

The Texas Natural Resource Conservation Commission (commission) adopts amendments to §§330.3, 330.41, 330.52, 330.56, 330.60, 330.65, 330.66, 330.70-330.73, 330.238, 330.253, 330.254, 330.280-330.284, 330.416, 330.1005, and 330.1010 and the repeal of §§330.9, 330.285, and 330.286, concerning Municipal Solid Waste. The amendments and repeals are adopted without changes to the proposed text as published in the October 22, 1999 issue of the *Texas Register* (24 TexReg 9210) and will not be republished.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE ADOPTED RULES

Changes have been adopted in Chapter 330 as the result of ongoing efforts by the commission for regulatory reform. The adopted changes focus on financial assurance and are based upon a two-step process. The first step involved identification of all commission programs which contain a financial assurance component and transfer of those requirements into 30 TAC Chapter 37. The second step involved processing of the rules to eliminate redundant requirements, to remove duplicative mechanisms, and to consolidate provisions whenever possible. Modifications are simultaneously adopted in coordination with 30 TAC Chapters 37, 305, 324, 331, 334, 335, and 336. Entities who are required to provide financial assurance are specifically instructed to do so in each relevant, technical chapter. Those requirements that are overseen by the commission's technical program staff, such as the calculation of closure, post closure, and corrective action costs, will remain in the technical rule chapters. Each technical chapter refers the reader to Chapter 37 for the rules pertaining to financial assurance and to the financial assurance mechanisms.

The financial assurance rules being adopted are consolidated in accordance with the commission's

ongoing regulatory reform initiative. For example, previously, several programs had rules with a separate subchapter concerning financial assurance and the allowed mechanisms. Frequently, the requirements were repetitive and identical. These rules consolidate financial requirements to reduce duplicative language while retaining the integrity of the previous requirements. The owner or operator must comply with the requirements of closure, the requirements of post closure, and the requirements of corrective action, or any combination of the three, as is appropriate for the particular activity conducted at the type of facility or site being considered. The mere consolidation, or inclusion, of all three types of activities in a single rule section does not alter the scope of the applicability of the rule, nor does it impose a more or less stringent regulation.

The financial assurance rules are also being adopted for clarification in accordance with the commission's ongoing regulatory reform initiative. For example, the adopted rules clarify and use cross-references to indicate that the owner or operator is subject to the provisions of the relative technical chapters, the general subchapters of Chapter 37, the mechanism requirements, the mechanism wordings, and the specific program subchapters of Chapter 37.

The rule adoption is for simplification and clarification and involves few substantive changes in the procedures and criteria to be used by the commission and the regulated community for providing financial assurance and other associated activities that are regulated under this chapter. Substantive changes are minimal and occur, when necessary, for the purposes of consolidation, clarification, compatibility and consistency with commission and federal requirements, and protection of human health and the environment. Substantive changes in the regulations were specifically articulated in the

proposal preamble published in the October 22, 1999 issue of the *Texas Register* to make those instances easily identifiable. In general, the adoption of these rules involves organization, editorial modifications, reordering requirements into a more logical sequence, and correcting cross-reference citations.

Texas law requires the commission to adopt rules requiring financial assurance for various program areas including Texas Health and Safety Code (HSC), §361.085 for solid waste, hazardous waste, and permitted facilities.

The purpose of the financial assurance requirements is to assure that adequate funds will be readily available to cover the costs of closure, post closure, and corrective action associated with certain types of facilities. Financial assurance is important for two primary reasons. First, to prevent delays in addressing environmental needs at facilities, owners and operators need to have funds that are readily available. Moreover, if the owner or operator lacks sufficient funds, environmental needs may have to be addressed through state or federal cleanup funds rather than by the entity responsible for the facility. Additionally, some programs require liability coverage to protect third parties from bodily injury and property damage that may result from a permittee's waste management activities.

The adopted amendments are necessary to maintain consistency of commission rules and to fulfill the statutory mandates requiring financial assurance.

SECTION BY SECTION DISCUSSION

Corrections to the proposed rules for Chapter 330 were published in the *Texas Register* on November 26, 1999 (24 TexReg 10606). The changes were primarily to include a statutory authority reference. The corrections are included in the adopted rule text. There were no additional modifications made during this rulemaking between the proposed rule text and the adopted rule language of Chapter 330.

FINAL REGULATORY IMPACT ANALYSIS

This rulemaking is not subject to Texas Government Code §2001.0225 because it does not meet the definition of a “major environmental rule” as defined in the Administrative Procedure Act. Although the rules are adopted to protect the environment and reduce risk to human health, this rulemaking is not a major environmental rule because it does not 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 rules do not adversely affect in a material way the aforementioned aspects of the state because, generally, the adopted changes are made to the financial assurance rules for the purposes of consolidation and organization. In the few instances where substantive changes are being adopted, there are no such changes which modify the procedures and criteria used by the commission and the regulated entities in such a manner that the adopted rules are a “major environmental rule.” The adopted rules provide better-written, better-organized, and easier to use financial assurance rules, which in turn provides an overall benefit to the affected economy, sectors of the economy, productivity, competition, jobs, the environment, and the public health and safety of the state and affected sectors of the state. The economy, a sector of the economy, productivity, competition, or jobs, are not adversely affected in a material way by the few adopted substantive

changes. In fact, the adoption should benefit the economy, a sector of the economy, and productivity by clarifying existing requirements and by making the rules easier to understand. As the previously existing rules were protective of human health and the environment, this rule adoption does not decrease the protection of the environment or human health. More simply stated, the adoption revises the commission's rules in a manner which could provide a benefit to the economy while enhancing the protection of the environment and public health and safety.

Furthermore, these rules do not meet any of the four applicability requirements listed in Texas Government Code, §2001.0225(a). The rules do not exceed a standard set by federal law because one of the purposes of this rulemaking is to adopt state rules which are accordant with the corresponding federal regulations. Any requirements in the rules are in accord with the corresponding federal regulations, and they do not exceed an express requirement of state law because they implement state law provisions to require financial assurance. This adoption does not exceed the requirements of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state or federal program because there is no federal financial assurance program. There are, however, federal financial assurance requirements for many of the delegated programs and these rules are consistent with the corresponding federal financial assurance requirements. The adoption is not made solely under the general powers of the commission, but is also made under the requirements of specific state law that allows the commission to provide these programs. Finally, these rules are not being adopted on an emergency basis to protect the environment or to reduce risks to human health.

TAKINGS IMPACT ASSESSMENT

The commission has prepared a takings impact assessment for these rules under Texas Government Code, §2007.043. The following is a summary of that assessment. The specific purpose of this rulemaking is to delete obsolete language, to make the rules consistent with commission and federal rules, and to implement the commission's guidelines on regulatory reform as well as to provide clarifications to existing rule language. Promulgation and enforcement of the rules does not create a burden on private real property. There are few significant, new requirements being added. In the few instances where substantive changes are being adopted, there are no such changes which modify the financial assurance rules, procedures, or criteria in such a manner that a burden on private real property is modified or created. A landowner's rights in private real property will not be affected by the adoption of these rules.

COASTAL MANAGEMENT PROGRAM CONSISTENCY REVIEW

The commission has reviewed the rulemaking for consistency with the Texas Coastal Management Program's (CMP) goals and policies in accordance with the regulations of the Coastal Coordination Council and found that the rules are subject to the CMP and must be consistent with applicable CMP goals and policies which are found in 31 TAC §501.12 and §501.14. The CMP goal applicable to the rules is the goal to protect, preserve, restore, and enhance the diversity, quality, quantity, functions, and values of Coastal Natural Resource Areas (CNRAs). CMP policies applicable to the rules include the administrative policies and the policies for specific activities related to construction and operation of solid waste treatment, storage, and disposal facilities. In particular, the CMP policy most applicable to these rules is to ensure that new solid waste facilities and areal expansions of existing solid waste

facilities are sited, designed, constructed, and operated to prevent releases of pollutants that may adversely affect CNRAs and comply with standards established under the Solid Waste Disposal Act, 42 United States Code, §§6901 et seq.

This rulemaking is related to financial assurance, which in turn impacts the issuance of permits, including those permits relating to solid waste facilities. Thus, this rulemaking is subject to the CMP. The commission has prepared a consistency determination for the rules pursuant to 31 TAC §505.22 and has found that this rulemaking is consistent with the applicable CMP goals and policies. The commission determined that the adoption is consistent with the applicable CMP goals and policies because the modification implemented by these adopted rules is insignificant in relationship to the CMP and has no impact upon CNRAs.

The adoption does contain minor, substantive changes. In the few instances where a substantive change is made, it is for the purpose of achieving consistency with state and federal law and to achieve consistency with commission rules. However, the commission has determined that these adopted rules do not have a direct or significant, adverse effect on CNRAs. This adoption does not change the technical permitting requirements of waste facilities nor change the amount of financial assurance that must be demonstrated. Instead, this financial assurance rule adoption addresses the means by which demonstrations of financial assurance can be made.

Because this rule adoption does not modify the amount of financial assurance to be demonstrated for permits for owners and operators of hazardous waste storage, processing, or disposal facilities,

promulgation and enforcement of these rules has no new effect on the CNRAs. The rules continue having the original effect, which is to require demonstrations of financial assurance in order to protect, preserve, restore, and enhance the diversity, quality, quantity, functions, and values of CNRAs, and also the rules continue to ensure that new solid waste facilities and areal expansions of existing solid waste facilities are sited, designed, constructed, and operated to prevent releases of pollutants that may adversely affect CNRAs and comply with standards established under the Solid Waste Disposal Act, 42 United States Code, §§6901 et seq.

The CMP goal applicable to the rules is the goal to protect, preserve, restore, and enhance the diversity, quality, quantity, functions, and values of CNRAs. Because the rules do not change the amount of financial assurance required by the previously existing rules, the rules are consistent with the applicable CMP goal. CMP policies applicable to the rules include the administrative policies and the policies for specific activities related to construction and operation of solid waste treatment, storage, and disposal facilities.

Promulgation and enforcement of these rules is consistent with the applicable CMP goals and policies because the adoption does not change the amount of financial assurance required in the previously existing rules. The rule modifications do not relax the existing requirements which encourage safe and appropriate storage, management, and treatment of hazardous waste, and thereby the rule modifications result in no substantive effect on the management of coastal areas of the state. In addition, these rules do not violate any applicable provisions of the CMP's stated goals and policies. Therefore, in compliance with 31 TAC §505.22(e), the commission affirms that these rules are consistent with CMP

goals and policies, and the rules have no new impact upon the coastal area.

HEARING AND COMMENTERS

A public hearing was not requested or held concerning these rules. The public comment period closed November 22, 1999 at 5:00 p.m. central standard time. Written comments were not received regarding this chapter. However, comments were received regarding other rule chapters associated with this rulemaking. Those comments as well as the changes that are being made throughout the associated promulgation are described and discussed in the adoption preambles for Chapters 37, 305, 324, and 331 being simultaneously published in this issue of the *Texas Register*.

STATUTORY AUTHORITY

The amendment is adopted under Texas Water Code (TWC), §5.103 and §5.105, which provide the commission with the authority to adopt any rules necessary to carry out its powers and duties under the laws of this state. The amendment is also adopted under the Solid Waste Disposal Act in HSC, §361.011, which provides the commission with the authority to manage municipal solid waste; HSC, §361.024, which provides the commission with the authority to adopt any rules and establish standards of operation for the management of solid waste; and HSC, §361.085, which provides the commission with the authority to require financial assurance demonstrations for solid waste, hazardous waste, and permitted facilities.

Together, these statutes authorize the commission to adopt any rules necessary to carry out its powers and duties under TWC and other laws of Texas and to establish and approve all general policy of the

commission.

SUBCHAPTER A : GENERAL INFORMATION

§330.3

§330.3. Applicability.

(a) The provisions of this chapter apply to any person as defined in §330.2 of this title (relating to Definitions) involved in any aspect of the management and control of municipal solid waste including, but not limited to, storage, collection, handling, transportation, processing, and disposal. Furthermore, these regulations apply to any person who by contract, agreement, or otherwise, arrange to process, store, or dispose of, or arranged with a transporter for transport to process, store, or dispose of, solid waste owned or possessed by the person, or by any other person or entity.

(b) For municipal solid waste landfills that stopped receiving waste before October 9, 1991, and MSW Sites, only the provisions of §330.251 of this title (relating to Closure Requirements for MSWLF Units That Stop Receiving Waste Prior to October 9, 1991, and MSW Sites) apply. If not previously submitted, owners or operators shall submit a closure report that documents that municipal solid waste landfill facility (MSWLF) units or MSW site(s), or portions thereof, have received final cover.

(c) MSWLF units that receive waste after October 9, 1991, but stop receiving waste before October 9, 1993, are exempt from the requirements of this chapter except for the final cover requirements specified in §330.252 of this title (relating to Closure Requirements for MSWLF Units

That Receive Waste on or after October 9, 1991, but Stop Receiving Waste Prior to October 9, 1993).

The final cover must be installed and certified in accordance with the requirements contained in §§330.250-330.253 of this title (relating to Closure and Post-Closure). Owners or operators of MSWLF units described in this subsection that fail to complete cover installation and certification within the time limits specified in §§330.250-330.256 of this title (relating to Closure and Post-Closure) will be subject to all the requirements of these regulations.

(d) All MSWLF units and MSW sites that receive waste on or after October 9, 1993, must comply with all requirements of these regulations, unless otherwise specified.

