary Period, extending from the end of the Pleistocene Epoch to the present.

(57) **Household waste** - Any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas); does not include yard waste or brush that is completely free of any household wastes.

(58) **Industrial hazardous waste** - Hazardous waste determined to be of industrial origin.

(59) **Industrial solid waste** - Solid waste resulting from or incidental to any process of industry or manufacturing, or mining or agricultural operations, classified as follows.

(A) Class I industrial solid waste or Class I waste is any industrial solid waste designated as Class I by the executive director as any industrial solid waste or mixture of industrial solid wastes that 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, and may pose a substantial present or potential danger to human health or the environment when improperly processed, stored, transported, or otherwise managed, including hazardous industrial waste, as defined in §335.1 of this title (relating to Definitions) and §335.505 of this title (relating to Class 1 Waste Determination).

(B) Class II industrial solid waste is any individual solid waste or combination of industrial solid wastes that cannot be described as Class I or Class III, as defined in §335.506 of this title (relating to Class 2 Waste Determination).

(C) Class III industrial solid waste is any inert and essentially insoluble industrial solid waste, including materials such as rock, brick, glass, dirt, and certain plastics and

rubber, etc., that are not readily decomposable as defined in §335.507 of this title (relating to Class 3 Waste Determination).

(60) **Inert material** - A naturally occurring nonputrescible material that is essentially insoluble such as soil, dirt, clay, sand, gravel, and rock.

(61) **In situ** - In natural or original position.

(62) **Karst terrain** - An area where karst topography, with its characteristic surface and/or subterranean features, is developed principally as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terrains include, but are not limited to, sinkholes, sinking streams, caves, large springs, and blind valleys.

(63) **Lateral expansion** - A horizontal expansion of the waste boundaries of an existing municipal solid waste landfill unit.

(64) **Land application of solid waste** - The disposal or use of solid waste (including, but not limited to, sludge or septic tank pumpings or mixture of shredded waste and sludge) in which the solid waste is applied within three feet of the surface of the land.

(65) **Leachate** - A liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.

(66) **Lead** - The metal element, atomic number 82, atomic weight 207.2, with the chemical symbol Pb.

(67) **Lead acid battery** - A secondary or storage battery that uses lead as the electrode and dilute sulfuric acid as the electrolyte and is used to generate electrical current.

(68) **License** -

(A) A document issued by an approved county authorizing and governing the operation and maintenance of a municipal solid waste facility used to process, treat, store, or dispose of municipal solid waste, other than hazardous waste, in an area not in the territorial limits or extraterritorial jurisdiction of a municipality.

(B) An occupational license as defined in Chapter 30 of this title (relating to Occupational Licenses and Registrations).

(69) **Licensed professional geoscientist** - A geoscientist who maintains a current license through the Texas Board of Professional Geoscientists in accordance with its requirements for professional practice.

(70) **Liquid waste** - Any waste material that is determined to contain "free liquids" as defined by EPA Method 9095 (Paint Filter Test), as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication Number SW-846).

(71) **Litter** - Rubbish and putrescible waste.

(72) **Lower explosive limit** - The lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at 25 degrees Celsius and atmospheric pressure.

(73) **Man-made inert material** - Those non-putrescible, essentially insoluble materials fabricated by man that are not included under the definition of rubbish.

(74) **Medical waste** - Waste generated by health-care-related facilities and associated with health-care activities, not including garbage or rubbish generated from offices, kitchens, or other non-health-care activities. The term includes special waste from health care-related facilities which is comprised of animal waste, bulk blood and blood products, microbiological waste, pathological waste, and sharps as those terms are defined in 25 TAC §1.132 (relating to Definitions). The term does not include medical waste produced on farmland and ranchland as defined in Agriculture Code, §252.001(6) (Definitions - Farmland or ranchland), nor does the term include artificial, nonhuman materials removed from a patient and requested by the patient, including, but not limited to, orthopedic devices and breast implants.

(75) **Monofill** - A landfill or landfill trench into which only one type of waste is placed.

(76) **MSWLF** - Municipal solid waste landfill facility.

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

(78) **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 solid waste.

(79) **Municipal solid waste facility** - All contiguous land, structures, other appurtenances, and improvements on the land used for processing, storing, or disposing of solid waste. A facility may be publicly or privately owned and may consist of several processing, storage, or disposal operational units, e.g., one or more landfills, surface impoundments, or combinations of them.

(80) **Municipal solid waste landfill unit** - A discrete area of land or an excavation that receives household waste and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under 40 Code of Federal Regulations §257.2. A municipal solid waste landfill (MSWLF) unit also may receive other types of RCRA Subtitle D wastes, such as

commercial solid waste, nonhazardous sludge, conditionally exempt small-quantity generator waste, and industrial solid waste. Such a landfill may be publicly or privately owned. An MSWLF unit may be a new MSWLF unit, an existing MSWLF unit, or a lateral expansion.

(81) **Municipal solid waste site** - A plot of ground designated or used for the processing, storage, or disposal of solid waste.

(82) **Navigable waters** - The waters of the United States, including the territorial seas.

(83) **New municipal solid waste landfill unit** - Any municipal solid waste landfill unit that has not received waste prior to October 9, 1993.

(84) **Nonpoint source** - Any origin from which pollutants emanate in an unconfined and unchanneled manner, including, but not limited to, surface runoff and leachate seeps.

(85) **Non-RACM** - Non-regulated asbestos-containing material as defined in 40 Code of Federal Regulations Part 61. This is asbestos material in a form such that potential health risks resulting from exposure to it are minimal.

(86) **Nuisance** - Municipal solid waste that is stored, processed, or disposed of in a manner that causes the pollution of the surrounding land, the contamination of groundwater or surface

water, the breeding of insects or rodents, or the creation of odors adverse to human health, safety, or welfare.

(87) **Open burning** - The combustion of solid waste without:

(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 the emission of the combustion products.

(88) **Operate** - To conduct, work, run, manage, or control.

(89) **Operating record** - All plans, submittals, and correspondence for a municipal solid waste landfill facility required under this chapter; required to be maintained at the facility or at a nearby site acceptable to the executive director.

(90) **Operation** - A municipal solid waste site or facility is considered to be in operation from the date that solid waste is first received or deposited at the municipal solid waste site or facility until the date that the site or facility is properly closed in accordance with this chapter.

(91) **Operator** - The person(s) responsible for operating the facility or part of a facility.

(92) **Opposed case** - A case when one or more parties appear, or make their appearance, in opposition to an application and are designated as opponent parties by the hearing examiner either at or before the public hearing on the application.

(93) **Other regulated medical waste** - Medical waste that is not included within special waste from health care-related facilities but that is subject to special handling requirements within the generating facility by other state or federal agencies, excluding medical waste subject to 25 TAC Chapter 289 (relating to Radiation Control).

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

(95) **PCB** - Polychlorinated biphenyl molecule.

(96) **Polychlorinated biphenyl waste(s)** - Those polychlorinated biphenyls (PCBs) and PCB items that are subject to the disposal requirements of 40 Code of Federal Regulations (CFR) Part 761. Substances that are regulated by 40 CFR Part 761 include, but are not limited to: PCB articles, PCB article containers, PCB containers, PCB-contaminated electrical equipment, PCB equipment, PCB transformers, recycled PCBs, capacitors, microwave ovens, electronic equipment, and light ballasts and fixtures.

(97) **Permit** - A written permit issued by the commission that, by its conditions, may authorize the owner or operator to construct, install, modify, or operate a specified municipal solid waste storage, processing, or disposal facility in accordance with specific limitations.

(98) **Point of compliance** - A vertical surface located no more than 500 feet from the hydraulically downgradient limit of the waste management unit boundary, extending down through the uppermost aquifer underlying the regulated units, and located on land owned by the owner of the permitted facility.

(99) **Point source** - Any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, or discrete fissure from which pollutants are or may be discharged.

(100) **Pollutant** - Contaminated dredged spoil, solid waste, contaminated incinerator residue, sewage, sewage sludge, munitions, chemical wastes, or biological materials discharged into water.

(101) **Pollution** - The man-made or man-induced alteration of the chemical, physical, biological, or radiological integrity of an aquatic ecosystem.

(102) **Poor foundation conditions** - Areas where features exist which indicate that a natural or man-induced event may result in inadequate foundation support for the structural components of a municipal solid waste landfill unit.

(103) **Population equivalent** - The hypothetical population that would generate an amount of solid waste equivalent to that actually being managed based on a generation rate of five pounds per capita per day and applied to situations involving solid waste not necessarily generated by individuals. It is assumed, for the purpose of these sections, that the average volume per ton of waste entering a municipal solid waste disposal facility is three cubic yards. For the purposes of these sections, the following population equivalents shall apply:

(A) 8,000 persons - 20 tons per day or 60 cubic yards per day;

(B) 5,000 persons - 12 1/2 tons or 37 1/2 cubic yards per day;

(C) 1,500 persons - 3 3/4 tons or 11 1/4 cubic yards per day;

(D) 1,000 persons - 225 pounds of wastewater treatment plant sludge per day (dry-weight basis).

(104) **Post-consumer waste** - A material or product that has served its intended use and has been discarded after passing through the hands of a final user. For the purposes of this subchapter, the term does not include industrial or hazardous waste.

(105) **Premises** - A tract of land with the buildings thereon, or a building or part of a building with its grounds or other appurtenances.

(106) **Processing** - Activities including, but not limited to, 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 hazardous waste, designed to change the physical, chemical, or biological character or composition of any hazardous waste to neutralize such waste, or to recover energy or material from the waste, or to render such waste nonhazardous or less hazardous; safer to transport, store, dispose of, or make it amenable for recovery, amenable for storage, or reduced in volume. Unless the executive director determines that regulation of such activity under these rules 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 under the federal Solid Waste Disposal Act, as amended by RCRA, 42 United States Code, §§6901 *et seq.*, as amended.

(107) **Public highway** - The entire width between property lines of any road, street, way, thoroughfare, bridge, public beach, or park in this state, not privately owned or controlled, if any part of the road, street, way, thoroughfare, bridge, public beach, or park is opened to the public for

vehicular traffic, is used as a public recreational area, or is under the state's legislative jurisdiction through its police power.

(108) **Putrescible waste** - Organic wastes, such as garbage, wastewater treatment plant sludge, and grease trap waste, that is capable of being decomposed by microorganisms with sufficient rapidity as to cause odors or gases or is capable of providing food for or attracting birds, animals, and disease vectors.

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

(110) **RACM** - Regulated asbestos-containing material as defined in 40 Code of Federal Regulations Part 61, as amended, includes: friable asbestos material, Category I nonfriable asbestos-containing material (ACM) that has become friable; Category I nonfriable ACM that will be, or has been, subjected to sanding, grinding, cutting, or abrading; or Category II nonfriable ACM that has a high probability of becoming, or has become, crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

(111) **Radioactive waste** - Waste that requires specific licensing under Texas Health and Safety Code, Chapter 401, and the rules adopted by the commission under that law.

(112) **Recyclable material** - A material that has been recovered or diverted from the nonhazardous waste stream for purposes of reuse, recycling, or reclamation, a substantial portion of which is consistently used in the manufacture of products that may otherwise be produced using raw or virgin materials. Recyclable material is not solid waste. However, recyclable material may become solid waste at such time, if any, as it is abandoned or disposed of rather than recycled, whereupon it will be solid waste with respect only to the party actually abandoning or disposing of the material.

(113) **Recycling** - A process by which materials that have served their intended use or are scrapped, discarded, used, surplus, or obsolete are collected, separated, or processed and returned to use in the form of raw materials in the production of new products. Except for mixed municipal solid waste composting, that is, composting of the typical mixed solid waste stream generated by residential, commercial, and/or institutional sources, recycling includes the composting process if the compost material is put to beneficial use.

(114) **Refuse** - Same as rubbish.

(115) **Registration** - The act of filing information for specific solid waste management activities that do not require a permit, as determined by this chapter.

(116) **Regulated hazardous waste** - A solid waste that is a hazardous waste as defined in 40 Code of Federal Regulations (CFR) §261.3, and that is not excluded from regulation as a hazardous waste under 40 CFR §261.4(b), or that was not generated by a conditionally exempt small-quantity generator.

(117) **Relevant point of compliance** - See point of compliance.

(118) **Resource recovery** - The recovery of material or energy from solid waste.

(119) **Resource recovery site** - A solid waste processing site at which solid waste is processed for the purpose of extracting, converting to energy, or otherwise separating and preparing solid waste for reuse.

(120) **Rubbish** - Nonputrescible solid waste (excluding ashes), consisting of both combustible and noncombustible waste materials. Combustible rubbish includes paper, rags, cartons, wood, excelsior, furniture, rubber, plastics, yard trimmings, leaves, or similar materials; noncombustible rubbish includes glass, crockery, tin cans, aluminum cans, metal furniture, and similar materials that will not burn at ordinary incinerator temperatures (1,600 degrees Fahrenheit to 1,800 degrees Fahrenheit).

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

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

(123) **Salvaging** - The controlled removal of waste materials for utilization, recycling, or sale.

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

(125) **Scavenging** - The uncontrolled and unauthorized removal of materials at any point in the solid waste management system.

(126) **Scrap tire** - Any tire that can no longer be used for its original intended purpose.

(127) **Seasonal high water table** - The highest measured or calculated water level in an aquifer during investigations for a permit application and/or any groundwater characterization studies at a site.

(128) **Septage** - The liquid and solid material pumped from a septic tank, cesspool, or similar sewage treatment system.

(129) **Site** - Same as facility.

(130) **Site development plan** - A document, prepared by the design engineer, that provides a detailed design with supporting calculations and data for the development and operation of a solid waste site.

(131) **Site operating plan** - A document, prepared by the design engineer in collaboration with the site operator, that provides general instruction to site management and operating personnel throughout the operating life of the site in a manner consistent with the engineer's design and the commission's regulations to protect human health and the environment and prevent nuisances.

(132) **Site operator** - The holder of, or the applicant for, a permit (or license) for a municipal solid waste site.

(133) **Sludge** - Any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water-supply treatment plant, or air pollution control facility, exclusive of the treated effluent from a wastewater treatment plant.

(134) **Small municipal solid waste landfill** - A municipal solid waste landfill at which less than 20 tons of municipal solid waste are disposed of daily based on an annual average.

(135) **Solid waste** - Garbage, rubbish, refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, municipal,

commercial, mining, and agricultural operations and from community and institutional activities. The term does not include:

(A) 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 under Texas Water Code, Chapter 26;

(B) 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; or

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

(136) **Source-separated recyclable material** - Recyclable material from residential, commercial, municipal, institutional, recreational, industrial, and other community activities, that at the point of generation has been separated, collected, and transported separately from municipal solid

waste, or transported in the same vehicle as municipal solid waste, but in separate containers or compartments. Source-separation does not require the recovery or separation of non-recyclable components that are integral to a recyclable product, including:

(A) the non-recyclable components of white goods, whole computers, whole automobiles, or other manufactured items for which dismantling and separation of recyclable from non-recyclable components by the generator are impractical, such as insulation or electronic components in white goods;

(B) source-separated recyclable material rendered unmarketable by damage during collection, unloading, and sorting, such as broken recyclable glass; and

(C) tramp materials, such as:

(i) glass from recyclable metal windows;

(ii) nails and roofing felt attached to recyclable shingles;

(iii) nails and sheetrock attached to recyclable lumber generated through the demolition of buildings; and

(iv) pallets and packaging materials.

(137) **Special waste** - Any solid waste or combination of solid wastes that because of its quantity, concentration, physical or chemical characteristics, or biological properties requires special handling and disposal to protect the human health or the environment. If improperly handled, transported, stored, processed, or disposed of or otherwise managed, it may pose a present or potential danger to the human health or the environment. Special wastes are:

(A) hazardous waste from conditionally exempt small-quantity generators that may be exempt from full controls under §§335.401 - 335.403 and §§335.405 - 335.412 of this title (relating to Household Materials Which Could Be Classified as Hazardous Waste);

(B) Class I industrial nonhazardous waste not routinely collected with municipal solid waste;

(C) special waste from health-care-related facilities (refers to certain items of medical waste);

(D) municipal wastewater treatment plant sludges, other types of domestic sewage treatment plant sludges, and water-supply treatment plant sludges;

(E) septic tank pumpings;

(F) grease and grit trap wastes;

(G) wastes from commercial or industrial wastewater treatment plants; air pollution control facilities; and tanks, drums, or containers, used for shipping or storing any material that has been listed as a hazardous constituent in 40 Code of Federal Regulations (CFR), Part 261, Appendix VIII but has not been listed as a commercial chemical product in 40 CFR §261.33(e) or (f);

(H) slaughterhouse wastes;

(I) dead animals;

(J) drugs, contaminated foods, or contaminated beverages, other than those contained in normal household waste;

(K) pesticide (insecticide, herbicide, fungicide, or rodenticide) containers;

(L) discarded materials containing asbestos;

(M) incinerator ash;

(N) soil contaminated by petroleum products, crude oils, or chemicals;

(O) light ballasts and/or small capacitors containing polychlorinated biphenyl compounds;

(P) waste from oil, gas, and geothermal activities subject to regulation by the Railroad Commission of Texas when those wastes are to be processed, treated, or disposed of at a solid waste management facility permitted under this chapter;

(Q) waste generated outside the boundaries of Texas that contains:

(i) any industrial waste;

(ii) any waste associated with oil, gas, and geothermal exploration, production, or development activities; or

(iii) any item listed as a special waste in this paragraph;

(R) any waste stream other than household or commercial garbage, refuse, or rubbish;

(S) lead acid storage batteries; and

(T) used-oil filters from internal combustion engines.

(138) **Special waste from health care-related facilities** - Includes animal waste, bulk human blood, blood products, body fluids, microbiological waste, pathological waste, and sharps as defined in 25 TAC §1.132 (relating to Definitions).

(139) **Stabilized sludges** - Those sludges processed to significantly reduce pathogens, by processes specified in 40 Code of Federal Regulations, Part 257, Appendix II.

(140) **Storage** - The holding of solid waste for a temporary period, at the end of which the solid waste is processed, disposed of, or stored elsewhere. Facilities established as a neighborhood collection point for only nonputrescible source-separated recyclable material, as a collection point for consolidation of parking lot or street sweepings or wastes collected and received in sealed plastic bags from such activities as periodic city-wide cleanup campaigns and cleanup of rights-of-way or roadside parks, or for accumulation of used or scrap tires prior to transportation to a processing or disposal site are considered examples of storage facilities. Storage includes operation of pre-collection and post-collection as follows:

(A) pre-collection-that storage by the generator, normally on his premises, prior to initial collection;

(B) post-collection-that storage by a transporter or processor, at a processing site, while the waste is awaiting processing or transfer to another storage, disposal, or recovery facility.