(e) Owners or operators of new, existing, and lateral expansions of small MSWLF units that dispose of less than 20 tons of municipal solid waste daily in the small MSWLF unit based on an annual average are exempt from §§330.200-330.206 and §§330.230-330.242 of this title (relating to Groundwater Protection Design and Operation and Groundwater Monitoring and Corrective Action respectively), so long as there is no evidence of existing groundwater contamination from the small MSWLF unit, the small MSWLF unit serves a community that has no practicable waste management alternative, and the small MSWLF unit is located in an area that receives less than or equal to 25 inches of annual average precipitation. Requests for exemptions under subsection (f) of this section may be approved administratively by the executive director, upon demonstration of compliance with these criteria. An exemption request may be denied by the executive director if he determines that granting the exemption could result in a substantial threat of groundwater contamination, based upon information made available to him from the applicant or agency files. Owners or operators may appeal such denials

to the commission for decision.

(f) Owners or operators of new, existing, and lateral expansions of small MSWLF units that meet the criteria in subsection (e) of this section must submit a certification of eligibility to the executive director and place a copy of the certification in the operating record. The certification must be signed by a principal executive officer, a ranking elected official, or an independent professional engineer registered to practice in the State of Texas, except that the groundwater certification shall be submitted in accordance with §330.14 of this title (relating to Arid Exemption Process) and signed by a qualified groundwater scientist, as defined in this chapter. The certification shall contain the following information:

(1) a certification that the MSWLF unit meets all requirements contained in subsection (e) of this section for exemptions from §§330.200-330.206 and §§330.230-330.242 of this title (relating to Groundwater Protection Design and Operation and Groundwater Monitoring and Corrective Action respectively);

(2) a report, prepared by a qualified groundwater scientist in accordance with §330.14 of this title (relating to Arid Exemption Process) documenting that there is no evidence of groundwater contamination;

(3) documentation that the small MSWLF unit receives for disposal an annual average of less than 20 tons per day based upon the most recent four reporting quarters; or a certification that

programs have been put in place, or will be implemented to reduce the annual average to less than 20 tons per day within one year;

(4) documentation that there are no practicable waste management alternatives available. The documentation shall demonstrate one of the following:

(A) additional costs of available alternatives are estimated to exceed 1.0% of the owner's or operating community's budget for all public services; or

(B) haul distances to alternative sites are unreasonably long; or

(C) all other alternatives are not feasible to implement, given the community location and economic condition;

(5) documentation that the small MSWLF unit receives less than or equal to 25 inches of average annual precipitation, as determined from the following map (Map 1) based on average annual precipitation for the years 1951-1980, or from precipitation data for the nearest official precipitation recording station for the most recent 30-year reporting period.

(g) If the owner or operator of a new, existing, or lateral expansion of a small MSWLF unit who has previously asserted eligibility in subsections (e) and (f) of this section has knowledge or becomes aware of groundwater contamination from the small MSWLF unit within a one-mile radius of

the small MSWLF unit, or the unit no longer meets the definition of a small MSWLF, or the waste reduction program is ineffective (based upon an evaluation of trends established after a minimum period of a year), or a practicable alternative becomes available, the owner or operator shall notify in writing the executive director of such condition(s) and thereafter comply with §§330.200-330.206 and §§330.230-330.242 of this title (relating to Groundwater Protection Design and Operation and Groundwater Monitoring and Corrective Action, respectively) on a schedule specified by the executive director. The executive director may consider the economic investment made by the owner or operator in establishing the schedule for compliance. The minimum time allowed for compliance necessitated by loss of small MSWLF status or availability of a practicable alternative shall be 18 months.

(h) Owners or operators of municipal solid waste facilities are required to comply with the financial assurance requirements specified in Chapter 37, Subchapter R of this title (relating to Financial Assurance for Municipal Solid Waste Facilities) and Chapter 330, Subchapter K of this title (relating to Closure, Post-Closure, and Corrective Action).

(i) A small MSWLF facility that meets the requirements of subsections (e) and (f) of this section shall maintain the integrity of any existing on-site groundwater monitor wells and make them available to the executive director for the collection of groundwater samples.

SUBCHAPTER A : GENERAL INFORMATION

§330.9

STATUTORY AUTHORITY

The repeal is adopted under TWC, §5.103 and §5.105, which provide the commission with the authority to adopt any rules necessary to carry out its powers and duties under the laws of this state.

The repeal is also adopted under the Solid Waste Disposal Act in HSC, §361.011, which provides the commission with the authority to manage municipal solid waste; HSC, §361.024, which provides the commission with the authority to adopt rules and establish standards of operation for the management of solid waste; and HSC, §361.085, which provides the commission with the authority to require financial assurance demonstrations for solid waste, hazardous waste, and permitted facilities.

Together, these statutes authorize the commission to adopt any rules necessary to carry out its powers and duties under TWC and other laws of Texas and to establish and approve all general policy of the commission.

§330.9. Financial Assurance Required.

SUBCHAPTER D : CLASSIFICATION OF MUNICIPAL SOLID WASTE FACILITIES

§330.41

STATUTORY AUTHORITY

The amendment is adopted under TWC, §5.103 and §5.105, which provide the commission with the authority to adopt any rules necessary to carry out its powers and duties under the laws of this state.

These rule amendment is also adopted under the Solid Waste Disposal Act in HSC, §361.011, which provides the commission with the authority to manage municipal solid waste; HSC, §361.024, which provides the commission with the authority to adopt rules and establish standards of operation for the management of solid waste; and HSC, §361.085, which provides the commission with the authority to require financial assurance demonstrations for solid waste, hazardous waste, and permitted facilities.

Together, these statutes authorize the commission to adopt any rules necessary to carry out its powers and duties under TWC and other laws of Texas and to establish and approve all general policy of the commission.

§330.41. Types of Municipal Solid Waste Sites.

(a) Classification of municipal solid waste facilities (MSWLF). The commission has classified all municipal solid waste facilities according to the method of processing or disposal of municipal solid waste. Subject to the limitations in §330.136 of this title (relating to Disposal of Special Wastes) and §330.137 of this title (relating to Disposal of Industrial Wastes), and with the written approval of the

executive director, an MSWLF may also receive special wastes, including Class I industrial nonhazardous solid waste and hazardous waste from conditionally exempt small quantity generators, if properly handled and safeguarded in the landfill facility.

(b) Municipal solid waste facility-Type I. A Type I facility shall be considered to be the standard landfill for the disposal of municipal solid waste. All solid waste deposited in a Type I facility shall be compacted and covered at least daily. The commission may authorize the designation of special-use areas for processing, storage, and disposal or any other functions involving solid waste. The operational and design standards prescribed in §§330.50-330.65 of this title (relating to Permit Procedures), §§330.111-330.139 of this title (relating to Operational Standards for Solid Waste Land Disposal Sites), §§330.150-330.159 of this title (relating to Operational Standards for Solid Waste Processing and Experimental Sites), §§330.200-330.206 of this title (relating to Groundwater Protection Design and Operation), §§330.230-330.242 of this title (relating to Groundwater Monitoring and Corrective Action), §§330.250-330.256 of this title (relating to Closure and Post-Closure), Chapter 330, Subchapter K of this title (relating to Closure, Post-Closure, and Corrective Action), Chapter 37, Subchapter R of this title (relating to Financial Assurance for Municipal Solid Waste Facilities), and §§330.300-330.305 of this title (relating to Location Restrictions), unless otherwise specified in §330.3(e) of this title (relating to Applicability), shall be followed. Those facilities meeting the requirements of §330.3(e) of this title shall be referred to as Type I-AE facilities and are exempt from all requirements pertaining to, but not limited to, §§330.200-330.206 and §§330.230-330.242 of this title (relating to Groundwater Protection Design and Operation and Groundwater Monitoring and Corrective Action, respectively). Type I Facilities that are authorized to operate a Type IV cell or

trench shall operate the cell or trench in accordance with subsection (e) of this section.

(c) Municipal solid waste facility-Type II. Upon the effective date of this title, all Type II facilities, as defined in this subsection, shall meet and comply with the Type I standards contained in subsection (b) of this section, except as otherwise specified in §330.3(e) of this title (relating to Applicability). For the purpose of this section, a Type II facility is defined as: a facility or operation serving less than 5,000 persons or the population equivalent; receiving less than 12 1/2 tons of solid waste per day; compacted and covered on a frequency that will not result in any significant health problems; and operation not conducted within 300 yards of a public road.

(d) Municipal solid waste facility-Type III. Upon the effective date of this title, all Type III facilities, as defined in this subsection, shall meet and comply with the Type I standards contained in subsection (b) of this section, except as otherwise specified in §330.3(e) of this title (relating to Applicability). For the purpose of this section, a Type III facility is defined as: a facility or operation serving less than 1,500 persons or the population equivalent; receiving less than 3 3/4 tons of waste per day; and operation not conducted within 300 yards of a public road.

(e) Municipal solid waste facility-Type IV. A Type IV facility or operation may be authorized by the commission for the disposal of brush, construction-demolition waste, and/or rubbish that are free of putrescible and free of household wastes. A Type IV operation shall not be operated within 300 yards of a public road unless the executive director, after a site evaluation, determines that the proposed operation in the proposed location is acceptable. The minimum operational standards are prescribed in

the applicable requests §§330.50-330.65 of this title (relating to Permit Procedures), §§330.111-330.135 of this title (relating to Operational Standards for Solid Waste Land Disposal Sites), §§330.138-330.139 of this title (relating to Operational Standards for Solid Waste Land Disposal Sites), §§330.204-330.206 of this title (relating to Groundwater Protection Design and Operation), §330.239 of this title (relating to Groundwater Monitoring at Type IV Landfills), §330.251 of this title (relating to Closure Requirements for MSWLF Units That Stop Receiving Waste Prior to October 9, 1991, and MSW Sites), unless otherwise specified in §330.3(e) of this title (relating to Applicability). Waste shall be compacted and covered weekly unless another schedule is approved or required by the commission. Those facilities meeting the requirements of §330.3(e) of this title shall be referred to as Type IV-AE facilities and are exempt from §§330.200-330.206 and §§330.230-330.242 of this title (relating to Groundwater Protection Design and Operation and Groundwater Monitoring and Corrective Action, respectively).

(f) Municipal solid waste facility-Type V. Separate solid waste processing facilities are classified as Type V. These facilities shall encompass processing plants that transfer, incinerate, shred, grind, bale, compost, salvage, separate, dewater, reclaim, and/or provide other processing of solid waste. Operational standards are prescribed in §§330.150-330.159 of this title (relating to Operational Standards for Solid Waste Processing and Experimental Sites).

(g) Municipal solid waste facility-Type VI. A Type VI facility or operation may be authorized by the commission for a facility involving a new or unproven method of managing or utilizing municipal solid waste, including resource and energy recovery projects. The commission may limit the

size of these facilities until the method is proven. The minimum operational standards are prescribed in §§330.150-330.159 of this title (relating to Operational Standards for Solid Waste Processing and Experimental Sites).

(h) Municipal solid waste facility-Type VII. A Type VII facility or operation may be authorized by the commission for the land management of sludges and/or similar wastes. Operational standards, depending on the particular waste, facility purpose, and method of operation (land application for beneficial use, land disposal to include landfilling and land treatment, etc.) are contained in Chapter 312 of this title (relating to Sludge Use, Disposal, and Transportation).

(i) Municipal solid waste facility-Type VIII. Facilities for the management of used or scrap tires are classified as Type VIII. Standards are prescribed in §§330.801-330.889 of this title (relating to Management of Whole, Used, or Scrap Tires).

(j) Municipal solid waste facility-Type IX. A closed disposal facility, an inactive portion of a disposal facility, or an active disposal facility, used for extracting materials for energy and material recovery or for gas recovery for beneficial use is classified as Type IX. Registration requirements are contained in §330.4 of this title (relating to Permit Required).

SUBCHAPTER E : PERMIT PROCEDURES

§§330.52, 330.56, 330.60, 330.65, 330.66, 330.70-330.73

STATUTORY AUTHORITY

The amendments are adopted under TWC, §5.103 and §5.105, which provide the commission with the authority to adopt any rules necessary to carry out its powers and duties under the laws of this state.

These amendments are also adopted under the Solid Waste Disposal Act in HSC, §361.011, which provides the commission with the authority to manage municipal solid waste; HSC, §361.024, which provides the commission with the authority to adopt rules and establish standards of operation for the management of solid waste; and HSC, §361.085, which provides the commission with the authority to require financial assurance demonstrations for solid waste, hazardous waste, and permitted facilities.

Together, these statutes authorize the commission to adopt any rules necessary to carry out its powers and duties under TWC and other laws of Texas and to establish and approve all general policy of the commission.

§330.52. Technical Requirements of Part I of the Application.

(a) General.

(1) The first part of the application, Part I, is designed to provide information that is required regardless of the type of site involved. All items required by this section and §305.45 of this

title (relating to Contents of Application for Permit) must be submitted.

(2) Persons who wish to have a "pre-application meeting" under the provisions of Health and Safety Code, §361.0635, and §330.50 of this title (relating to Preapplication Review) should include a draft Part I with their request.

(3) Submittal of a Part I by itself will not necessarily require publication of a notice of intent to obtain a municipal solid waste permit under the provisions of Health and Safety Code, §361.0665, or a notice concerning receipt of a permit application under the provisions of Health and Safety Code, §361.079.

(4) Submittal of a Part I only will not allow an application to be declared "administratively complete" under the provisions of Health and Safety Code, §361.068; §281.3 of this title (relating to Initial Review); and §281.18 of this title (relating to Applications Returned).

(b) Additional requirements of Part I.

(1) Title page. The title page shall show the name of the project, the municipal solid waste (MSW) permit application number if known, the name of the applicant, the location by city and county, the date the part was prepared and, if appropriate, the number and date of the revision. It shall be sealed as required by the Texas Engineering Practice Act.