(141) **Storage battery** - A secondary battery, so called because the conversion from chemical to electrical energy is reversible and the battery is thus rechargeable. Secondary or storage batteries contain an electrode made of sponge lead and lead dioxide, nickel-iron, nickel-cadmium, silver-zinc, or silver-cadmium. The electrolyte used is sulfuric acid. Other types of storage batteries contain lithium, sodium-liquid sulfur, or chlorine-zinc using titanium electrodes.

(142) **Store** - To keep, hold, accumulate, or aggregate.

(143) **Structural components** - Liners, leachate collections systems, final covers, run-on/run-off systems, and any other component used in the construction and operation of the municipal solid waste landfill that is necessary for protection of human health and the environment.

(144) **Surface impoundment** - A facility or part of a facility that is a natural topographic depression, human-made excavation, or diked area formed primarily of earthen materials (although it may be lined with human-made materials) that is designed to hold an accumulation of liquids; examples include holding, storage, settling, and aeration pits, ponds, or lagoons.

(145) **Surface water** - Surface water as included in water in the state.

(146) **Texas Civil Statutes** - Vernon's Texas Revised Civil Statutes Annotated.

(147) **Transfer station** - A fixed facility used for transferring solid waste from collection vehicles to long-haul vehicles (one transportation unit to another transportation unit). It is not a storage facility such as one where individual residents can dispose of their wastes in bulk storage containers that are serviced by collection vehicles.

(148) **Transportation unit** - A truck, trailer, open-top box, enclosed container, rail car, piggy-back trailer, ship, barge, or other transportation vehicle used to contain solid waste being transported from one geographical area to another.

(149) **Transporter** - A person who collects and transports solid waste; does not include a person transporting his or her household waste.

(150) **Trash** - Same as Rubbish.

(151) **Treatment** - Same as Processing.

(152) **Triple rinse** - To rinse a container three times using a volume of solvent capable of removing the contents equal to 10% of the volume of the container or liner for each rinse.

(153) **Uncompacted waste** - Any waste that is not a liquid or a sludge, has not been mechanically compacted by a collection vehicle, has not been driven over by heavy equipment prior to

collection, or has not been compacted prior to collection by any type of mechanical device other than small, in-house compactor devices owned and/or operated by the generator of the waste.

(154) **Unified soil classification system** - The standardized system devised by the United States Army Corps of Engineers for classifying soil types.

(155) **Unconfined water** - Water that is not controlled or impeded in its direction or velocity.

(156) **Unit** - Municipal solid waste landfill unit.

(157) **Unstable area** - A location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and karst terrains.

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

(159) **Vector** - An agent, such as an insect, snake, rodent, bird, or animal capable of mechanically or biologically transferring a pathogen from one organism to another.

(160) **Washout** - The carrying away of solid waste by waters.

(161) **Waste management unit boundary** - A vertical surface located at the hydraulically downgradient limit of the unit. This vertical surface extends down into the uppermost aquifer.

(162) **Waste-separation/intermediate-processing center** - A facility, sometimes referred to as a materials recovery facility, to which recyclable materials arrive as source-separated materials, or where recyclable materials are separated from the municipal waste stream and processed for transport off-site for reuse, recycling, or other beneficial use.

(163) **Waste-separation/recycling facility** - A facility, sometimes referred to as a material recovery facility, in which recyclable materials are removed from the waste stream for transport off-site for reuse, recycling, or other beneficial use.

(164) **Water in the state** - Groundwater, percolating or otherwise, lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state, and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or non-navigable, and including the beds and banks of all watercourses and bodies of surface water, that are wholly or partially inside or bordering the state or inside the jurisdiction of the state.

(165) **Water table** - The upper surface of the zone of saturation at which water pressure is equal to atmospheric pressure, except where that surface is formed by a confining unit.

(166) **Waters of the United States** - All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide, with their tributaries and adjacent wetlands, interstate waters and their tributaries, including interstate wetlands; all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters that are or could be used by interstate or foreign travelers for recreational or other purposes; from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; that are used or could be used for industrial purposes by industries in interstate commerce; and all impoundments of waters otherwise considered as navigable waters; including tributaries of and wetlands adjacent to waters identified herein.

(167) **Wetlands** - As defined in Chapter 307 of this title (relating to Texas Surface Water Quality Standards) and areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include playa lakes, swamps, marshes, bogs, and similar areas.

(168) **Yard waste** - Leaves, grass clippings, yard and garden debris, and brush, including clean woody vegetative material not greater than six inches in diameter, that results from landscaping maintenance and land-clearing operations. The term does not include stumps, roots, or shrubs with intact root balls.

**SUBCHAPTER F: OPERATIONAL STANDARDS FOR SOLID WASTE**

**LAND DISPOSAL SITES**

**§§330.111 - 330.138**

**STATUTORY AUTHORITY**

The amendments and new section are adopted under Texas Water Code, §5.103, which authorizes the commission to adopt any rules necessary to carry out its powers and duties; Texas Health and Safety Code, §361.011, which establishes the commission's jurisdiction over all aspects of the management of municipal solid waste with all powers necessary or convenient to carry out the responsibilities of that jurisdiction; §361.024, which provides the commission with rulemaking authority; and §361.061, which authorizes the commission to require and issue permits governing the construction, operation, and maintenance of solid waste facilities used to store, process, or dispose of solid waste.

**§330.111. General.**

(a) The approved site development plan, the site operating plan, the final closure plan, the post-closure maintenance plan, the landfill gas management plan, and all other documents and plans required by this chapter shall become operational requirements and shall be considered a part of the operating record of the facility. Any deviation from the permit and incorporated plans or other related documents associated with the permit is a violation of this chapter.

(b) To the extent that a requirement has been changed by this subchapter, the facility may continue to operate under requirements contained in previously issued authorizations, except as provided by this subchapter. The landfill permittee is under an obligation to apply for a permit modification in accordance with §305.70(k) of this title (relating to Municipal Solid Waste Permit and Registration Modifications), as applicable, to incorporate the amended requirements. A permittee's initial application will be processed as a modification and any subsequent applications will be processed in accordance with Chapter 305, Subchapter D of this title (relating to Amendments, Renewals, Transfers, Corrections, Revocation, and Suspension of Permits). The executive director will determine a schedule for landfill permittees to submit an application to modify their permit to conform to the requirements in this subchapter. Timely submission of a request for a permit modification qualifies the owners or operators of existing landfills to operate under requirements contained in the existing permit.

**§330.112. Pre-Operation Notice.**

The owner or operator shall provide written notice in the form of a soils and liner evaluation report as described in §330.206 of this title (relating to Soils and Liner Evaluation Report (SLER) and Flexible Membrane Liner Evaluation Report (FMLER)) of the final construction and lining of a new disposal area (sector) to the executive director for review 14 days prior to the placement of waste. The executive director has 14 days to provide a verbal or written response. If by the end of the 14th day following the executive director's receipt of the report no comments are received, the operator may begin placing waste. This provision is not applicable to the initial opening of a municipal solid waste landfill.

**§330.113. Recordkeeping Requirements.**

(a) A copy of the permit, the approved site development plan, the site operating plan, the final closure plan, the post-closure maintenance plan, the landfill gas management plan, and any other required plan or other related document shall be maintained at the municipal solid waste facility, or an alternate location approved by the executive director. This requirement shall be considered a part of the operating record for the facility.

(b) The owner or operator shall within seven working days of completion or receipt of analytical data, as appropriate, record and retain in the operating record the following information:

(1) any and all location-restriction demonstrations;

(2) inspection records, training procedures, and notification procedures relating to excluding the receipt of prohibited waste;

(3) all results from gas monitoring and any remediation plans relating to explosive and other gases;

(4) any and all unit design documentation for the placement of leachate or gas condensate in a municipal solid waste landfill;

(5) any and all demonstration, certification, findings, monitoring, testing, and analytical data relating to groundwater monitoring and corrective action;

(6) closure and post-closure care plans and any monitoring, testing, or analytical data relating to post-closure requirements;

(7) any and all cost estimates and financial assurance documentation relating to financial assurance for closure and post-closure;

(8) any and all information demonstrating compliance with the small community exemption criteria;

(9) copies of all correspondence and responses relating to the operation of the facility, modifications to the permit, approvals, and other matters pertaining to technical assistance;

(10) any and all documents, manifests, trip tickets, etc., involving special waste; and

(11) any other document(s) as specified by the approved permit or by the executive director.

(c) The owner or operator shall provide written notification annually to the executive director for each occurrence that documents from subsection (b) of this section are placed into or added to the

operating record. All information contained in the operating record must be furnished upon request to the executive director and must be made available for inspection by the executive director.

(d) The owner or operator shall retain all information contained within the operating record and the different plans required for the facility for the life of the facility including the post-closure care period.

(e) The owner or operator shall maintain training records in accordance with §335.586(d) and (e) of this title (relating to Personnel Training).

(f) The owner or operator shall maintain personnel operator licenses issued in accordance with Chapter 30, Subchapter F of this title (relating to Municipal Solid Waste Facility Supervisors), as required.