(2) Table of contents. The table of contents shall list and give the page numbers for the main sections of the application. It shall be sealed as required by the Texas Engineering Practice Act.

(3) Supplementary technical report. The applicant shall describe the purpose of the facility or the application and any other information believed to be needed to understand the application in a supplementary technical report.

(4) Maps.

(A) General. The maps submitted as a group shall show the elements contained in §305.45 of this title (relating to Contents of Application for Permit) and the following:

(i) the prevailing wind direction with a wind rose;

(ii) all known water wells within 500 feet of the proposed permit boundary shall be shown. The state well numbering system designation for Water Development Board "located wells" shall be shown;

(iii) all structures and inhabitable buildings within 500 feet of the proposed site;

(iv) schools, licensed day care facilities, churches, hospitals, cemeteries, ponds, lakes, and residential, commercial, and recreational areas within one mile of the site;

(v) the location and surface type of all roads within one mile of the site that will normally be used by the applicant for entering or leaving the site;

(vi) latitudes and longitudes;

(vii) area streams;

(viii) airports within five miles of the site;

(ix) the property boundary of the site;

(x) drainage, pipeline, and utility easements within or adjacent to the site; and

(xi) archaeological sites, historical sites, and sites with exceptional aesthetic qualities adjacent to the site.

(B) General location maps. These maps shall be all or a portion of county

maps prepared by Texas Department of Transportation (TxDot). At least one general location map shall be at a scale of one-half inch equals one mile. If TxDot publishes more detailed maps of the proposed site area, the more detailed maps shall also be included in Part I. The latest revision of all maps shall be used.

(C) General topographic maps. These maps shall be United States Geological Survey 7 1/2-minute quadrangle sheets or equivalent. At least one general topographic map shall be at a scale of one inch equals 2,000 feet.

(D) Land ownership maps. These maps shall comply with the requirements §281.5 of this title (relating to Application for Wastewater Discharge, Underground Injection, Municipal Solid Waste, Hazardous Waste, and Industrial Solid Waste Management Permits) by locating the property owned by adjacent and potentially affected landowners. The maps should show all property ownership within 500 feet of the site.

(5) Landowners list. The adjacent and potentially affected landowners list shall be keyed to the land ownership maps and shall give each property owner's name and mailing address. The list shall comply with the requirements of §281.5 of this title (relating to Application for Wastewater Discharge, Underground Injection, Municipal Solid Waste, Hazardous Waste, and Industrial Solid Waste Management Permits). The list shall include all property owners within 500 feet of the site.

(6) Legal description.

(A) Provide the legal description of the property and the county, book, and page number of the current ownership record.

(B) For property that is platted, the county, book, and page number of the final plat record of only that acreage encompassed in the application and a copy of the final plat shall be provided in addition to a written legal description.

(C) Provide a boundary metes and bounds description of the site signed and sealed by a registered professional land surveyor.

(D) Provide drawings of the boundary metes and bounds description.

(7) Property owner affidavit. A property owner affidavit shall be submitted and shall include the following:

(A) the legal description of the site;

(B) acknowledgment that the State of Texas may hold the property owner of record either jointly or severally responsible for the operation, maintenance, and closure and post-closure care of the site;

(C) acknowledgment that the owner has a responsibility to file with the county

deed records an affidavit to the public advising that the land has been used for a solid waste facility, at such time as the site actually begins operating as a municipal solid waste landfill facility; and

(D) acknowledgment that the site owner or operator and the State of Texas shall have access to the property during the active life and for a period of not less than 30 years after closure for the purpose of inspection and maintenance.

(8) Legal authority. The applicant shall provide verification of his legal status as required by §281.5 of this title (relating to Application for Wastewater Discharge, Underground Injection, Municipal Solid Waste, Hazardous Waste, and Industrial Solid Waste Management Permits). Normally, this shall be a one-page certificate of incorporation issued by the secretary of state. The applicant shall list all persons having over a 20% ownership in the proposed facility.

(9) Evidence of competency.

(A) The applicant shall submit a list of all Texas solid waste sites that the applicant has owned or operated within the last 10 years. The site name, site type, permit or registration number, county, and dates of operation shall also be submitted.

(B) The applicant shall submit a list of all solid waste sites in all states, territories, or countries in which the applicant has a direct financial interest. The type of site shall be identified by location, operating dates, name, and address of the regulatory agency, and the name under

which the site was operated.

(C) If the applicant does not have a prior site operating record, he must possess a commission letter of competency for the type of facility involved, evidence of completion of an approved course, evidence of equivalent qualification, or evidence that the proposed site supervisor has such qualification. The executive director shall require that an appropriately qualified site supervisor be employed before commencing site operation.

(D) The names of the principals and supervisors of the applicant's organization shall be provided, together with previous affiliations with other organization engaged in solid waste activities.

(E) Evidence of competency to operate the site shall also include landfilling and earthmoving experience, other pertinent experience, or commission letters of competency possessed by key personnel and the number and size of each type of equipment to be dedicated to site operation.

(10) Appointments.

(A) Provide documentation that the person signing the application meets the requirements of §305.44 of this title (relating to Signatories to Applications). If the authority has been delegated, provide a copy of the document issued by the governing body of the applicant authorizing the person who signed the application to act as agent for the applicant.

(B) A "notice of appointment" identifying the applicant's engineer shall be provided.

(11) Evidence of financial assurance. The applicant shall submit a copy of the documentation required to demonstrate financial assurance as specified in Subchapter K of this chapter (relating to Closure, Post-Closure, and Corrective Action) and Chapter 37, Subchapter R of this title (relating to Financial Assurance for Municipal Solid Waste Facilities), as applicable. For a new facility, a copy of the required documentation shall be submitted 60 days prior to the initial receipt of waste.

§330.56. Attachments to the Site Development Plan.

(a) Attachment 1 - site layout plan.

(1) This is the basic element of the site development plan consisting of a site layout plan on a constructed map showing the outline of the units and fill sectors with appropriate notations thereon to communicate the types of wastes to be disposed of in individual sectors, the general sequence of filling operations, locations of all interior site roadways to provide access to all fill areas, locations of monitor wells, dimensions of trenches, locations of buildings, and any other graphic representations or marginal explanatory notes necessary to communicate the proposed step-by-step construction of the site. The layout should include: fencing; sequence of excavations, filling, maximum waste elevations

and final cover; provisions for the maintenance of natural windbreaks, such as greenbelts, where they will improve the appearance and operation of the site; and, where appropriate, plans for screening the site from public view.

(2) A generalized design of all site entrance roads from public access roads shall be included. All designs of proposed public roadway improvements such as turning lanes, storage lanes, etc., associated with site entrances should be coordinated with the agency exercising maintenance responsibility of the public roadway involved.

(3) This plan is the basis for operational planning and budgeting, and therefore shall contain sufficient detail to provide an effective site management tool.

(b) Attachment 2 - fill cross-section.

(1) The fill cross-sections shall consist of plan profiles across the site clearly showing the top of the levee, top of the proposed fill, maximum elevation of proposed fill, top of the final cover, top of the wastes, existing ground, bottom of the excavations, side slopes of trenches and fill areas, gas vents or wells, and groundwater monitoring wells, plus the initial and static levels of any water encountered.

(2) The fill cross-sections shall go through or very near the soil borings in order that the boring logs obtained from the soils report can also be shown on the profile.

(3) Large sites shall provide sufficient fill cross-sections, both latitudinally and longitudinally, so as to accurately depict the existing and proposed depths of all fill areas within the site. The plan portion shall be shown on an inset key map.

(4) Construction and design details of compacted perimeter or toe berms which are proposed in conjunction with aboveground (aerial-fill) waste disposal areas shall be included in the fill cross-sections.

(c) Attachment 3 - existing contour map. This is a constructed map showing the contours prior to any grading, excavation, and/or filling operations on the site. Appropriate vertical contour intervals shall be selected so that contours are not further apart than 100 feet as measured horizontally on the ground. Wider spacing may be used when approved by the executive director. The map should show the location and quantities of surface drainage entering, exiting, or internal to the site and the area subject to flooding by a 100-year frequency flood.

(d) Attachment 4 - geology report. This portion of the application applies to owners or operators of municipal solid waste facilities that store, process, or dispose of municipal waste in landfills. If the municipal solid waste landfill facility (MSWLF) contains two or more MSWLF units, the information requested pertaining to regional geology and regional aquifers need only be provided once. The geology report shall be prepared and signed by a qualified groundwater scientist except that the reports required under paragraph (5) of this subsection shall be signed and sealed, where appropriate, as required by the Texas Engineering Practice Act. Previously prepared documents may

be submitted but shall be supplemented as necessary to provide the requested information. Sources and references for information shall be provided. The geology report shall contain the information in paragraphs (1)-(6) of this subsection.

(1) The owner or operator shall provide a discussion of the regional physiography and topography in the vicinity of the facility. The discussion shall include, at a minimum, the distance to local surface water bodies and drainage features, the slope of the land surface (direction and rate), and the maximum and minimum elevations of the facility. Any limitation of the facility due to unfavorable topography (e.g., cliffs, floodplains) shall be discussed.

(2) The owner or operator shall provide a description of the regional geology of the area. This section shall include:

(A) a geologic map of the region with text describing the stratigraphy and lithology of the map units. An appropriate section of a published map series such as the Geologic Atlas of Texas prepared by the Bureau of Economic Geology is acceptable;

(B) a description of the generalized stratigraphic column in the facility area from the base of the lowermost aquifer capable of providing usable groundwater, or from a depth of 1,000 feet, whichever is less, to the land surface. The geologic age, lithology, variations in lithology, thickness, depth, geometry, hydraulic conductivity, and depositional history of each geologic unit should be described based upon available geologic information. Regional stratigraphic cross-sections

should be provided.

(3) The owner or operator shall provide a description of the geologic processes active in the vicinity of the facility. This description shall include:

(A) an identification of any faults and subsidence in the area of the facility.

The information about faulting and subsidence shall include at least that required in §330.303(b) and §330.305 of this title (relating to Fault Areas and Unstable Areas, respectively);

(B) a discussion of the degree to which the facility is subject to erosion. The potential for erosion due to surface water processes such as overland flow, channeling, gulying, and fluvial processes such as meandering streams and undercut banks shall be evaluated. If the facility is located in a low-lying coastal area, historical rates of shoreline erosion shall also be provided; and

(C) an identification of wetlands located within the facility boundary.

(4) The owner or operator shall provide a description of the regional aquifers in the vicinity of the facility based upon published and open-file sources. The section shall provide:

(A) aquifer names and their association with geologic units described in paragraph (2) of this subsection;

- (B) a description of the composition of the aquifer(s);
- (C) a description of the hydraulic properties of the aquifer(s);
- (D) information on whether the aquifers are under water table or artesian conditions;
- (E) information on whether the aquifers are hydraulically connected;
- (F) a regional water-table contour map or potentiometric surface map for each aquifer, if available;
- (G) an estimate of the rate of groundwater flow;
- (H) typical values or a range of values for total dissolved solids content of groundwater from the aquifers;
- (I) identification of areas of recharge to the aquifers within five miles of the site; and
- (J) the present use of groundwater withdrawn from aquifers in the vicinity of the facility. The identification, location, and aquifer of all water wells within one mile of the property

boundaries of the facility shall be provided.

(5) The owner or operator shall provide the results of investigations of subsurface conditions at a particular waste management unit in the following reports.

(A) Subsurface investigation report. This report shall describe all borings drilled on-site to test soils and characterize groundwater and shall include a site map drawn to scale showing the surveyed locations and elevations of the borings. Boring logs shall include a detailed description of materials encountered including any discontinuities such as fractures, fissures, slickensides, lenses, or seams. Geophysical logs of the boreholes may be useful in evaluating the stratigraphy. Each boring shall be presented in the form of a log that contains, at a minimum, the boring number; surface elevation and location coordinates; and a columnar section with text showing the elevation of all contacts between soil and rock layers, description of each layer using the unified soil classification, color, degree of compaction, and moisture content. A key explaining the symbols used on the boring logs and the classification terminology for soil type, consistency, and structure shall be provided.

(i) A sufficient number of borings shall be performed to establish subsurface stratigraphy and to determine geotechnical properties of the soils and rocks beneath the facility. Other types of samples may also be taken to provide geologic and geotechnical data. The number of borings necessary can only be determined after the general characteristics of a site are analyzed and will vary depending on the heterogeneity of subsurface materials. Locations with

stratigraphic complexities such as non-uniform beds that pinch out, vary significantly in thickness, coalesce, or grade into other units, will require a significantly greater degree of subsurface investigation than areas with simple geologic frameworks.

(ii) Borings shall be sufficiently deep to allow identification of the uppermost aquifer and underlying hydraulically interconnected aquifers. Borings shall penetrate the uppermost aquifer and all deeper hydraulically interconnected aquifers and be deep enough to identify the aquiclude at the lower boundary. All the borings shall be at least five feet deeper than the elevation of the deepest excavation. In addition, at least the number of borings shown on the Table of Borings shall be drilled to a depth at least 30 feet below the deepest excavation planned at the waste management unit, unless the executive director approves a different depth. If no aquifers exist within 50 feet of the elevation of the deepest excavation, at least one test hole shall be drilled to the top of the first perennial aquifer beneath the site, if sufficient data does not exist to accurately locate it. The executive director may accept data equivalent to a deep boring on the site to determine information for aquifers more than 50 feet below the site. Aquifers more than 300 feet below the lowest excavation and where the estimated travel times for constituents to the aquifer are in excess of 30 years plus the estimated life of the site need not be identified through borings.

Figure: 30 TAC §330.56(d)(5)(A)(ii) (No change.)