(g) The executive director may set alternative schedules for recordkeeping and notification requirements as specified in subsections (a) - (f) of this section, except for notification requirements contained in Subchapter L of this chapter (relating to Location Restrictions) for any proposed lateral expansion located within a five-mile radius of any airport runway end used by turbojet or piston-type aircraft or notification relating to landowners whose property overlies any part of the plume of contamination, if contaminants have migrated off site as indicated by groundwater sampling.

(h) The owner or operator shall maintain records to document the annual waste acceptance rate for the facility. Documentation must include maintaining the quarterly solid waste summary reports and the annual solid waste summary reports required by §330.603 of this title (relating to Reports) in the operating record. After an updated site operating plan permit modification under §330.111(b) of this title (relating to General) is approved, if the annual waste acceptance rate exceeds the rate estimated in the landfill permit application and the waste increase is not due to a temporary occurrence, the owner or operator shall file an application to modify the permit application, including the revised estimated waste acceptance rate, in accordance with §305.70(k) of this title (relating to Municipal Solid Waste Permit and Registration Modifications), within 90 days of the exceedance as established by the sum of the previous four quarterly summary reports. The application must propose any needed changes in the site operating plan to manage the increased waste acceptance rate to protect public health and the environment. The increased waste acceptance rate may justify requiring permit conditions that are different from or absent in the existing permit. This subsection is not intended to make an estimated waste acceptance rate a limiting parameter of a landfill permit.

**§330.114. Site Operating Plan.**

The site operating plan must include provisions for site management and the site operating personnel to meet the general and site-specific requirements of this subchapter. The site operating plan must be retained during the active life of the site and throughout the post-closure care maintenance period. The site operating plan must include the following:

(1) a description of functions and minimum qualifications for each category of key personnel to be employed at the facility and for the supervisory personnel in the chain-of-command;

(2) a description, including the minimum number, size, type, and function, of the equipment to be utilized at the facility based on the estimated waste acceptance rate and other operational requirements, and a description of the provisions for back-up equipment during periods of breakdown or maintenance of this listed equipment;

(3) a description of the general instructions that the operating personnel shall follow concerning the operational requirements of this subchapter;

(4) identification of applicable training requirements under §335.586(a) and (c) of this title (relating to Personnel Training) which shall be followed;

(5) procedures for the detection and prevention of the disposal of prohibited wastes, including regulated hazardous waste as defined in 40 Code of Federal Regulations (CFR) Part 261, and of polychlorinated biphenyls (PCB) wastes as defined in accordance with 40 CFR Part 761 unless authorized by the United States Environmental Protection Agency. The detection and prevention program must include the following:

(A) procedures to be used by the owner or operator to control the receipt of prohibited waste. The procedures must include the random inspections of incoming loads and must

include the inspection of compactor vehicles. In addition to the random inspections, trained staff shall observe each load that is disposed at the landfill;

(B) records of all inspections;

(C) training for appropriate facility personnel responsible for inspecting or observing loads to recognize prohibited waste;

(D) notification to the executive director of any incident involving the receipt or disposal of regulated hazardous waste or PCB waste at the landfill;

(E) provisions for the remediation of the incident; and

(6) general instructions required to be included in the site operating plan by other sections of this subchapter.

**§330.115. Fire Protection.**

The owner or operator shall maintain a source of earthen material in such a manner that it is available at all times to extinguish any fires. The source must be sized to cover any waste received for disposal not covered with six inches of earthen material. Sufficient on-site equipment must be provided to place a six-inch layer of earthen material to cover any waste not already covered with six inches of

earthen material within one hour of detecting a fire. The site operating plan must contain calculations demonstrating the adequacy of the earthen material. The executive director may approve alternate methods of fire protection. The potential for accidental fires must be minimized by use of proper compaction and earthen material cover. The site operating plan must contain a fire protection plan that identifies the fire protection standards to be used at the facility and how personnel are trained. The operator must initiate procedures in accordance with the fire protection plan upon detection of a fire. For any municipal solid waste activity on a landfill that stores or processes combustible materials, such as solidification basins, brush collection areas, construction waste and demolition waste areas, composting areas, mulching areas, shredding areas, and used oil storage areas, the site operating plan must address fire protection measures specific to each individual activity. If a fire occurs that is not extinguished within ten minutes of detection, the commission's regional office must be contacted immediately after detection, but no later than four hours by telephone, and in writing within 14 days with a description of the fire and the resulting response.

**§330.116. Access Control.**

Public access to all municipal solid waste facilities must be controlled by means of artificial barriers, natural barriers, or a combination of both, appropriate to protect human health and safety and the environment. Uncontrolled access to other operations located at a municipal solid waste facility must be prevented. The provisions for access control must be specified in the site operating plan. The preferred method of landfill access control is fences and gates. Regardless of the access control method, the site operating plan must include an inspection and maintenance schedule, notification to the

commission's regional office of a breach, provisions for temporary and permanent repairs, and notification to the commission's regional office when a permanent access control breach repair is completed. The commission's regional office must be notified of the breach within 24 hours of detection. The breach must be temporarily repaired within 24 hours of detection and must be permanently repaired by the time specified to the commission's regional office when it was reported in the initial breach report. If a permanent repair can be made within eight hours of detection, no notice to the commission's regional office is required.

**§330.117. Unloading of Waste.**

(a) The unloading of solid waste must be confined to as small an area as practical. The maximum size of the unloading area must be specified in the site operating plan. The number and types of unloading areas must be identified. A trained staff person shall be provided at all facilities to monitor all incoming loads of waste. A trained staff person shall also be on duty during operating hours at each area where waste is being unloaded to direct and observe the unloading of solid waste. The owner or operator is not required to accept any solid waste which the owner or operator determines will cause or may cause problems in maintaining full and continuous compliance with these sections. Small municipal solid waste landfill facilities (MSWLFs) may submit a request to receive approval for an alternate plan, if sufficient justification is provided.

(b) The unloading of waste in unauthorized areas is prohibited. Any waste deposited in an unauthorized area must be removed immediately and disposed of properly. Trained staff shall observe

each load that is disposed at the landfill. The working face staff shall have the authority and responsibility to reject unauthorized loads, have unauthorized material removed by the transporter, and/or assess appropriate surcharges, and have the unauthorized material removed by on-site personnel or otherwise properly managed by the facility. A record of unauthorized material removal must be maintained in the operating record.

(c) The unloading of prohibited wastes at the municipal solid waste facility must not be allowed. Prohibited wastes are listed in §330.5(e) of this title (relating to General Prohibitions). The permit issued to the municipal solid waste facility may also prohibit other wastes. Necessary steps shall be taken by the owner or operator to ensure compliance with this provision. Any prohibited waste must be returned immediately to the transporter or generator of the waste or otherwise properly managed by the landfill.

(d) Any MSWLF facility may establish a brush and/or construction-demolition (B&CD) waste area on site that is designated to receive B&CD waste.

(e) At Type IV landfills, only B&CD wastes and rubbish (trash) that are free of putrescible and household waste are allowed.

(f) In addition to the other operating requirements of this subchapter, Type IV landfill operators that accept rubbish shall provide the following during all periods of operation.

(1) A written procedure retained on site to ensure that containers with any putrescible wastes are not accepted. This might include or be a combination of a manifest system, surcharges, contractual agreements with transporters, or other acceptable means. This written procedure must be made available for review by the executive director. The procedure must be followed and must be modified as necessary to accomplish its purpose.

(2) A written procedure retained on site for the removal of any putrescible wastes and other prohibited waste to an approved disposal facility must specify the means to be used for removal of putrescible wastes illegally disposed of at the landfill. In all cases, such wastes must be removed from the working face immediately upon discharge and returned to the offending transporter's vehicle or placed in suitable collection bins and must not be allowed to remain on the landfill in the collection bins for more than 24 hours. The equipment necessary to meet the chosen alternative must be specified and must be on site and operable during operating hours. This written procedure must be made available for review by the executive director. The procedure must be followed and must be modified as necessary to accomplish its purpose.

(3) A procedure whereby the transporter certificates required by §330.32 of this title (relating to Collection and Transportation Requirements) must be retained at the landfill and be available for inspection by the executive director.

(g) Type IV landfill owners or operators shall not accept wastes from completely enclosed containers or enclosed vehicles except in accordance with §330.135 of this title (relating to Waste in Enclosed Containers or Enclosed Vehicles Accepted at Type IV Landfills).

(h) In addition to the requirements in §330.119 of this title (relating to Site Sign), Type IV landfill owners or operators shall identify wastes that are not allowed and stating the landfill's requirements for transporters, such as certificates, manifests, and surcharges or other penalties that may be imposed in the event that transporters do not meet the requirements of this chapter.

(i) At Type VIII facilities, only used and scrap tires free of any other type of waste are allowed to be accepted.

**§330.118. Facility Operating Hours.**

(a) The site operating plan must specify the waste acceptance hours and the operating hours when materials will be transported on or off site, and the hours when heavy equipment may operate. The waste acceptance hours of a municipal solid waste facility may be any time between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, unless otherwise approved in the authorization for the facility. Waste acceptance hours within the 7:00 a.m. to 7:00 p.m. weekday span do not require other specific approval. Transportation of materials and heavy equipment operation must not be conducted between the hours of 9:00 p.m. to 5:00 a.m., unless otherwise approved in the authorization for the facility. Operating hours for other activities do not require other specific approval.