(iii) All borings shall be conducted in accordance with established field exploration methods. The hollow-stem auger boring method is recommended for softer materials;

coring may be required for harder rocks. Other methods shall be used as necessary to obtain adequate samples for soil testing required in this paragraph. Investigation procedures shall be discussed in the report.

(iv) The boring plan, including locations and depths of all proposed borings, shall be approved by the executive director prior to initiation of the work.

(v) Installation, abandonment, and plugging of the borings shall be in accordance with the rules of the commission.

(vi) Both the number and depth of borings may be modified because of site conditions with prior approval of the executive director.

(vii) Geophysical methods, such as electrical resistivity, may be used with authorization of the executive director to reduce the number of borings that may be necessary or to provide additional information between borings.

(viii) Cross-sections prepared from the borings depicting the generalized strata at the facility. For small waste management units two perpendicular cross-sections will normally suffice.

(ix) A text that describes the investigator's interpretations of the

subsurface stratigraphy based upon the field investigation.

(B) Geotechnical report. This report shall include engineering data that describes the geotechnical properties of the subsurface soil materials and a discussion with conclusions about the suitability of the soils and strata for the uses for which they are intended. All engineering tests shall be performed in accordance with industry practice and recognized procedures such as described below. A brief discussion of engineering test procedures shall be included in the report.

(i) A laboratory report of soil characteristics shall be determined from at least one sample from each soil layer or stratum that will form the bottom and side of the proposed excavation and from those that are less than 30 feet below the lowest elevation of the proposed excavation. As many additional tests shall be performed as necessary to provide a typical profile of soil stratification within the site. No laboratory work need be performed on highly permeable soil layers such as sand or gravel. The samples shall be tested by a competent independent third-party soils laboratory.

(ii) Permeability tests shall be performed according to one of the following standards on undisturbed soil samples. Permeability tests shall be performed using tap water or .05 Normal solution of CaSO_4 , and not distilled water, as the permeant. Those undisturbed samples that represent the sidewall of any proposed trench, pit, or excavation shall be tested for the coefficient of permeability on the sample's in-situ horizontal axis; all others shall be tested on the in-situ vertical axis. All test results shall indicate the type of tests used and the orientation of each tested sample. All

calculations for the final coefficient of permeability tests result for each sample tested shall be included in the report:

(I) Constant head with back pressure per Appendix VII of Corps of Engineers Manual EM1110-2-1906, "Laboratory Soils Testing;" ASTM D5084 "Saturated Porous Materials Using a Flexible Wall Permeameter";

(II) Falling head per Appendix VII of Corps of Engineers Manual EM1110-2-1906, "Laboratory Soils Testing";

(III) Sieve analysis for the 200, and less than 200 fraction per ASTM D1140;

(IV) Atterberg limits per ASTM D4318;

(V) Moisture content per ASTM D2216.

(C) A groundwater investigation report. This report shall include the following:

(i) the depth at which groundwater was encountered and records of after-level measurements in all borings. The cross-sections prepared in response to subparagraph

(A)(viii) of this paragraph shall be annotated to note the level at which groundwater was first encountered and the level of groundwater after equilibrium is reached or just prior to plugging, whichever is later. This water-level information shall also be presented on all borings required by this paragraph and presented in a table format in the report;

(ii) records of water-level measurements in monitor wells. Historic water-level measurements made during any previous groundwater monitoring shall be presented in a table for each well;

(iii) all the information and data required in §330.231(e)(1) of this title (relating to Groundwater Monitoring Systems); and

(iv) an analysis of the most likely pathway(s) for pollutant migration in the event that the primary barrier liner system is penetrated. This shall include any groundwater modeling data and results as described in §330.231(e)(2) of this title (relating to Groundwater Monitoring Systems) and shall consider changes in groundwater flow that are expected to result from construction of the facility.

(6) The owner or operator shall provide a description of the existing or proposed monitoring system that meets the requirements of §330.231 of this title (relating to Groundwater Monitoring Systems). The owner or operator shall also provide engineering drawings of a typical monitoring well and a table of data for all proposed wells that includes the following information for

each well: total depth of the well; depth to groundwater; surveyed elevation of the ground surface at the well; surveyed elevation of the top of each well casing (or that point consistently used to determine depth to groundwater); depth to the top and base of the screen; and depth to the top and base of the filter pack.

(e) Attachment 5 - groundwater characterization report. A groundwater characterization study and report is required from owners and operators of proposed MSWLF units or proposed lateral expansions except for SLERs and FMLERs covering previously permitted and approved designs. The report shall contain the following information:

(1) a tabulation of all relevant groundwater monitoring data from wells on site or on adjacent MSWLF unit(s);

(2) identification of the uppermost aquifer and any lower aquifers that are hydraulically connected to it beneath the facility, including groundwater flow direction and rate, and the basis for such identification (i.e., the information obtained from hydrogeologic investigations of the facility area);

(3) on a topographic map as required under §330.52(b)(4)(C) of this title (relating to Technical Requirements of Part I of the Application), a delineation of the waste management area, the property boundary, the proposed "point of compliance" as defined under §330.200(d) of this title (relating to Design Criteria), the proposed location of groundwater monitoring wells as required under

§330.231 of this title (relating to Groundwater Monitoring Systems), and, to the extent possible, the information required in paragraph (2) of this subsection;

(4) a description of any plume of contamination that has entered the groundwater from the MSWLF facility at the time that the application was submitted that:

(A) delineates the extent of the plume on the topographic map required under §330.52(b)(4)(C) of this title (relating to Technical Requirements of Part I of the Application); and

(B) identifies the concentration of each assessment constituent as defined in §330.235 of this title (relating to Assessment Monitoring Program) throughout the plume or identifies the maximum concentration of each assessment constituent in the plume;

(5) detailed plans and an engineering report describing the proposed groundwater monitoring program to be implemented to meet the requirements of §330.231 of this title (relating to Groundwater Monitoring Systems);

(6) if the hazardous constituents listed in Table I of §330.200 of this title (relating to Design Criteria) have not been detected in the groundwater at the time of permit application, the owner or operator shall submit sufficient information, supporting data, and analyses to establish a detection monitoring program that meets the requirements of §330.234 of this title (relating to Detection Monitoring Program). This submission shall address the following items specified under §330.234 of

this title (relating to Detection Monitoring Program):

(A) a proposed groundwater monitoring system;

(B) background values for each monitoring parameter or constituent listed in §330.241 of this title (relating to Constituents for Detection Monitoring), or procedures to calculate such values; and

(C) a description of proposed sampling, analysis, and statistical comparison procedures to be utilized in evaluating groundwater monitoring data;

(7) if the presence of hazardous constituents listed in Table I of §330.200 of this title (relating to Design Criteria) has been detected in the groundwater at the time of the permit application, the owner or operator shall submit sufficient information, supporting data, and analyses to establish an assessment monitoring program that meets the requirements of §330.235 of this title (relating to Assessment Monitoring Program). To demonstrate compliance with §330.235 of this title, the owner or operator shall address the following items:

(A) a description of any special wastes previously handled at the MSWLF facility;

(B) a characterization of the contaminated groundwater, including

concentration of assessment constituents as defined in §330.235 of this title (relating to Assessment Monitoring Program);

(C) a list of assessment constituents as defined in §330.235 of this title (relating to Assessment Monitoring Program) for which assessment monitoring will be undertaken in accordance with §330.233 of this title (relating to Groundwater Sampling and Analysis Requirements) and §330.235 of this title;

(D) detailed plans and an engineering report describing the proposed groundwater monitoring system, in accordance with the requirements of §330.233 of this title (relating to Groundwater Sampling and Analysis Requirements); and

(E) a description of proposed sampling, analysis, and statistical comparison procedures to be utilized in evaluating groundwater monitoring data; and

(8) if hazardous constituents have been measured in the groundwater that exceed the concentration limits established in Table 1 of §330.200 of this title (relating to Design Criteria), the owner or operator shall submit sufficient information, supporting data, and analyses to establish a corrective action program that meets the requirements of §330.236 of this title (relating to Assessment of Corrective Measures) and §330.237 of this title (relating to Selection of Remedy). To demonstrate compliance with §330.236 of this title (relating to Assessment of Corrective Measures), the owner or operator shall address, at a minimum, the following items:

(A) a characterization of the contaminated ground water, including concentrations of assessment constituents as defined in §330.235 of this title (relating to Assessment Monitoring Program);

(B) the concentration limit for each constituent found in the groundwater;

(C) detailed plans and an engineering report describing the corrective action to be taken;

(D) a description of how the groundwater monitoring program will demonstrate the adequacy of the corrective action; and

(E) the permit may contain a schedule for submittal of the information required in subparagraphs (C) and (D) of this paragraph provided the owner or operator obtains written authorization from the executive director prior to submittal of the complete permit application.

(f) Attachment 6 - Groundwater and surface water protection plan and drainage plan. These plans shall reflect locations, details, and typical sections of levees, dikes, drainage channels, culverts, holding ponds, trench liners, storm sewers, leachate collection systems, or any other facilities relating to the protection of groundwater and surface water. Adequacy of provisions for safe passage of any internal or externally adjacent floodwaters should be reflected here.

(1) A drawing(s) showing the drainage areas and drainage calculations shall be provided.

(2) Cross-sections or elevations of levees should be shown tied into contours. Natural drainage patterns shall not be significantly altered.

(3) The 100-year floodplain shall be shown on this attachment.

(4) As part of the attachment, the following information and analyses shall be submitted for review, as applicable.

(A) Drainage and run-off control analyses:

(i) a description of the hydrologic method and calculations used to estimate peak flow rates and run-off volumes including justification of necessary assumptions;

(ii) the 25-year rainfall intensity used for facility design including the source of the data; all other data and necessary input parameters used in conjunction with the selected hydrologic method and their sources should be documented and described;

(iii) hydraulic calculations and designs for sizing the necessary collection, drainage, and/or detention facilities shall be provided.

(iv) discussion and analyses to demonstrate that natural drainage patterns will not be significantly altered as a result of the proposed landfill development;

(v) structural designs of the collection, drainage, and/or storage facilities, and results of all field tests to ensure compatibility with soils; and

(vi) a maintenance plan for ensuring the continued operation of the collection, drainage, and/or storage facilities, as designed along with the plan for restoration and repair in the event of a washout or failure; and

(vii) erosion and sedimentation control plan, including interim controls for phased development.

(B) Flood control and analyses.

(i) Identify whether the site is located within a 100-year floodplain.

Indicate the source of all data for such determination and include a copy of the relevant Federal Emergency Management Agency (FEMA) flood map, if used, or the calculations and maps used where a FEMA map is not available. Information shall also be provided identifying the 100-year flood level and any other special flooding factors (e. g., wave action) that must be considered in designing, constructing, operating, or maintaining the proposed facility to withstand washout from a 100-year flood. The boundaries of the proposed landfill facility should be shown on the floodplain map.

(ii) If the site is located within the 100-year floodplain, the applicant shall provide information detailing the specific flooding levels and other events (e.g., design hurricane projected by Corps of Engineers) that impact the flood protection of the facility. Data should be that required by §§301.33-301.36 of this title (relating to Approval of Levees and Other Improvements).

(iii) No solid waste disposal and treatment operations shall be permitted in areas that are located in a floodway as defined by FEMA.

(g) Attachment 7 - final contour map. This is a constructed map showing the final contour of the entire landfill to include internal drainage and side slopes plus accommodation of surface drainage entering and departing the completed fill area plus areas subject to flooding due to a 100-year frequency flood. Cross-sections shall be provided.

(h) Attachment 8 - cost estimate for closure and post-closure care. The applicant shall submit a cost estimate for closure and post-closure care costs in accordance with Subchapter K of this chapter (relating to Closure, Post-Closure, and Corrective Action).

(i) Attachment 9 - Applicant's statement. The applicant, or the authorized representative empowered to make commitments for the applicant, shall provide a statement that he is familiar with the site development plan and is aware of all commitments represented in the plan, that he is also familiar with all pertinent requirements in this chapter, and that he agrees to develop and operate the site in accordance with the plan, the regulations, and any permit special provisions that may be

imposed.

(j) Attachment 10 - soil and liner quality control plan (SLQCP). The SLQCP shall be prepared in accordance with §§330.200-330.206 of this title (relating to Groundwater Protection Design and Operation).

(k) Attachment 11 - groundwater sampling and analysis plan (GWSAP). The GWSAP shall be prepared in accordance with §§330.230-330.242 of this title (relating to Groundwater Monitoring and Corrective Action).

(l) Attachment 12 - final closure plan. The final closure plan shall be prepared in accordance with §§330.250-330.256 of this title (relating to Closure and Post-Closure).

(m) Attachment 13 - post-closure care plan. The post-closure care plan shall be prepared in accordance with §§330.250-330.256 of this title (relating to Closure and Post-Closure).

(n) Attachment 14 - landfill gas management plan.

(1) Owners or operators of all MSWLF units shall ensure that:

(A) the concentration of methane gas generated by the facility does not exceed 25% of the lower explosive limit for methane in facility structures (excluding gas control or recovery

system components); and

(B) the concentration of methane gas does not exceed the lower explosive limit for methane at the facility property boundary. For purposes of this section, "lower explosive limit" means 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.

(2) Owners or operators of all MSWLF units shall implement a routine methane monitoring program to ensure that the standards of paragraph (1) of this subsection are met.

(A) the type and frequency of monitoring shall be determined based on the following factors:

(i) soil conditions;

(ii) the hydrogeologic conditions surrounding the facility;

(iii) the hydraulic conditions surrounding the facility;

(iv) the location of facility structures and property boundaries; and

(v) the location of any utility lines or pipelines that cross the MSWLF

facility.