(b) In addition to the requirements of subsection (a) of this section, the executive director may approve alternate operating hours of up to five days in a calendar-year period to accommodate special occasions, special purpose events, holidays, or other special occurrences as specified in §305.70 of this title (relating to Municipal Solid Waste Permit and Registration Modifications).

(c) The commission's regional offices may allow additional temporary operating hours to address disaster or other emergency situations, or other unforeseen circumstances that could result in the disruption of waste receipt at the facility.

(d) The facility must record in the site operating record the dates and times when any alternate or additional operating hours are utilized.

**§330.119. Site Sign.**

Each facility must conspicuously display at all entrances through which wastes are received, a sign measuring at least four feet by four feet with letters at least three inches in height stating the type of site, the hours and days of operation, an emergency 24-hour contact phone number(s) that reaches an individual with the authority to obligate the facility at all times that the facility is closed, the local emergency fire department phone number, and the permit number or facility number. The facility sign must be readable from the facility entrance. The posting of erroneous or misleading information constitutes a violation of this section.

**§330.120. Control of Windblown Solid Waste and Litter.**

The working face must be maintained and operated in a manner to control windblown solid waste. Windblown material and litter must be collected and properly managed in accordance with paragraphs (1) and (2) of this section to control unhealthy, unsafe, or unsightly conditions.

(1) Windblown waste and litter at the working face must be controlled by using engineering methods or measures, including portable panels, temporary fencing, and perimeter fencing or comparable engineering controls. The site operating plan must specify the means for confining windblown waste and litter.

(2) Litter scattered throughout the site, along fences and access roads, and at the gate must be picked up once a day on the days the facility is in operation and properly managed. The site operating plan must specify the means for complying with this requirement.

**§330.121. Easements and Buffer Zones.**

(a) Easement protection. No solid waste unloading, storage, disposal, or processing operations shall occur within any easement, buffer zone, or right-of-way that crosses the site. No solid waste disposal shall occur within 25 feet of the center line of any utility line or pipeline easement, unless

otherwise authorized by the executive director. All pipeline and utility easements must be clearly marked with posts which extend at least six feet above ground level, spaced at intervals no greater than 300 feet.

(b) Buffer zones. A minimum separating distance of 50 feet shall be maintained between solid waste processing and disposal activities and the boundary of the facility, or as determined by the requirements of §330.56 of this title (relating to Attachments to the Site Development Plan). The buffer zone must provide for safe passage for fire-fighting and other emergency vehicles.

**§330.122. Landfill Markers and Benchmark.**

All required landfill markers and the benchmark must be maintained so that they are visible during operating hours. Markers that are removed or destroyed must be replaced within 15 days of the removal or destruction. All markers must be maintained to retain visibility. Landfill markers must be inspected on a monthly basis to ensure that they are installed and maintained in compliance with the site operating plan. Records of all inspections must be maintained at the facility. Landfill markers must be repaired or replaced within 15 days of discovering a marker does not meet regulatory requirements.

**§330.123. Materials Along the Route to the Site.**

The facility owner or operator shall take steps to encourage that vehicles hauling waste to the facility are enclosed or provided with a tarpaulin, net, or other means to effectively secure the load in

order to prevent the escape of any part of the load by blowing or spilling. The owner or operator shall take actions such as posting signs, reporting offenders to proper law enforcement officers, adding surcharges, or similar measures. On days when the facility is in operation, the owner or operator shall be responsible for at least once per day cleanup of waste materials spilled along and within the right-of-way of public access roads serving the facility for a distance of two miles in either direction from any entrances used for the delivery of waste to the facility. The facility operator shall consult with the Texas Department of Transportation, county, and/or local governments with maintenance authority over the roads concerning cleanup of public access roads and right-of-ways. An alternate clean-up frequency and distance may be approved in the site operating plan.

**§330.124. Disposal of Large Items.**

(a) Large, heavy, or bulky items, which cannot be incorporated in the regular spreading, compaction, and covering operations at landfills should be recycled. A special area should be established to collect these items. This special collection area must be designated as a large-item salvage area. The owner or operator shall remove the items from the site often enough to prevent these items from becoming a nuisance and to preclude the discharge of any pollutants from the area.

(b) Items that can be classified as large, heavy, or bulky can include, but are not limited to, white goods (household appliances), air conditioner units, metal tanks, large metal pieces, and automobiles.

(c) Refrigerators, freezers, air conditioners, and any other items containing chlorinated fluorocarbon (CFC) must be handled in accordance with 40 Code of Federal Regulations §82.156(f), as amended.

**§330.125. Air Criteria.**

(a) The landfill is subject to commission rules concerning burning and air pollution control. The owner or operator shall ensure that any unit of the municipal solid waste facility does not violate any applicable requirement of the approved state implementation plan developed under the Federal Clean Air Act, §110, as amended, and §330.5(d) of this title (relating to General Prohibitions), which prohibits the open burning of waste at any municipal solid waste landfill facility.

(b) The site operating plan must have an odor management plan that addresses the sources of odors and includes general instructions to control odors or sources of odors. Plans for odor management must include the identification of wastes that require special attention such as septage, grease trap waste, dead animals, and leachate.

**§330.126. Disease Vector Control.**

The site operator shall control on-site populations of disease vectors using proper compaction and daily cover procedures, and the use of other approved methods when needed. The general methods

and performance-based frequencies for disease vector control must be specified in the site operating plan.

**§330.127. Site Access Roads.**

(a) All-weather roads must be provided from the facility to access public roads and within the facility to the unloading area(s) designated for wet-weather operation. Tracked mud and associated debris at the access to the facility on the public roadway must be removed at least once per day on days when mud and associated debris are being tracked onto the public roadway. The methods for controlling mud and associated debris tracked onto public roadways must be specified in the site operating plan. Provisions for controlling the tracking of mud and associated debris on public roadways are listed in §330.55(a)(2) of this title (relating to Site Development Plan).

(b) Dust from on-site and other access roadways must not become a nuisance to surrounding areas. A water source and necessary equipment or other means of dust control approved by the executive director must be provided.

(c) All on-site and other access roadways must be maintained in a clean and safe condition. Litter and any other debris must be picked up at least daily and taken to the working face. Access roadways must be regraded to minimize depressions, ruts, and potholes. The frequency of regrading must be specified in the site operating plan.

**§330.128. Salvaging and Scavenging.**

Salvaging must not be allowed to interfere with prompt sanitary disposal of solid waste or to create public health nuisances. Salvaged materials may be considered as potential recycled materials. The owner or operator shall remove the salvaged items from the facility often enough to prevent the items from becoming a nuisance, to preclude the discharge of any pollutants from the area, and to prevent an excessive accumulation of the material at the facility. Class 1 industrial and other special wastes received at the disposal facility must not be salvaged. Pesticide, fungicide, rodenticide, and herbicide containers must not be salvaged unless being salvaged through a state-supported recycling program. Scavenging must not be allowed.

**§330.129. Endangered Species Protection.**

The facility and the operation of the facility must not result in the destruction or adverse modification of the critical habitat of endangered or threatened species, or cause or contribute to the taking of any endangered or threatened species. Criteria for the protection of endangered species are listed in §330.53(b)(13) of this title (relating to Technical Requirements of Part II of the Application). Facilities must be operated in conformance with any endangered or threatened species protection plan required by the commission.

**§330.130. Landfill Gas Control.**

All landfill gases must be monitored in accordance with a landfill gas management plan in accordance with §330.56(n) of this title (relating to Attachments to the Site Development Plan). The required reports and other submittals must be included in the operating record of the facility and submitted to the executive director.

**§330.131. Oil, Gas, and Water Wells.**

(a) The facility operator shall provide written notification to the executive director of the location of any and all existing or abandoned water wells situated within the facility upon discovery during the course of facility development. The facility operator shall, within 30 days of such a discovery, provide the executive director with such notification and written certification that such wells have been capped, plugged, and closed in accordance with all applicable rules and regulations of the commission or other state agency. Water wells that will be used for supply at the facility may remain in use as long as they are located outside of the groundwater monitoring well network or the waste footprint, and are not impacted by landfill operations. Water wells that will be used for supply at the landfill that are located inside of the groundwater monitoring network may be used if identified and approved in the facility permit.

(b) The facility operator shall provide written notification to the executive director of the location of any and all existing or abandoned on-site crude oil or natural gas wells, or other wells associated with mineral recovery that are under the jurisdiction of the Railroad Commission of Texas. The facility owner or operator shall provide the executive director with written notification of the

location of any such well within 30 days after discovery during the course of facility development.

Within 30 days after plugging of any such well, the facility operator shall provide the executive director with written certification that these wells have been properly capped, plugged, and closed in accordance with all applicable rules and regulations of the Railroad Commission of Texas. Producing crude oil or natural gas wells that do not affect or hamper landfill operations may be operated within the facility boundary, if identified in the permit for the facility or in a written notification to the executive director.

(c) Any water or other type of wells under the jurisdiction of the commission must be plugged in accordance with all applicable state requirements or additional requirements imposed by the executive director. A copy of the well plugging report required to be submitted to the appropriate state agency must also be submitted to the executive director within 30 days after the well has been plugged.

(d) The facility operator shall submit for executive director approval a permit modification identifying any proposed changes to the liner installation plan as a result of any well abandonment.

**§330.132. Compaction.**

Solid waste must be spread and compacted by repeated passages of compaction equipment such that each layer of solid waste is thoroughly compacted. The methods for compaction must be specified in the site operating plan.

**§330.133. Landfill Cover.**

(a) Daily cover. All landfills, with the exception of Type IV landfills, must apply six inches of well-compacted earthen material not previously mixed with garbage, rubbish, or other solid waste at the end of each operating day to control disease vectors, fires, odors, windblown litter or waste, and scavenging, unless the executive director requires a more frequent interval to control disease vectors, fires, odors, windblown litter or waste, and scavenging. Landfills that operate on a 24-hour basis must cover the working face or active disposal area at least once every 24 hours. All Type IV facilities must follow the requirements of this subsection except the rate of cover must be no less than weekly, unless the commission approves another schedule.

(b) Intermediate cover. All areas that have received waste but will be inactive for longer than 180 days must provide intermediate or final cover. This intermediate cover must include six inches of suitable earthen material that is capable of sustaining native plant growth and must be seeded or sodded following its application in order to control erosion, or must be a material approved by the executive director that will otherwise control erosion. This intermediate cover must be not less than 12 inches of suitable earthen material. The intermediate cover must be graded to prevent ponding of water, and plant growth or other erosion control features must be maintained. Runoff from areas which have received intermediate cover must not be considered as having come into contact with the working face or leachate for the purpose of §330.55(b)(6) of this title (relating to Site Development Plan ).

(c) Alternative material daily cover. Alternative material daily cover (ADC) may be allowed by a temporary authorization under §305.70(m) of this title (relating to Municipal Solid Waste Permit and Registration Modifications) followed by a permit amendment or a modification in accordance with

§305.70(k)(1) of this title. Use of ADC is limited to a 24-hour period after which either waste or daily cover as defined in subsection (a) of this section must be placed.

(1) An ADC operating plan must be included in the request for temporary authorization or in the site development plan that includes the following:

(A) a description and minimum thickness of the alternative material to be used;

(B) its effect on vectors, fires, odors, and windblown litter and waste;

(C) the application and operational methods to be utilized at the site when using this alternative material;

(D) chemical analysis of the material and/or the Material Safety Data Sheet(s) for the alternative material; and

(E) any other pertinent characteristic, feature, or other factors related to the use of this alternative material.

(2) A status report on the ADC must be submitted on a two-month basis to the executive director during the temporary authorization period describing the effectiveness of the alternative material, any problems that may have occurred, and corrective actions required as a result of

such problems. If no unresolved problems have occurred within the temporary authorization period, status reports may no longer be required.

(3) ADC must not be allowed when the landfill is closed for a period greater than 24 hours, unless the executive director approves an alternative length of time.

(d) Temporary waiver. The executive director may grant a temporary waiver from the requirements of subsections (a) - (c) of this section if the owner or operator demonstrates that there are extreme seasonal climatic conditions that make meeting such requirements impractical.

(e) Final cover. Final cover for the landfill must be in accordance with the site closure plan and Subchapter J of this chapter (relating to Closure and Post-Closure).

(f) Erosion of cover. Erosion of final or intermediate cover must be repaired within five days of detection by restoring the cover material, grading, compacting, and seeding unless the commission's regional office approves otherwise, based on the extent of the damage requiring more time to repair or the repairs are delayed because of weather conditions. The date of detection of erosion and date of completion of repairs, including reasons for any delays, must be documented in the cover inspection record required under subsection (g) of this section. The site operating plan must establish a frequency, and identify other occasions, for conducting inspections of the final and intermediate covers to detect the need for repairs. The periodic inspections and restorations are required during the entire operational life and for the post-closure maintenance period.

(g) Cover inspection record. Each landfill must keep a cover application record on site readily available for inspection by commission representatives and authorized agents or employees of local governments having jurisdiction. This record must specify the date cover (no exposed waste) was accomplished, how it was accomplished, and the last area covered. This applies to daily, intermediate, and alternate daily cover. For final cover, this record must specify the area covered, the date cover was applied, and the thickness applied that date. Each entry must be certified by the signature of the on-site supervisor that the work was accomplished as stated in the record. The cover inspection record must document inspections required under subsection (f) of this section, the findings, and corrective action taken when necessary.

**§330.134. Ponded Water.**

The ponding of water over waste on a landfill, regardless of its origin, must be prevented. Ponded water that occurs in the active portion of a landfill or on a closed landfill must be eliminated and the area in which the ponding occurred must be filled in and regraded within seven days of the occurrence. A ponding prevention plan must be provided in the site operating plan that identifies techniques to be used at the landfill to prevent the ponding of water over waste, an inspection schedule to identify potential ponding sites, corrective actions to remove ponded water, and general instructions to manage water that has been in contact with waste .

**§330.135. Waste in Enclosed Containers or Enclosed Vehicles Accepted at Type IV Landfills.**

Acceptance of waste in enclosed containers or enclosed vehicles at Type IV landfills must be in accordance with the following requirements.

(1) Waste in enclosed containers or enclosed vehicles must not be accepted at a Type IV landfill unless all of the following conditions have been met.

(A) The landfill to receive the waste must be participating in the funding program to monitor these activities as detailed in paragraph (2) of this section.

(B) Each enclosed container or enclosed vehicle must have all required approvals and/or permits from the executive director in accordance with §330.32 of this title (relating to Collection and Transportation Requirements).

(C) Enclosed containers or enclosed vehicles must only be accepted at their designated time and on the specified day in accordance with this section, §330.32 of this title, commission permits, or other orders of the commission.

(D) A commission inspector shall be on site and shall witness the unloading process to ensure that no putrescible waste or household waste is present. Any waste considered nonallowable by the inspector must be removed from the working face and subsequently from the facility in accordance with §330.117 of this title (relating to Unloading of Waste).

(E) Each transporter delivering waste in enclosed containers or enclosed vehicles must, prior to discharging the load, provide to the landfill operator a transporter trip ticket for the route being delivered. Trip tickets must be maintained as part of the operating record.

(F) The commission may revoke a transporter's authorization to deliver waste to a Type IV municipal solid waste facility for failure to comply with this chapter.

(2) The executive director shall determine the approximate annual costs of implementing and maintaining the surveillance and enforcement of all the activities associated with the acceptance of enclosed containers or enclosed vehicles at Type IV landfills.

(A) Notification of these costs will be provided to each affected holder of a Type IV landfill permit with notice of public hearing to apportion these costs.

(B) The public hearing will be held at a location to be determined by the commission with at least 20 days' advance notice. Notice will be provided Type IV landfill operators by regular and certified mail.

(C) The public hearing will be for the purpose of establishing the total compensation and expenditures required to administer this program and the apportionment of those costs to the Type IV landfill operators to be reimbursed to the commission.

(D) Unless authorized by the executive director, the apportioned monthly payments will be due by the 10th day of each month.

(E) The apportioned costs to each Type IV landfill may be altered periodically to add or subtract landfills from the program. A 30-day notice will be provided to each participating Type IV landfill and/or proposed additional landfill and a hearing will be held, upon request, by one of the affected parties or on the commission's own motion.

(3) A Type IV landfill operator who is delinquent in making the monthly payment shall immediately halt acceptance of waste in enclosed containers or enclosed vehicles and may also be subject to other penalties allowable under state law.

(4) Stationary compactors permitted in accordance with §330.25 of this title (relating to Requirements for Stationary Compactors) and municipal transporter routes permitted in accordance with §330.32 of this title are exempt from the requirements of paragraphs (1) - (3) of this section. However, the landfill operator shall obtain from the transporter a hauler trip ticket for a municipal transporter route or stationary compactors, as appropriate, prior to allowing discharge of the material at the landfill. These trip tickets must be maintained as a part of the operating record.

**§330.136. Disposal of Special Wastes.**

(a) The acceptance and/or disposal of a special waste as defined in §330.2 of this title (relating to Definitions) which is not specifically identified in subsections (b) or (c) of this section, or in §330.137 of this title (relating to Disposal of Industrial Wastes), requires prior written approval from the executive director.

(1) Approvals will be waste-specific and/or site-specific and will be granted only to appropriate facilities operating in compliance with this chapter.

(2) Requests for approval to accept special wastes must be submitted by the generator to the executive director or to a facility with an approved plan and must include, but are not limited to, the following:

(A) a complete description of the chemical and physical characteristics of each waste, a statement as to whether or not each waste is a Class 1 industrial waste as defined in §330.2 of this title, and the quantity and rate at which each waste is produced and/or the expected frequency of disposal;

(B) an operational plan containing the proposed procedures for handling each waste and listing required protective equipment for operating personnel and on-site emergency equipment; and

(C) a contingency plan outlining responsibility for containment and cleanup of any accidental spills occurring during the delivery and/or disposal operation.

(3) A vacuum truck, as used in this section, refers to any vehicle which transports liquid waste to a solid waste disposal or processing facility. A vacuum truck must transport liquid waste to a landfill that has a sludge stabilization and solidification process or to a Type V processing facility for sludge, grease trap, or grit trap waste. The owner or operator shall submit written notification to the executive director of the liquids-processing activity as required in §330.8 of this title (relating to Notification Requirements).

(4) The executive director may authorize the receipt of special waste with a written concurrence from the owner or operator; however, the facility operator is not required to accept the waste.