(B) The minimum frequency of monitoring shall be quarterly.

(3) If methane gas levels exceeding the limits specified in paragraph (1) of this subsection are detected, the owner or operator shall:

(A) immediately take all necessary steps to ensure protection of human health and notify the executive director, local and county officials, emergency officials, and the public;

(B) within seven days of detection, place in the operating record the methane gas levels detected and a description of the steps taken to protect human health; and

(C) within 60 days of detection, implement a remediation plan for the methane gas releases, place a copy of the plan in the operating record, provide a copy to the executive director and notify the executive director that the plan has been implemented. The plan shall describe the nature and extent of the problem and the proposed remedy. After review, the executive director may require additional remedial measures.

(4) The executive director may establish alternative schedules for demonstrating compliance with paragraphs (2) and (3) of this subsection.

(5) The gas monitoring and control program shall continue for a period of thirty years after the final closure of the facility or until the owner or operator receives written authorization to reduce the program. Authorization to reduce gas monitoring and control shall be based on a demonstration by the owner or operator that there is no potential for gas migration beyond the property boundary or into on-site structures. Demonstration of this proposal shall be supported by data collected and additional studies as required.

(6) Gas monitoring and control systems shall be modified as needed to reflect changing on-site and adjacent land uses. Post-closure land use at the site shall not interfere with the function of gas monitoring and control systems. Any underground utility trenches that cross the MSWLF facility boundary shall be vented and monitored regularly.

(7) A landfill gas management plan shall be prepared that includes the following:

(A) a description of how landfill gases will be managed and controlled;

(B) a description of the proposed system(s), including installation procedures and time-lines for installation, monitoring procedures, and procedures to be used during maintenance;
and

(C) a backup plan to be used if the main system breaks down or becomes ineffective.

(8) Perimeter monitoring network shall be installed in accordance with the following provisions:

(A) initial monitoring at small MSWLFs and larger MSWLFs that have no habitable structures within 3,000 feet of the waste placement boundary may consist of perimeter subsurface monitoring around the perimeter of the site using portable equipment and probes. If test results show the presence of methane gas above 10% of the LEL, a permanent monitoring system shall be installed; and

(B) permanent monitoring systems shall be installed on all other MSWLFs.

Technical guidance on monitoring systems may be issued by the executive director.

(9) The monitoring network design shall include provisions for monitoring on-site structures, including, but not limited to, buildings, subsurface vaults, utilities, or any other areas where potential gas buildup would be of concern.

(10) All monitoring probes and on-site structures shall be sampled for methane during the monitoring period. Sampling for specified trace gases may be required by the executive director when there is a possibility of acute or chronic exposure due to carcinogenic or toxic compounds.

(11) Monitoring frequency shall be determined as follows.

(A) As a minimum, quarterly monitoring is required. The executive director may require more frequent monitoring based upon the factors listed in this section. When more frequent monitoring is necessary, the executive director shall notify the owner or operator.

(B) More frequent monitoring shall also be required at those locations where results of monitoring indicate that landfill gas migration is occurring or is accumulating in structures.

(o) Attachment 15 - leachate and contaminated water plan.

(1) The plan shall provide the details of the storage, collection, treatment and disposal of the contaminated water, leachate and/or gas condensate from the leachate collection system and/or the gas monitoring and collection system, where used. Contaminated water is water which has come into contact with waste, leachate or gas condensate. This plan shall include the following information:

(A) estimated rate of leachate removal;

(B) capacity of sumps;

(C) pipe material and strength;

(D) pipe network spacing and grading;

(E) collection sump materials and strength;

(F) drainage media specifications and performance; and

(G) demonstration that pipes and perforations will be resistant to clogging and can be cleaned or rehabilitated.

(2) Leachate and gas condensate may be disposed of in a MSWLF unit that is designed and constructed with a composite liner system and a leachate collection system that meets the requirements of §330.200(a)(2) of this title (relating to Design Criteria). Contaminated surface water and groundwater may not be placed in or on the MSWLF unit.

(3) Leachate, gas condensate, contaminated surface water, and contaminated groundwater shall be disposed of at an authorized facility or as authorized by a National Pollutant Discharge Elimination System permit.

(4) On-site collection ponds and impoundments for contaminated water shall be lined with an approved liner.

§330.60. Technical Requirements of an Application for Registration of Solid Waste Facilities

(Type V and Type VI).

(a) General.

(1) This section applies to Type V and Type VI sites that require a registration rather than a permit.

(2) Registration applicants shall submit applications in accordance with the requirements of §305.45 of this title (relating to Contents of Application for Permit) and §330.51 of this title (relating to Permit Application for Municipal Solid Waste Facilities).

(3) Applicants should consult with the executive director to confirm the applicability of specific requirements.

(4) Registration applicants shall submit four copies of the application.

(5) Even though an applicant may not be required to submit detailed supporting data, the executive director recommends that the applicant consider the requirements contained in §§330.150-330.159 of this title (relating to Operational Standards for Solid Waste Processing and Experimental Sites) as a guide in selecting a suitable site location and developing the operational plan. The commission also recommends that the applicant review the operational standards for the specific type of site before completing the application.

(b) Unless an exception is granted by the executive director, the registration application shall be supported by the following:

(1) estimate of the cost of closure of the facility as specified in Subchapter K of this chapter (relating to Closure, Post-Closure, and Corrective Action) and evidence of financial assurance in that amount and in a form specified in Chapter 37, Subchapter R of this title (relating to Financial Assurance for Municipal Solid Waste Facilities).

(2) evidence of competency to operate the site in accordance with §330.52(b)(9) of this title (relating to Technical Requirements of Part I of the Application).

§330.65. Registration for Solid Waste Management Facilities.

(a) Applicability. This section applies to a municipal solid waste management facility that is exempt from permit requirements under §330.4(d), (g), and (q) of this title (relating to Permit Required).

(b) Construction and operation.

(1) The construction of the transfer facility shall not begin until the registration has been issued by the executive director. Operation of the facility shall not begin until the registration has been issued and a pre-opening inspection is conducted by commission staff.

(2) If a registered facility does not begin construction within two years of issuance of a registration or within two years of the conclusion of the appeals process, whichever is longer, the registration shall automatically terminate and will no longer be effective under §330.4(d)(4) of this title. If a facility registered under previous rule does not begin construction within two years of the effective date of this section, or within two years of the conclusion of the appeals process, whichever is longer, the registration shall automatically terminate and will no longer be effective.

(3) If a transfer station registration application was filed under a previous rule but the registration has not been issued, the applicant shall complete all registration requirements of the previous rule within one year of the effective date of this section or the application will be automatically withdrawn. If a registration application is filed under this section, the applicant shall complete all registration requirements within one year of the date of receipt by the commission or the application will be automatically withdrawn.

(c) Number of copies. Registrants shall submit three copies of the completed application for registration.

(d) Application. The complete registration application shall include Part I of a permit application as required by §330.52 of this title (relating to Technical Requirements of Part I of the Application), including, but not limited to, documentation of population or incoming waste rate, site plan, land use narrative, site operating plan, legal description, evidence of competency, evidence of financial assurance, and an applicant's statement, and shall be submitted as follows.

(1) Documentation of population or incoming waste rate.

(A) Documentation of the population to be served shall be submitted with the application. The population information shall be consistent with the latest population data from the last decennial census;

(B) Documentation of the incoming waste rate shall be submitted with the application. The incoming municipal solid waste rate shall be supported by the reports submitted for calculation of the municipal solid waste disposal fee for the previous six reporting quarters, documentation of new or existing programs that recycle and would reduce the waste loading for the facility, existing data of the municipal solid waste generated by the area to be served, or other data acceptable to the executive director.

(2) Site plan. The site plan shall include all the general design criteria which could be incorporated in a set of construction plans and specifications. A site layout plan, signed and sealed by a registered professional engineer, and a location map shall be included in the plan.

(A) The site plan or location map, or both, shall identify:

(i) the site boundary;

(ii) access to public roadway;

(iii) site access control features; and

(iv) site drainage features.

(B) Site drawings shall include a north arrow, legend, and scale. All design features shall be labeled.

(C) The site plan may be supplemented with additional sheets as needed to depict all design features.

(3) Land use narrative.

(A) The land use narrative shall include a description of the surrounding land use within one-half mile of the site and it shall be shown on a topographic map.

(B) The applicant shall attach documentation of local government approval/acceptance of the site location, e.g., conformity with local zoning restrictions, a building permit, license, nonconforming use authorization, etc. These regulations do not grant authorization for development/operation of the facility in noncompliance with local government ordinances and regulations.

(C) The applicant and the commission shall conduct a public meeting in the local area,

prior to facility authorization, to describe the proposed action to the general public. Notice of the public meeting shall be as specified in §39.101(d) of this title (relating to Application for Municipal Solid Waste Permit).

(D) Landowners list and land ownership maps. The applicant shall provide a list of landowners owning land within 500 feet of the site which includes their addresses along with a map locating the property owned by those persons. This map and list shall identify property owned by adjacent landowners and show all property ownership within 500 feet of the site.

(4) Site operating plan.

(A) The site operating plan shall include, as a minimum, a description of the solid waste data, the facility operation, operational characteristics of the equipment, facility maintenance, safety provisions, emergency procedures, fire protection, sanitation, facility rules, operating hours, litter control procedures, and vector control procedures.

(B) The plan shall also address alternate processing or disposal procedures of the solid waste in the event that the facility becomes inoperable for periods longer than 24 hours.

(C) The solid waste data shall include an estimate of the amount of solid waste to be received daily, the maximum amount of solid waste to be stored, the maximum and average lengths of time that solid waste is to remain on the site, and the intended destination of the solid waste received at

this site;

(5) Legal description. A legal description of the property, including the book and page number of the county deed records of the current property owner shall be submitted. The legal description shall be a metes and bounds description of the site signed and sealed by a registered professional land surveyor. A drawing of the description, signed and sealed by the surveyor, shall also be submitted. If the property is platted, the book and page number of the final plat record and a copy of the final plat shall be submitted.

(6) Evidence of competency.

(A) The applicant shall submit a list of all Texas solid waste sites which the applicant has owned or operated within the past ten years. The site name, site type, permit or registration number, county, and dates of operation shall be also submitted.

(B) The names of the principals and supervisors of the applicant's organization shall be provided, together with previous affiliations with other organizations engaged in solid waste activities.

(7) Evidence of financial assurance. Evidence of financial assurance shall be provided in accordance with Subchapter K of this chapter (relating to Closure, Post Closure, and Corrective Action) and Chapter 37, Subchapter R of this title (relating to Financial Assurance for Municipal Solid Waste Facilities).

(8) Statement of applicant. The applicant shall provide documentation that the person signing the application meets the requirements of §305.44 of this title (relating to Signatories to Applications). The following document shall be signed, notarized, and submitted with the application:

Figure: 30 TAC §330.65(d)(8) (No change.)

(e) Design criteria.

(1) Site access. The site access road from a publicly owned roadway shall be at least a two-lane gravel or paved road, designed for the expected traffic flow. Safe on-site access for commercial collection vehicles and for residents shall be provided. The access road design shall include adequate turning radii according to the vehicles that will utilize the site and shall avoid disruption of normal traffic patterns. A positive means to control dust and mud shall be provided.

(2) Access control. Access to the site shall be controlled by a perimeter fence, four-foot barbed wire or six-foot chain-link, with lockable gates. An attendant shall be on-site during operating hours. A sign shall be provided that gives the site name, registrant name, registration number, operating hours, and site rules.

(3) Miscellaneous design details. The facility shall be designed in accordance with all local building code and land development code requirements. Building setback lines shall be followed, if applicable. Vehicle parking shall be provided for equipment, employees, and visitors. Safety bumpers

at hoppers shall be provided for vehicles. Necessary connections for facility cleaning shall be provided. Provisions shall be made to prevent the entry of precipitation into vehicles. The operating area and transport shall be enclosed by walls, chain-link fencing, and/or gates.

(4) Water pollution control. Provisions for the treatment of wastewaters from the facility shall be provided. A connection into a public sewer system, a septic system, or a small wastewater treatment plant are acceptable. On-site wastewater treatment systems shall comply with Chapter 285 of this title (relating to On-site Wastewater Treatment). The applicant shall obtain any permit or other approval required by state or local code for the system installed. The floor of the operating area shall be concrete, and the walls of the operating areas shall be smooth masonry, metal or concrete. A sump drain shall be provided to collect all wastewaters generated by the facility, and transport them to the treatment facility.

(5) Air pollution and ventilation. Ventilation of structures designed in accordance with applicable codes shall be provided. The facility shall be designed and operated to prevent nuisance odors from leaving the property boundary of the facility.

(A) Openings to process buildings required under subsection (f)(1) of this section shall be controlled to prevent releases of nuisance odors to the atmosphere.

(B) All odor control equipment shall be properly maintained and operated during the process operation.

(C) The applicant shall employ one or more of the following measures:

(i) air scrubber units for odor control;

(ii) on-site buffer zones for odor control;

(iii) additional waste handling procedures, storage procedures, and clean-up procedures for odor control when accepting putrescible waste; or

(iv) alternative ventilation and odor control measures approved by the executive director.

(6) Storage requirements. On-site storage of source-separated recyclable materials should be provided and this area shall be separate from the transfer area. Control of odors, vectors, and windblown waste from the storage area shall be maintained.

(7) Fire protection. A fire protection plan shall be prepared. This fire protection plan shall describe the source of fire protection (a local fire department, fire hydrants, fire extinguishers, water tanks, water well, etc.), procedures for using the fire protection source, and employee training and safety procedures. The fire protection plan shall comply with local fire codes.