(5) The executive director may revoke an authorization to accept special waste if the owner or operator does not maintain compliance with these rules or conditions imposed in the authorization to accept special waste.

(b) Receipt of the following special wastes does not specifically require written authorization for acceptance provided the waste is handled in accordance with the noted provisions for each waste.

(1) Special wastes from health care related facilities which have not been treated in accordance with the procedures specified in Subchapter Y of this chapter (relating to Medical Waste Management) must not be accepted at a municipal solid waste landfill facility (MSWLF) unless authorized in writing by the executive director. The executive director may provide this authorization when a situation exists which requires disposal of untreated wastes in order to protect the human health and the environment from the effects of a natural or man-made disaster.

(2) Dead animals and/or slaughterhouse waste may be accepted at any MSWLF facility without further approval from the executive director provided the carcasses and/or slaughterhouse waste are covered by three feet of other solid waste or at least two feet of earthen material immediately upon receipt.

(3) Regulated asbestos-containing material (RACM) as defined in 40 Code of Federal Regulations §61 may be accepted at a Type I or Type I-AE MSWLF facility in accordance with subparagraphs (A) - (I) of this paragraph provided the MSWLF facility has been authorized to accept RACM. The facility operator proposing to accept RACM shall provide written notification to the executive director of the intent to accept RACM.

(A) To receive authorization to accept RACM, the owner or operator shall dedicate a specific area or areas of the landfill to receive RACM and shall provide written notification to the executive director of the area or areas to be designated for receipt of RACM. After initial

authorization to receive RACM is issued, additional areas may be designated by providing written notice to the executive director.

(B) The location of the area designated to receive the RACM must be surveyed and marked by a registered professional land surveyor and identified on a current site diagram which is maintained at the landfill. A copy of the current site diagram identifying the RACM area must be submitted to the executive director immediately upon completion of the diagram. The operator shall maintain a record of each load of RACM accepted as to its location, depth, and volume of material.

(C) Upon closure of the MSWLF unit which accepted RACM, a specific notation that the facility accepted RACM must be placed in the deed records for the facility with a diagram identifying the RACM disposal areas. Concurrently, a notice of the deed recordation and a copy of the diagram identifying the asbestos disposal areas must be submitted to the executive director.

(D) Delivery of the RACM to the MSWLF unit must be coordinated with the on-site supervisor so the waste will arrive at a time it can be properly handled and covered.

(E) RACM must only be accepted at the facility in tightly closed and unruptured containers or bags or must be wrapped with at least six-mil polyethylene.

(F) The bags or containers holding the RACM must be placed below natural grade level. Where this is not possible or practical, provisions must be made to ensure that the waste will not be subject to future exposure through erosion or weathering of the intermediate and/or final

cover. RACM which is placed above natural grade must be located in the MSWLF unit such that it is, at closure of the MSWLF unit, not less than 20 feet from any final side slope of the unit and must be at least ten feet below the final surface of the unit.

(G) The bags or containers holding the RACM must be carefully unloaded and placed in the final disposal location. The RACM must be covered immediately with 12 inches of earthen material or three feet of solid waste containing no asbestos. Care must be exercised in the application of the cover so that the bags or containers are not ruptured.

(H) A contingency plan in the event of accidental spills (e.g., ruptured bags or containers) shall be prepared by the owner or operator prior to accepting RACM. The plan must specify the responsible person(s) and the procedure for the collection and disposal of the spilled material.

(I) RACM which has been designated as a Class 1 industrial waste may be accepted by a Type I municipal solid waste landfill authorized to accept RACM provided the RACM waste is handled in accordance with the provisions of this paragraph and the landfill operator complies with the provisions of §330.137(g) - (i) of this title (relating to Disposal of Industrial Wastes).

(4) Nonregulated asbestos-containing materials (non-RACM) may be accepted for disposal at any municipal solid waste landfill provided the wastes are placed on the active working face and covered in accordance with this chapter. Under no circumstances may any material containing non-

RACM be placed on any surface or roadway which is subject to vehicular traffic or disposed of by any other means by which the material could be crumbled into a friable state.

(5) Empty containers which have been used for pesticides, herbicides, fungicides, or rodenticides must be disposed of in accordance with subparagraphs (A) and (B) of this paragraph.

(A) These containers may be disposed of at any landfill provided that:

(i) the containers are triple-rinsed prior to receipt at the landfill;

(ii) the containers are rendered unusable prior to or upon receipt at the landfill; and

(iii) the containers are covered by the end of the same working day they are received.

(B) Those containers for which triple-rinsing is not feasible or practical (e.g., paper bags, cardboard containers) may be disposed of under the provisions of paragraph (6) of this subsection or in accordance with §330.137 of this title, as applicable.

(6) Municipal hazardous waste from a conditionally exempt small quantity generator (CESQG) may be accepted at a Type I municipal solid waste landfill without further approval from the

executive director provided the amount of waste does not exceed 220 pounds (100 kilograms) per month per generator, and provided the landfill owner or operator authorizes acceptance of the waste.

(7) Sludge, grease trap waste, grit trap waste, or liquid wastes from municipal sources can be accepted at a Type I municipal solid waste landfill for disposal only if the material has been, or is to be, treated or processed and the treated/processed material has been tested, in accordance with Test Method 9095 (Paint Filter Liquids Test), as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication Number SW-846), as amended, and is certified to contain no free liquids. Prior to treatment or processing of this waste at the landfill, the owner or operator shall submit written notification to the executive director of the liquids processing activity as required in §330.8 of this title.

(c) Used oil filters from internal combustion engines must not be intentionally and knowingly accepted for disposal at landfills permitted under this chapter except as provided in paragraphs (1) and (2) of this subsection.

(1) Used oil filters must not be offered for disposal by a generator and/or be intentionally and knowingly accepted for landfill disposal unless the filter has been:

(A) crushed to less than 20% of its original volume to remove all free-flowing used oil; or

(B) processed by a method other than crushing to remove all free-flowing used oil. A filter is considered to have been processed if:

(i) the filter has been separated into component parts and the free-flowing used oil has been removed from the filter element by some means of compression in order to remove free-flowing used oil;

(ii) the used filter element of a filter consisting of a replaceable filtration element in a reusable or permanent housing has been removed from the housing and pressed to remove free-flowing used oil; or

(iii) the housing is punctured and the filter is drained for at least 24 hours.

(2) Used oil filters (to include filters which have been crushed and/or processed to remove free-flowing used oil) must not be offered for landfill disposal by any non-household generator and must not be intentionally or knowingly accepted by any landfill permitted and regulated under this chapter.

**§330.137. Disposal of Industrial Wastes.**

(a) All Class 1 industrial solid waste is required to be manifested. Owners or operators of municipal solid waste landfill (MSWLF) facilities shall not accept such wastes without prior written approval from the executive director and specific authorization in the permit.

(b) Wastes which are Class 1 only because of asbestos content may be accepted at any Type I or Type I-AE MSWLF facility which is authorized to accept regulated asbestos-containing material (RACM) as stated in §330.136(b)(3)(I) of this title (relating to Disposal of Special Wastes). Authorization to accept this waste is implied in the authorization to accept RACM unless the acceptance of industrial wastes is prohibited by the permit. All Class 1 industrial asbestos wastes must be manifested and the owner or operator of the MSWLF facility shall comply with the requirements of subsections (f) - (h) of this section.

(c) Unless the facility permit authorizes the acceptance of a specified type of Class 1 industrial waste, an authorization to accept specific types of Class 1 wastes will be waste-specific and site-specific and will be granted only to appropriate facilities that are operating in compliance with this chapter. Requests for authorization to accept Class 1 solid wastes must be submitted in writing to the executive director and must include, but are not limited to, the following:

(1) a complete description of the chemical and physical characteristics of the waste in accordance with §335.587 of this title (relating to Waste Analysis) , a statement as to whether or not the waste is a hazardous waste as defined in §330.2 of this title (relating to Definitions), and the quantity and rate at which the waste is produced and/or the expected frequency of disposal;

(2) an operational plan containing the proposed procedures for handling the waste and a listing of required protective equipment for operating personnel and on-site emergency equipment.

This plan must become a part of the site operating plan; and

(3) a written contingency plan meeting the requirements of §335.589 of this title (relating to Contingency Plan). This plan shall become a part of the site operating plan.

(d) Class 1 industrial solid waste other than asbestos-containing waste must not be placed above the surrounding natural ground surface elevation. Class 1 industrial solid waste which is Class 1 only because of asbestos content must be managed in accordance with the provisions of §330.136(b)(3) of this title (relating to Disposal of Special Wastes).

(e) Unless specifically authorized by the facility permit, a Type I MSWLF facility permitted after October 9, 1993, may not accept Class 1 industrial nonhazardous wastes in excess of 20% of the total amount of waste (not including Class 1 wastes) accepted during the current or previous year. The amount of waste may be determined by volume or by weight, but the same unit of measure must be used for each year, unless a variance is authorized by the executive director.

(f) Any authorization to accept Class 1 waste is subject to the site operating in compliance with these rules and any specific conditions required under any letter(s) of authorization. Failure to operate the site in compliance with these rules or any special conditions imposed by the executive director may result in revocation of the authorization to accept a Class 1 waste.

(g) All shipments of Class 1 waste must be accompanied by a manifest (waste-shipping control ticket) as required by the commission. The facility operator or a designated representative shall sign the manifest for any authorized shipments of Class 1 waste. The facility operator shall not accept or sign for shipments of Class 1 waste for which the authorization to accept has not been granted by the executive director or has not been authorized by permit provisions. The facility operator shall retain the disposal facility copy of the manifest for a period of three years. This time period is automatically extended if any enforcement action involving the owner, operator, or MSWLF facility is initiated or pending by the executive director.

(h) A facility which accepts any Class 1 waste must submit to the executive director a written report of Class 1 waste received. This report must be submitted no later than the 25th day of the month following the month in which the waste was received. Reports must be submitted on forms provided by the commission and must include all information required. Monthly reports must be submitted by facilities which have received Class 1 wastes including those months in which no Class 1 waste is received at the facility unless an exception is granted by the executive director. Failure to submit the reports required by this subsection in a timely manner is a violation of these rules.

(i) Class 2 industrial solid waste, except special wastes as defined in §330.2 of this title , may be accepted at any Type I or Type I-AE municipal solid waste landfill provided the acceptance of this waste does not interfere with facility operation.

(j) Class 3 industrial solid waste may be disposed of at any municipal solid waste landfill provided the acceptance of this waste does not interfere with facility operation.

**§330.138. Visual Screening of Deposited Waste.**

Visual screening of deposited waste materials at a municipal solid waste facility must be provided by the owner or operator for the facility where the executive director determines that screening is necessary or where permit or design requirements so dictate.

**SUBCHAPTER F: OPERATIONAL STANDARDS FOR SOLID WASTE LAND DISPOSAL**

**§330.118**

**STATUTORY AUTHORITY**

The repeal is adopted under Texas Water Code, §5.103, which authorizes the commission to adopt any rules necessary to carry out its powers and duties; Texas Health and Safety Code, §361.011, which establishes the commission's jurisdiction over all aspects of the management of municipal solid waste with all powers necessary or convenient to carry out the responsibilities of that jurisdiction; §361.024, which provides the commission with rulemaking authority; and §361.061, which authorizes the commission to require and issue permits governing the construction, operation, and maintenance of solid waste facilities used to store, process, or dispose of solid waste.

**§330.118. Hours of Operation.**

**SUBCHAPTER H: GROUNDWATER PROTECTION DESIGN  
AND OPERATION**

**§330.200**

**STATUTORY AUTHORITY**

The amendment is adopted under Texas Water Code, §5.103, which authorizes the commission to adopt any rules necessary to carry out its powers and duties; Texas Health and Safety Code, §361.011, which establishes the commission's jurisdiction over all aspects of the management of municipal solid waste with all powers necessary or convenient to carry out the responsibilities of that jurisdiction; §361.024, which provides the commission with rulemaking authority; and §361.061, which authorizes the commission to require and issue permits governing the construction, operation, and maintenance of solid waste facilities used to store, process, or dispose of solid waste.

**§330.200. Design Criteria.**

(a) New municipal solid waste landfill facility (MSWLF) units and lateral expansions must be constructed in accordance with one of the two following provisions approved by the executive director:

(1) a design that ensures that the concentration values listed in Table 1 of this section will not be exceeded in the uppermost aquifer at the relevant point of compliance, as specified by the executive director under subsection (d) of this section; or

(2) a composite liner, as defined in subsection (b) of this section, and a leachate collection system that is designed and constructed to maintain less than a 30-centimeter depth of leachate over the liner.

(b) For purposes of this section, "composite liner" means a system consisting of two components; the upper component must consist of a minimum 30-mil flexible membrane liner (FML) and the lower component must consist of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than  $1 \times 10^{-7}$  centimeters per second (cm/sec). FML components consisting of high density polyethylene (HDPE) must be at least 60-mil thick. The FML component must be installed in direct and uniform contact with the compacted soil component.

(c) When approving a design that complies with subsection (a)(1) of this section, the executive director may consider, but is not limited to, the following factors:

- (1) the hydrogeologic characteristics of the facility and surrounding land;
- (2) the climatic factors of the area; and
- (3) the volume and physical and chemical characteristics of the leachate.

(d) For purposes of this section, the relevant point of compliance is defined in §330.2 of this title (relating to Definitions). In determining the relevant point of compliance, the executive director may consider, but is not limited to, the following factors:

- (1) the hydrogeologic characteristics of the facility and surrounding land;
- (2) the volume and physical and chemical characteristics of the leachate;
- (3) the quantity, quality, and direction of flow of groundwater;
- (4) the proximity and withdrawal rate of the groundwater users;
- (5) the availability of alternative drinking water supplies;
- (6) the existing quality of the groundwater, including other sources of contamination and their cumulative impacts on the groundwater and whether groundwater is currently used or reasonably expected to be used for drinking water;
- (7) public health, safety, and welfare effects; and
- (8) practicable capability of the owner or operator.

Figure: 30 TAC §330.200(d)(8)

Table 1

Chemical	MCL (mg/l)
Arsenic	0.05
Barium	1.0
Benzene	0.005
Cadmium	0.01
Carbon tetrachloride	0.005
Chromium (hexavalent)	0.05
2,4-Dichlorophenoxy acetic acid	0.1
1,4-Dichlorobenzene	0.075
1,2-Dichloroethane	0.005
1,1-Dichloroethylene	0.007
Endrin	0.0002
Fluoride	4
Lindane	0.004
Lead	0.05
Mercury	0.002
Methoxychlor	0.1
Nitrate	10
Selenium	0.01
Silver	0.05
Toxaphene	0.005
1,1,1-Trichloroethane	0.2
Trichloroethylene	0.005
2,4,5-Trichlorophenoxy acetic acid	0.01
Vinyl chloride	0.002

(e) Type IV landfills authorized to dispose of brush and demolition materials only must meet one of the following groundwater protection requirements listed in paragraph (1) or (2) of this subsection, and in addition all Type IV sites must have a soils and liner quality control plan (SLQCP) as described in paragraph (3) of this subsection.

(1) There must exist at least four feet of in-situ soil between the deposited waste and groundwater. This in-situ soil must constitute an in-situ liner and must meet all the physical properties for a constructed liner as detailed in §330.205(c)(6) of this title (relating to Soils and Liner Quality Control Plan). In-situ liners must not exhibit primary or secondary physical features such as jointing, fractures, bedding planes, solution cavities, root holes, desiccation shrinkage cracks etc., that have a coefficient of permeability greater than  $1 \times 10^{-7}$  cm/sec.

(2) There must be at least a three-foot thick compacted clay liner between the deposited waste and groundwater. The constructed liner must meet all the criteria detailed in §330.205 of this title and must at a minimum have one foot of protective cover overlying the compacted liner after all quality control testing and final thickness determinations are complete.

(3) All Type IV landfill permits must include a SLQCP as required by §330.205 of this title and should follow the latest technical guidelines of the executive director. The owner or operator shall submit soils and liner evaluation reports in accordance with §330.206 of this title (relating to Soils and Liner Evaluation Report (SLER) and Flexible Membrane Liner Evaluation Report (FMLER)).

(f) MSWLF facilities that accept Class 1 wastes, other than asbestos-containing material, must have dedicated trenches which meet the following requirements.

(1) The trenches designated for Class 1 wastes must have a composite liner system consisting of two components. The upper component must consist of a minimum of a 30-mil FML and

the lower component must consist of at least a three-foot layer of compacted soil with a hydraulic conductivity of no more than  $1 \times 10^{-7}$  cm/sec. FML components consisting of HDPE must be at least 60-mil thick. The FML component must be installed in direct and uniform contact with the compacted soil component. The liner system installed for Class 1 trenches is subject to the requirements of §330.205 of this title. These trenches must be designated on the site development plan.

(2) The trenches designated for Class 1 wastes must have a leachate-collection system designed and constructed to maintain less than a 30-cm depth of leachate over the liner. The leachate-collection and leachate-removal system must be:

(A) constructed of materials that are chemically resistant to the leachate expected to be generated;

(B) of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and by any equipment used at the landfill; and

(C) designed and operated to function through the scheduled closure and post-closure period of the landfill. The leachate-collection system design criteria and performance standards must be, at a minimum, in accordance with the commission's most recent policy and guidelines on this subject.

(3) Storm water run-on/run-off facilities such as berms and ditches placed to protect the dedicated trench(es) must be provided in accordance with §330.54 of this title (relating to Technical Requirements of Part III of the Application).

(4) The facility must have a groundwater monitoring system installed that is capable of detecting the migration of pollutants from the landfill and is sampled semiannually for the parameters specified in Subchapter I of this chapter (relating to Groundwater Monitoring and Corrective Action).

(5) The final cover placed over the dedicated Class 1 industrial waste trench must consist of a minimum of 18 inches of uncontaminated topsoil overlying four feet of compacted clay-rich soil material meeting the requirements of Subchapter J of this chapter (relating to Closure and Post-Closure) unless waste is to be placed on top of the Class 1 wastes. If waste is to be placed above Class 1 wastes, the Class 1 waste must first be covered with a four-foot layer of compacted clay-rich soil. The final cover over the aerial fill must meet the requirements of Subchapter J of this chapter and must include a flexible membrane component.

(6) Class 1 industrial solid waste other than asbestos-containing waste must not be placed above the surrounding natural ground surface elevation. Class 1 industrial solid waste which is Class 1 only because of asbestos content must be managed in accordance with the provisions of §330.136(b)(3) of this title (relating to Disposal of Special Wastes).