(8) Noise pollution and screening. Screening or other measures to minimize the noise

pollution and adverse visual impacts shall be provided.

(9) Site drainage. Drainage provisions for controlling surface water on or near the site shall be provided. The locations of any proposed dikes, berms, storm sewers, levees, detention ponds, and the outfall point shall be identified. Drainage calculations shall be in accordance with §330.55 of this title (relating to Site Development Plan).

(10) Site facilities. The site shall provide facilities for potable water, sanitary purposes, office, maintenance, and solid waste transfer. Concrete pads with raised curbs around the perimeter or asphalt paved areas with berms shall be utilized to control spills and contaminated water.

(11) Additional technical information for composting facilities. For registration of composting facilities, additional technical information related to the specifics of composting shall be submitted by the applicant in accordance with the criteria for composting facilities provided by the commission.

(f) Additional design criteria.

(1) Process area. The process area for transfer stations that recover material from solid waste that contains putrescibles shall be maintained totally within an enclosed building.

(2) Operational design standards. In designing the transfer facility the applicant shall

ensure that all requirements of operation required by Subchapter G of this chapter (relating to Operational Standards for Solid Waste Processing and Experimental Sites) will be met. Operational design standards shall be included in the site operating plan.

(3) Safety plan. The applicant shall provide a written safety plan for site workers that operate material recovery equipment or that will hand sort recoverable material from the nonsegregated incoming waste.

(g) Motion for Reconsideration. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final approval of an application, under §50.39(b)-(f) of this title (relating to Motion for Reconsideration), of the executive director's final approval of an application. The criteria regarding motions for reconsideration shall be explained in public notices given under Chapter 39 of this title (relating to Public Notice) and §50.33 of this title (relating to Executive Director Action on Application). Notice of issuance of registration shall be mailed to landowners as shown on the land ownership map and landowners list required by §330.65(d)(3)(D) of this title (relating to Registration for Solid Waste Management Facilities), and to any other person requesting notice.

§330.66. Liquid Waste Transfer Facility Design and Operation.

(a) Applicability.

(1) This section shall apply to a municipal solid waste management facility that handles only liquid waste and which is exempt from permit requirements under §330.4(r) of this title (relating to Permit Required).

(2) New liquid waste transfer facilities with permanent holding vessels (fixed facilities) must comply with all requirements of this section prior to operation.

(3) New liquid waste transfer facilities that only transfer from vehicle to vehicle must comply with applicable requirements of this section prior to operation.

(4) Existing liquid waste transfer facilities must comply with applicable requirements of this section and must notify the Texas Natural Resource Conservation Commission (TNRCC) of their operation within 30 days of the effective date of these regulations.

(5) Temporary storage facilities as defined in §312.147 of this title (relating to Temporary Storage) that store 8,000 gallons or less for a period of four days or less in mobile containers are not required to follow the liquid waste transfer station rules in this section. Owners and operators of temporary storage facilities that store 8,000 gallons or less for a period of four days or less must follow the notification rules in this section.

(6) Secondary transporters of liquid wastes as defined in §312.148 of this title (relating to Secondary Transportation of Waste) are subject to all applicable requirements in this section.

(7) This section is applicable to liquid waste transfer facilities located on or at other TNRCC authorized facilities.

(b) Public meeting. The owner or operator of each liquid waste transfer facility shall conduct a public meeting in the local area within 30 days of facility operation, or as determined by the executive director, to describe the proposed action to the general public. A one time notice of the public meeting shall be provided by the facility owner or operator two weeks prior to the meeting in the format prescribed in the Health and Safety Code, §361.0791(d) and (e) (relating to Public Meeting and Notice Requirements). Evidence that the meeting was held shall be submitted to the TNRCC in the form of a copy of the meeting notice as published and a notarized statement from the facility owner or operator stating that the meeting was held and stating the meeting date and location. This meeting requirement is applicable to all liquid waste transfer facilities.

(c) Notification. The owner or operator shall notify the executive director in writing of the intent to operate a liquid waste transfer facility 30 days prior to the operation of the facility by completing a TNRCC Form entitled "Notice of Intent to Operate a Liquid Waste Transfer Facility," available from the TNRCC. The facility will be issued a registration number by the TNRCC upon receipt of the Form. Documentation of the facility design and operation shall be maintained as follows.

(1) Waste data. For all liquid waste transfer facilities, documentation of the incoming and outgoing liquid waste rate shall be maintained at the facility or at the facility headquarters, as applicable. The incoming liquid waste rate shall be supported by trip ticket receipts and annual reports.

Random sampling and analysis of the incoming waste should be conducted and records maintained.

(2) Site plan. For fixed facilities only, a site layout plan, signed and sealed by a registered professional engineer, and a location map must be maintained at the facility.

(3) Land-use. For all liquid waste transfer facilities, the owner or operator shall maintain documentation at the facility of local government approval/acceptance of the site location, e.g., conformity with local zoning restrictions, a building permit, license, nonconforming use authorization, deed restrictions, etc. These regulations do not grant authorization for any activities of the facility that are not in compliance with local government ordinances and regulations.

(4) Site operating plan.

(A) A site operating plan shall be maintained at the facility or at the facility headquarters for all liquid waste transfer facilities. The site operating plan shall include, at a minimum, a description of the general liquid waste data, the facility operation, facility maintenance, safety provisions, emergency procedures, fire protection, operating hours, spill control procedures, and vector control procedures.

(B) For each facility, the plan shall also address alternate procedures in the event that the facility becomes inoperable for periods longer than 24 hours.

(C) For all liquid waste transfer facilities, the liquid waste data shall be maintained to include an estimate of the amount of liquid waste to be received daily, the maximum amount of liquid waste to be stored, the maximum and average lengths of time that liquid waste is to remain on the site, and the intended destination of the liquid waste received. The data shall be maintained either at the facility or at the facility headquarters.

(D) The plan shall address emergency procedures for catastrophic vessel failure, for accidental discharges, and for spills of liquid waste. For fixed storage facilities, a plan shall be maintained on site that addresses yearly vessel inspection and procedures to repair leaks, if found. In the event of a discharge or spill of waste at the transfer facility the owner or operator of the facility must take appropriate action to protect human health and the environment, e.g., notify local law enforcement and health authorities; dike the discharge area; clean up any waste discharge that occurs; or take such action as may be required or approved by federal, state, or local officials having jurisdiction so that the waste discharge no longer presents a public health or environmental problem.

(5) Legal description. For all liquid waste transfer facilities, a legal description of the property, including the book and page number of the county deed records of the current property owner, shall be maintained at the site or at the facility headquarters. If the property is platted, the book and page number of the final plat record and a copy of the final plat shall be maintained on site or at the facility headquarters.

(6) Evidence of financial assurance. For fixed facilities only, evidence of assurance shall

be submitted to the TNRCC in accordance with Subchapter K of this chapter (relating to Closure, Post-Closure, and Corrective Action) and Chapter 37, Subchapter R of this title (relating to Financial Assurance for Municipal Solid Waste Facilities). A cost estimate of the cost to close the facility shall be submitted with the notice. The financial assurance document shall be submitted prior to facility operation. The financial assurance instrument will be released upon approval of the executive director.

(7) Statement of owner or operator. The following document shall be signed, notarized, and submitted with the notification form:

Figure: 30 TAC §330.66(c)(7) (No change.)

(d) Design criteria.

(1) Facility design. The facility shall be designed in accordance with all local building codes, land development code requirements, and deed restrictions, if applicable. Building setback lines shall be followed, if applicable. Vehicle parking shall be provided on-site for equipment and employees. Necessary water connections for facility cleaning shall be provided.

(2) Water pollution control. Lagoons, opentop storage facilities, and open vessels are prohibited. Underground storage facilities are prohibited. Provisions for the handling of spilled liquids and any washdown waters from the facility shall be provided. Normally, at fixed facilities, concrete pads with raised curbs around the perimeter, asphalt-paved areas with berms, or the equivalent containment facilities should be utilized to control spills of waste and any other contaminated water.

Other spill control methods are acceptable.

(3) Odor control. All liquid waste transfer facilities shall be designed to transfer liquids with a minimal time exposure of liquid waste to the air. The owner or operator shall consider all necessary measures to prevent or eliminate nuisance odors. All liquid waste shall be stored in odor retaining containers and vessels. The applicant should consider additional on-site buffer zones for odor control. The facility shall be designed and operated to prevent nuisance odors from leaving the property boundary of the facility. If nuisance odors are found to be passing the facility property boundary, the facility owner or operator may be required to suspend operations until the nuisance is abated.

(4) Visual screening. Screening or other measures to minimize adverse visual impacts should be considered where appropriate.

(5) Site drainage. For fixed facilities only, drainage provisions for controlling surface water on or near the site shall be provided. The locations of any proposed dikes, berms, storm sewers, levees, detention ponds, and the outfall point shall be identified in the site plan.

(6) 100-year flood. If the fixed facility is located in a 100-year floodplain, the facility shall be designed to prevent washout of contaminants. Such designs normally include levees and other flood control structures.

(7) Site access. The site access road from a publicly-owned roadway to each facility shall be at least a two-lane gravel or paved road, designed for the expected traffic flow. Safe on-site access for waste transporter vehicles shall be provided. The access road design shall include adequate turning radii according to the vehicles that will utilize the site and shall avoid disruption of normal traffic patterns. A positive means to control dust and mud shall be provided.

(8) Access control. Access to each site should be controlled by a perimeter fence, four-foot barbed wire or six-foot chain-link, or equivalent, with lockable gates. A sign shall be provided that gives the site name, owner or operator's name, facility registration number, operating hours, telephone number, and site rules.

(e) General prohibitions. A person may not cause, suffer, allow, or permit the collection, storage, transportation, processing, or disposal of liquid waste, or the use or operation of a liquid waste facility to store, process, or dispose of liquid waste, in violation of the Texas Solid Waste Disposal Act, or any regulations, rules, permit, license, order of the commission or in such a manner so as to cause:

(1) the discharge or imminent threat of discharge of liquid waste into or adjacent to the waters in the state without obtaining specific authorization for such discharge from the commission;

(2) the creation and maintenance of a nuisance; or

(3) the endangerment of the human health and welfare or the environment.

§330.70. Registration of Facilities that Recover Gas for Beneficial Use.

(a) Applicability. This section shall apply to a municipal solid waste management Type IX facility which is exempt from permit requirements under §330.4(n) of this title (relating to Permit Required).

(b) Relationship with other rules. All municipal solid waste landfill facilities accepting waste after October 9, 1993, applying for a non-beneficial use gas control system for any area within the facility's permit boundary shall apply for a permit modification pursuant to §305.70 of this title (relating to Permit Modification).

(c) Relationship to previously permitted Type IX facilities. Type IX facility permits previously issued for the recovery and beneficial use of landfill gas are considered to remain valid under applicable permit provisions pursuant to the Texas Health and Safety Code, §361.092.

(d) Public meeting. The owner or operator of each facility that recovers gas for beneficial use shall conduct a public meeting in the local area at least 30 days before beginning facility operation, or as determined by the executive director, to describe the proposed action to the general public. A one time notice of the public meeting shall be provided by the facility owner or operator two weeks prior to the meeting in the format prescribed in the Health and Safety Code, §361.0791(d) and (e) (relating to Public Meeting and Notice Requirements). Evidence that the meeting was held shall be submitted to the TNRCC in the form of a copy of the meeting notice as published and a notarized statement from the

facility owner or operator stating that the meeting was held and stating the meeting date and location.

(e) Registration application. The applicant shall submit an application as follows.

(1) Number of copies. Registrants shall submit four copies of the completed application for registration.

(2) Application. Part I of the application shall be in accordance with §330.52 of this title (relating to Technical Requirements of Part I of the Application). This part includes all items required by §330.45 of this title (relating to Contents of Application for Permit) and §§330.51-330.52 of this title (relating to Permit Procedures). The applicant should consult with the executive director to confirm the applicability of specific requirements. With regard to the submission of the Land Ownership Maps and a Land Ownership List with Part I of the application, upon request by the applicant, the executive director may waive these requirements if they are deemed unnecessary. This letter of request should be included with the application. The remaining parts of the application must be submitted in the form of an engineering plan signed and sealed in accordance with the Texas Engineering Practice Act.

(3) Air quality information. All information necessary to complete the Air Quality Review as prescribed by the TNRCC shall be submitted and approved by the executive director prior to receipt of approval of the registration.

(4) Plans and cross-sections. On a large-scale plan drawing of the site, the applicant shall show the following information:

(A) Site boundaries (show permit boundaries and/or boundaries and dimensions of tract or land or closed municipal solid waste landfill unit on which the gas recovery system is to be developed).

(B) General Plan layout of extraction system and well locations (identify all underground utility easements, limits of waste placement, final contours of facility).

(C) A plan layout showing landfill gas treatment, gas compression, electrical power generation equipment, and any other beneficial gas-use equipment, and indicating limits of waste placement, additional easements required, and existing underground and overhead utility easements.

(D) Streets and roads to provide ingress and egress to the processing facility.

(E) Typical cross sections of final cover with gas extraction system and wells.

(F) Typical details of well placement and manifold placement in conjunction with the final cover system.

(G) Provisions for control of drainage or related items concerning the final contours of

the municipal solid waste unit or facility and any appurtenant drainage features that may result incidental to the constructions of a processing unit and/or fixed structure.

(H) Provisions to assure the integrity of the liner.

(I) For enclosed structures, provisions for fire control facilities (fire hydrants, fire extinguisher, water tanks, and water well), continuous methane monitoring, and explosion-proof fixtures.

(J) A discussion of the proposed method for condensate disposal.

(5) Safety plans. The applicant shall provide written plans for personnel safety and contingency during the design, construction, and operation of the entire gas recovery system.

(6) Recovery system operating plan. The applicant shall provide a written plan for the operation of the entire gas recovery system. The plan shall include, but not necessarily be limited to, the following:

(A) Information necessary to demonstrate that the integrity of the final cover system will not be damaged as a result of the installation of the recovery system;

(B) Routine operational procedures for the entire gas recovery system;

(C) Emergency and contingency procedures for personnel and equipment;

(D) Startup procedures, shutdown, and closure procedures;

(E) Monitoring and maintenance procedures; and

(F) Post-closure care plan for the gas recovery system. The applicant shall provide a post-closure care plan that discusses operational procedures for the extraction and processing system once the municipal solid waste facility is undergoing post-closure care pursuant to §330.254 of this title (relating to Post-Closure Care).

(7) System descriptive data. The applicant shall provide the following:

(A) an estimation of average daily gas production;

(B) an estimation of the design daily gas production;

(C) a description of the process unit;

(D) a list of monitoring and maintenance procedures.

(8) Evidence of financial assurance. Municipal solid waste landfill facilities are subject to

Subchapter K of this chapter (relating to Closure, Post-Closure, and Corrective Action) and Chapter 37, Subchapter R of this title (relating to Financial Assurance for Municipal Solid Waste Facilities).

(9) Requirements of statements and certification. The applicant shall include the following statements and/or applicable signatures.

(A) Statement of applicant.

Figure: 30 TAC §330.70(e)(9)(A) (No change.)

(B) Engineer's certification.

Figure: 30 TAC §330.70(e)(9)(B) (No change.)

(f) Motion for reconsideration. The applicant or a person affected may file with the chief clerk a motion for reconsideration, under §50.39(b)-(f) of this title (relating to Motion for Reconsideration), of the executive director's final approval of an application.

§330.71. Registration for Municipal Solid Waste Facilities that Process Grease Trap Waste, Grit Trap Waste, or Septage.

(a) Applicability.

(1) This section shall apply to new municipal solid waste Type V processing facilities that

process only grease trap waste, grit trap waste or septage or any combination of these three liquid wastes, and are seeking a registration to authorize such activities in accordance with §330.4(s) of this title (relating to Permit Required). For the purposes of this subsection, grit trap waste means only grit trap waste from commercial car washes and excludes grit trap waste from other generators. A Type V processing facility which processes the liquid wastes specified in this section is eligible for a registration if the facility attains a material recovery rate of 10% from the incoming waste for beneficial use or if the facility is located within the boundaries of a commission permitted disposal facility, subject to delineated limitations. Type V facilities not meeting the exemption criteria may apply for a regular permit under §330.51 of this title (relating to Permit Application for Municipal Solid Waste Facilities).

(2) Facilities under this subsection that have been in operation prior to October 9, 1993, and are operating at a treatment facility permitted under the Texas Water Code, Chapter 26 and have not been permitted, may be authorized by notification. Notification shall consist of completion of a commission application form, submittal of process data, submittal of location information, submittal of an operating plan, submittal of a demonstration of the ability to meet applicable effluent standards, and submittal of evidence of compliance with the trip ticket system. Upon completion of the above requirements for notification, the facility will be issued a registration number.

(3) Facilities that have received a permit and wish to add capacity may apply for a registration in lieu of a permit amendment if they meet the permit exemptions established in §330.4(s) of this title.

(b) General prohibitions. A person may not cause, suffer, allow, or permit the collection, storage, transportation, processing, or disposal of liquid waste or solid waste, or the use or operation of a liquid waste processing unit to store, process, or dispose of liquid waste or solid waste, in violation of the Texas Solid Waste Disposal Act, or any regulations, rules, permit, license, registration, or order of the commission or in such a manner so as to cause:

(1) the discharge or imminent threat of discharge of liquid waste or solid waste to the waters of the state without obtaining specific authorization for such discharge from the commission;

(2) the creation and maintenance of a nuisance;

(3) the endangerment of the human health and welfare or the environment.

(c) General facility design requirements.

(1) A statement justifying the facility's exemption from permit requirements as established under §330.4(s) of this title must be included in the registration application.

(2) Waste solids produced by the processing facility must be disposed of in an authorized solid waste disposal facility.

(3) If liquid wastes produced by the processing facility are discharged to a treatment

facility permitted under the Texas Water Code, Chapter 26 the discharge shall not:

(A) interfere with or pass-through the treatment facility;

(B) interfere with or pass-through its treatment processes or operations;

(C) interfere with or pass-through its sludge processes, use or disposal; or

(D) otherwise be inconsistent with the prohibited discharge standards including 40 Code of Federal Regulations (40 CFR) Part 403 "General Pretreatment Regulations for Existing and New Source Pollution."

(4) Discharge to a septic system is prohibited.

(d) General registration, construction, and operation requirements.

(1) Prior to beginning construction, a registration application must be submitted containing all information required by this section to demonstrate compliance with these regulations.

(2) Prior to beginning construction, the applicant together with the executive director, shall conduct a public meeting in the local area to describe the proposed action to the general public. A public meeting under this section is not a contested case hearing under the Administrative Procedure

Act, Texas Government Code, Chapter 2001. Notice of the public meeting shall be given as prescribed by §305.107(c) of this title (relating to Public Meeting and Notice Requirements).

(3) The operation of the facility shall not begin until a pre-opening inspection has been conducted and written authorization to accept waste has been given by the executive director.

(4) Owners and operators must comply with all applicable requirements of this section.

(5) Owners and operators shall remain responsible for making corrections or changes that are necessary to meet requirements prior to operating the facility.

(6) If a registered facility does not begin construction within two years of obtaining its registration, the registration shall terminate and shall no longer be effective under §330.4(s) of this title.

(7) Any change in the site operating plan must be approved prior to implementation.

(e) Registration application. The registration application shall be a completed Part A Application Form and an engineering report prepared and sealed by a professional engineer as required by the Texas Engineering Practice Act. The engineering report shall consist of all applicable information required in §330.52 of this title (relating to Technical Requirements of Part I of the application). Information required by §330.52 of this title includes but is not limited to maps, legal description, property owner affidavit, legal authority, evidence of competency, and evidence of

financial assurance. Additional requirements of the contents of the engineering report are outlined as follows.

(1) Number of copies. Applicants for registration shall submit four copies of the completed application for registration.

(2) Land use narrative.

(A) A land use narrative shall be included in the engineering report with a description of the surrounding land use within one-half mile of the site and generalized indications of land use shall be shown on a topographic map or recent aerial photograph (scale not over 1:12,000).

(B) The applicant shall include documentation of local government review, approval, or acceptance of the site location, e.g., conformity with local zoning restrictions, building permit, license, nonconforming use authorization, etc. These regulations do not grant authorization for development/operation of the facility in noncompliance with local government ordinances and regulations.

(C) Maps shall be supplied that comply with the requirements of §281.5 of this title (relating to Application for Wastewater Discharge, Underground Injection, Municipal Solid Waste, Hazardous Waste, and Industrial Solid Waste Management Permits) by locating the property owned by adjacent and potentially affected landowners. The maps should show all property ownership within 500

feet of the site.

(D) The Adjacent and Potentially Affected Landowners List shall be keyed to the Land Ownership Maps and shall give each property owner's name and mailing address. The list shall comply with the requirements of §281.5 of this title (relating to Application for Wastewater Discharge, Underground Injection, Municipal Solid Waste, Hazardous Waste, and Industrial Solid Waste Management Permits). The list shall include all property owners within 500 feet of the site.

(3) Site plan. A site plan shall be included in the engineering report showing the general design criteria incorporated in a set of general plans and specifications. A site layout plan, signed and sealed by the registered professional engineer preparing the plans shall be provided.

(4) Waste information.

(A) Waste identification. Design information shall be submitted identifying the sources and characteristics of waste proposed to be received for processing. An analysis of each general type of waste to be processed by the facility shall be submitted to include constituent concentrations and characteristics, including, but not limited to: pH; oil and grease concentration; total suspended solids; biochemical oxygen demand; biological oxygen demand; and other constituents that may impact the design or operation of the facility.

(B) Waste data. Waste data shall include: the types and an estimate of the amount of

each liquid waste to be received daily; the maximum amount of waste to be stored at any one point in time; the maximum and average lengths of time that waste is to remain on the site the maximum and average waste processing times; and the intended destination of the solids and liquids generated by this facility. Additionally, if applicable, a descriptive narrative must be included that describes how 10% of the incoming waste will be recovered and its intended use.

(C) Processed wastes. The specifications for the general characteristics and constituent concentrations of all wastes leaving the facility shall be submitted. Written documentation shall be included in the registration application for assurance that all processed waste (liquid and solid) leaving the facility will be adequately handled by other facilities, which are licensed, permitted, registered, or otherwise authorized by the appropriate agencies to receive the solid and liquid wastes generated at the facility at the volumes and concentrations estimated in the facility design. An estimate shall be given for the amount and planned method for testing and final disposal of wastes resulting from the process. An estimate of the volume of process water and the planned method of treatment of such process water shall be provided.

(5) Process design. A process design shall be included to show the general design of the overall processing facility. At a minimum, the following data shall be included:

(A) flow diagrams indicating the processing sequences proposed for the various types of wastes received;

(B) schematic view drawings showing the various phases of collection, separation, treatment, and disposal, as applicable, for the types of wastes received for processing;

(C) proposed odor control measures for each storage, separation, and processing unit;

(D) generalized construction details of all treatment and storage components (i.e., tanks, sumps, etc.) with regard to approximate dimensions and capacities, construction materials, vents, covers, enclosures, protective coatings of exposed surfaces, etc. Vendor performance data sheets on all units shall be provided if available and where applicable;

(E) generalized construction details of slab and subsurface supports of all treatment and storage components;

(F) locations and engineering design details, including supporting calculations, of all spill containment dikes or walls (with indicated freeboard) proposed to enclose all treatment, processing, and storage components and all loading and unloading areas;

(G) plans for the on-site storage of grease, oil, and sludge, including maximum periods of time all recovered materials will remain on-site and the ultimate disposition of such materials off-site; and

(H) proposed disposition of effluent and sludge resulting from all treatment and

processing operations.

(6) Site operating plan. The operating plan must consider applicable requirements of Subchapter G of this chapter (relating to Operational Standards For Solid Waste Processing and Experimental Sites). Where applicable, the site operating plan shall include:

(A) provisions for the control of accidental spillage at the facility;

(B) provisions for periodic cleaning of storage, treatment, and processing units;

(C) maximum allowable period of time unprocessed and processed waste are to remain on-site;

(D) contingency plans for facility breakdown, catastrophic vessel failure, and accidental discharges;

(E) quality control plans to ensure that hazardous waste and other unauthorized wastes will not be unloaded or processed at the facility;

(F) plans indicating how wash waters will be collected and disposed of in an authorized manner;

(G) a description of the facility operation;

(H) operational characteristics of the equipment;

(I) facility maintenance;

(J) emergency procedures;

(K) operating hours;

(L) vector control procedures;

(M) alternate processing procedures in the event the processing facility becomes inoperable for longer than 24 hours;

(N) inspection of incoming loads;

(O) record retention provisions for results of incoming load inspections;

(P) training of personnel to recognize hazardous waste;

(Q) handling procedures for hazardous waste suspected or discovered on-site;

(R) record retention provisions for trip tickets as required by §312.145 of this title (relating to Transporters -- Record Keeping);

(S) record keeping provisions to justify, on a quarterly basis, that 10% or more of the incoming waste is processed to recover recycled products for applicable facilities (failure to achieve the 10% recycling rate in any two quarters within any one year period will cause the registration to terminate and require the facility to obtain a permit); and

(T) odor control provisions.

(7) Legal description. A legal description of the property, including the book and page number of the county deed records, and the name and address of the current property owner shall be submitted. The legal description shall be a metes and bounds description of the site signed and sealed by a registered professional land surveyor. A drawing of the description, signed and sealed by the surveyor, shall also be submitted. If the property is platted, the book and page number of the final plat record and a copy of the final plat shall be submitted.

(8) Evidence of competency.

(A) The applicant shall submit a list of all solid waste facilities which the applicant has owned or operated within the past ten years. The facility name, permit or registration number, location, and dates of operation shall also be submitted.

(B) The names of the principals and supervisors of the applicant's organization shall be provided, together with previous affiliations with other organizations engaged in solid waste activities in Texas.

(9) Evidence of financial assurance. Evidence of financial assurance shall be provided in accordance with Subchapter K of this chapter (relating to Closure, Post-Closure, and Corrective Action) and Chapter 37, Subchapter R of this title (relating to Financial Assurance for Municipal Solid Waste Facilities). A cost estimate of the cost to close the facility shall be submitted as part of the application.

(10) Statement of applicant. The following document shall be signed, notarized, and submitted with the application:

Figure: 30 TAC §330.71(e)(10) (No change.)

(f) Design criteria. The engineering report for the registration application shall consider the following criteria.

(1) Site access. The site access road from a publicly-owned roadway shall be at least a two-lane paved road, designed for the expected traffic flow. The access road design shall include adequate turning radii according to the vehicles that will utilize the site and shall avoid disruption of normal traffic patterns. A positive means to control dust and mud shall be provided.

(2) Access control. Access to the site shall be controlled by a perimeter fence, four or six

foot barbed wire or chain-link, with lockable gates. An attendant shall be on-site during operating hours. A sign shall be provided that gives the site name, registrant name, registration number, and operating hours.

(3) Miscellaneous design details. The facility shall be designed in accordance with all local building code and land development code requirements.

(4) Water pollution control. Provisions for the treatment of wastewaters from the facility shall be provided. The applicant shall obtain any permit or other approval required by state or local code for the system installed. A statement from the treatment facility permitted under the Texas Water Code, Chapter 26 indicating the compatibility of the facility with the treatment facility shall be attached to the application with requirements set by the treatment facility for discharge. The daily effluent design standard for oil and grease concentration leaving the facility and entering a public sewer system shall not exceed 200 mg/liter or the concentration established in the wastewater discharge permit pretreatment limit or the concentration established by the treatment facility permitted under the Texas Water Code, Chapter 26. In general, the following effluent standards should be used for design considerations:

Figure: 30 TAC §330.71(f)(4) (No change.)

(5) Air pollution and ventilation.

(A) The facility shall be designed to prevent nuisance odors from leaving the property

boundary of the permitted facility. The facility shall be designed to allow a minimal time of exposure of liquid waste to the air. All facilities and air pollution abatement devices constructed pursuant to this registration must obtain authorization, pursuant to Chapter 116 of this title (relating to Control of Air Pollution By Permits for New Construction or Modifications), from the Office of Air Quality prior to the start of construction.

(B) Ventilation of structures designed in accordance with applicable codes shall be provided.

(C) An air scrubber unit or equivalent technology for odor control shall be provided for any facility structure that houses a portion of the facility process that handles unprocessed liquid waste or final product that is in open contact with the air.

(D) Suitable deodorants such as biological deodorants, shall be made available to control odors from spills of untreated liquid waste. Openings to processing buildings shall be controlled to prevent release of nuisance odors to the atmosphere.

(E) All air pollution emission capture and abatement equipment or equivalent technology shall be properly maintained and operated during the facility operation. Cleaning and maintenance of the abatement equipment shall be performed as recommended by the manufacturer and as necessary so that the equipment efficiency can be adequately maintained.

(F) A design must be provided showing the unloading of liquid waste into the facility will be in a manner that minimizes waste contact with air.

(G) Air emissions from this facility must not cause or contribute to a condition of air pollution as defined in the Texas Clean Air Act.

(H) Consideration should be given to additional buffer zones within the facility property boundary for odor control.

(I) All liquid waste and solid waste shall be stored in odor retaining containers and vessels.

(J) If nuisance odors are found to be passing the facility boundary, the facility owner or operator may be required to suspend operations until the nuisance is abated.

(K) Notification for upsets and maintenance shall be made in accordance with §101.6 and §101.7 of this title (relating to Notification Requirements for Major Upset and Notification Requirements for Maintenance).

(6) Storage requirements.

(A) On-site storage of recyclable materials should be provided and this area should be

separate from the process area. Control of odors and vectors from the recyclable material storage area shall be maintained.

(B) Storage of unprocessed waste and recycled materials shall be in an enclosed building, vessel, or container.

(7) Fire protection. A fire protection plan shall be prepared. This fire protection plan shall describe the source of fire protection (a local fire department, fire hydrants, fire extinguishers, water tanks, water well, etc.), procedures for using the fire protection source, and employee training and safety procedures. The fire protection plan shall comply with local fire codes.

(8) Noise pollution and screening. Screening or other measures to minimize noise pollution and adverse visual impacts shall be provided.

(9) Site drainage. Drainage provisions for controlling surface water on or near the facility shall be provided. Drainage calculations for the site shall be provided such as those established by standards in §330.55 of this title (relating to Site Development Plan).

(10) Site facilities. The site shall provide facilities for potable water, sanitary purposes, office, maintenance, and recyclable materials storage. Concrete pads with raised curbs around the perimeter of the storage and processing areas or asphalt paved areas with berms shall be utilized to control spills and contaminated water. The applicant must demonstrate that the spill containment

structures are adequate to contain a spill resulting from the catastrophic failure of the largest storage or processing vessel. The storage and process areas shall have secondary containment structures to prevent releases to the waters of the state and to control spills.

(11) The operating plan must consider applicable requirements of Subchapter G of this chapter (relating to Operational Standards For Solid Waste Processing and Experimental Sites). Where applicable, the site operating plan shall include: At a minimum, analyses shall be made for benzene, lead, and total petroleum hydrocarbons (TPH). Sludges that are disposed of at a municipal solid waste landfill must be analyzed annually for benzene, lead, and TPH. At a minimum, effluent from the facility must be analyzed annually for fats, oils, greases and pH. Records of each analysis shall be maintained at the facility for a minimum of three years. All sampling and analysis shall be done according to EPA approved methods.

(12) Sludge control. The facility shall be designed and operated in a manner that sludges produced pass the Paint Filter Liquids Test, (EPA method 9095) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication Number SW-846) (September 1986). The facility shall be designed and operated to produce a sludge that is accepted at municipal landfills and does not exceed the following standards:

Figure: 30 TAC §330.71(f)(12) (No change.)

(13) Storage limits. The maximum time allowed for storage of unprocessed waste is 72 hours.

- (14) Hazardous waste. The facility may not receive hazardous waste.
- (15) 100-Year flood. The facility shall not be located in a 100-year floodplain.
- (g) Enforceability. The regulations under this section are enforceable by local governments of Texas.
- (h) Fees. The liquid waste processing facility shall pay a quarterly fee to the commission based on requirements of §§330.601, 330.602, and 330.603 of this title (relating to Purpose and Applicability, Fees, and Reporting).
- (i) Fee reports. Fee reports shall be submitted to the commission as required by applicable portions of §330.601(b)(3) and §330.603 of this title.
- (j) Motion for Reconsideration. In regard to motions for reconsideration, notwithstanding §50.31(c)(8) of this title (relating to Purpose and Applicability), applications for registration under this subchapter are governed by §50.31(b)-(f) of this title (relating to Motion for Reconsideration). The rights of the public regarding motion for reconsideration shall be explained in public notices given under this section. Notice of issuance of registration shall be mailed to adjacent and potentially affected landowners as shown on the land ownership map and landowners list under subsection (e)(2)(C) and (D) of this section, and to any other person requesting notice. The applicant or a person affected may file with the chief clerk a motion for reconsideration, under §50.39(b)-(f) of this title, of the executive

director's final approval of an application. Notice of issuance of registration shall be published once in the same manner as prescribed by §305.107(c) of this title.

§330.72. Registration for Mobile Liquid Waste Processing Units.

(a) Applicability.

(1) This section shall apply to mobile liquid waste processing units that process grease trap waste, grit trap waste or septage or any combination of these three liquid wastes, and are seeking a registration to authorize such activities in accordance with §330.4(t) of this title (relating to Permit Required). For the purposes of this section liquid waste shall mean grease trap waste, grit trap waste, or septage. For purposes of this section, grit trap waste means grit trap waste from commercial car washes, and excludes grit trap waste from other generators. For purposes of this section, mobile liquid waste processing shall be limited to the processing of liquid waste while at a generator's trap or in transit to or from such a trap.

(2) This section is applicable if liquid waste is discharged to a trap, interceptor, or a treatment facility permitted under the Texas Water Code, Chapter 26 by a mobile liquid waste processor.

(3) This section is not applicable for liquid waste transporters who only transport to an approved disposal site such as a Type I landfill or a Type V processing facility without processing the

waste.

(4) The mobile liquid waste processing units regulated under this section include truck mounted processes that are also known as separator trucks, and any other liquid waste processes that are not considered to be fixed to a specific location.

(5) This section is not meant to supplant rules or ordinances of local governments where stricter standards are in effect.

(6) Existing mobile liquid waste processing units must comply with applicable requirements of this section and must notify the executive director of their operation within 30 days of the effective date of these regulations to receive a schedule for registration application and engineering plan submittal. Full compliance must be achieved by operators of mobile processing units no later than 180 days following the effective date of those regulations.

(7) This section is not applicable to septage if waste has received only a pH adjustment prior to or during transportation for disposal at a treatment facility permitted under the Texas Water Code, Chapter 26 or other authorized facility.

(b) Registration application. The registration application shall consist of three parts. The first part shall be a completed application form supplied by the agency. The second part of the application shall be an engineering report submitted to the agency including, but not limited to: documentation of

incoming waste rates; a process description; a waste monitoring plan; a waste sampling and analysis plan; an indication of expected waste discharge points; evidence of financial assurance; and an accidental spill response plan. The third part of the application is a demonstration of viability conducted at a commission region or central office or demonstrated to a local government.

(c) Mobile processing unit design.

(1) The mobile liquid waste unit should be designed and operated to meet the effluent limits imposed by its treatment facility permitted under the Texas Water Code, Chapter 26 or National Pollutant Discharge Elimination System (NPDES) permit or the following liquid effluent limits if the discharge points do not require compliance with locally set limits:

Figure: 30 TAC §330.72(c)(1) (No change.)

(2) Waste solids (sludges) produced by the mobile processing unit must be disposed of in a solid waste disposal facility regulated by the State of Texas or other location approved by the executive director. Solids should be dewatered to the point that they pass the United States Environmental Protection Agency (EPA) paint filter test, EPA test method 9095, or they should be taken to an authorized facility to be dewatered prior to landfilling.

(3) If effluent produced by the mobile processing unit is discharged to a treatment facility permitted under the Texas Water Code, Chapter 26, the discharge shall not:

(A) interfere with or pass-through the treatment facility;

(B) interfere with or pass-through its treatment processes or operations;

(C) interfere with or pass-through its sludge processes, use or disposal; or

(D) otherwise be inconsistent with the discharge standards including 40 Code of Federal Regulations Part 403 "General Pretreatment Regulations for Existing and New Sources of Pollution."

(4) Written approval from the receiving treatment facility permitted under the Texas Water Code, Chapter 26 must be submitted as a part of the application.

(d) Unit operation.

(1) A registration application must be submitted with all information required by this section to demonstrate compliance with these regulations.

(2) Operation of each mobile unit shall not be initiated until a pre-operation inspection of each mobile unit has been conducted and written authorization to accept waste has been given by the executive director. The pre-operation inspection shall consist of a series of tests to ascertain the quality of effluent delivered to a treatment facility permitted under the Texas Water Code, Chapter 26.

- (3) Owners and operators shall comply with all applicable requirements of this section.
- (4) Owners and operators shall remain responsible for making corrections or changes that are necessary to meet requirements prior to operating the mobile unit.
- (5) If a registered mobile unit does not begin operation within two years of obtaining its registration, the registration shall terminate and shall no longer be effective under §330.4(t) of this title.
- (e) Demonstration of viability. The applicant shall demonstrate under field conditions that the process works. The demonstration shall be conducted under the supervision of experienced executive director staff and when appropriate, with local government staff. The viability demonstration shall be made by processing three traps in a single day representative of the traps normally serviced. The traps shall have been in operation and shall not have been serviced for at least 30 days prior to the demonstration. The volume of material to be processed before unloading shall be consistent with manufacturer's performance specifications and the operating plan, particularly as to the expected ratios between gross volumes processed and amounts discharged following processing. Multiple grab samples of effluent taken from the discharge outlet of the mobile processing unit shall be tested for fats, oils, greases, and pH and shall meet the specified limits in subsection (c)(1) of this section.
- (f) Registration application. The registration application shall be a completed Part A Application Form and an engineering report prepared and sealed by a professional engineer as required by the Texas Engineering Practice Act. Requirements of the contents of the engineering report are

outlined as follows.

(1) Number of copies. Applicants for registration shall submit three copies of the completed application for registration.

(2) Local government approval. The applicant shall include documentation of affirmative local government approval or acceptance of the mobile unit operation, including conformity with local ordinances, local rules, or requirements set forth by the treatment facility for the discharge, including local limits, zoning restrictions, permits, licenses, authorizations, etc. These regulations do not grant authorization for operation of mobile liquid waste processing units in noncompliance with local government ordinances and regulations or without the express approval of the local wastewater authority. Discharge from a mobile liquid waste processing units is allowed only at selected disposal points selected by the local treatment facility permitted under the Texas Water Code, Chapter 26 so that they can be monitored by the local treatment facility.

(3) Mobile processing unit plans. A plan shall be included in the engineering report showing the general unit design criteria incorporated in a set of general plans and specifications. The plans shall be signed and sealed by the registered professional engineer preparing the plans.

(4) Waste information.

(A) Waste identification. For purposes of the process design, information shall be

submitted identifying the sources and characteristics of waste proposed to be received for processing.

An analysis of each general type of waste to be processed by the unit shall be submitted to include constituent concentrations and characteristics such as: pH; fats; oil; and grease concentration, total suspended solids; biological oxygen demand (BOD); and other constituents that may impact the design or operation of the unit.

(B) Solid waste data. The solid waste data shall include: the types and an estimate of the amount of each liquid waste to be processed daily; the maximum amount of liquid and solid waste to be stored at any one point in time; the maximum and average lengths of time that solid waste is to remain in the mobile unit; the maximum and average waste processing times; and the intended destination of all solid and liquid wastes generated by the mobile liquid waste processing unit.

(C) Processed wastes. The specifications for the general characteristics and constituent concentrations of all wastes (liquid and solid) and beneficial use products leaving the mobile unit shall be submitted. Written documentation shall be included in the registration application for assurance that all processed waste (liquid and solid) leaving the unit will be adequately handled by other facilities, which are licensed, permitted, registered or otherwise authorized by the appropriate agencies to receive the solid and liquid wastes generated by the unit at the volumes and concentrations estimated in the unit's design. An estimate shall be given for the amount and planned method for testing and final disposal of wastes resulting from the process. An estimate of the volume of process water and the planned method of treatment of such process water shall be provided.

(5) Process design. A process design shall be included to show the general design of the mobile processing unit. At a minimum, the following data shall be included:

(A) flow diagrams indicating the processing sequences proposed for the various types of wastes received;

(B) schematic view drawings showing the various phases of collection, separation, treatment, and disposal, as applicable, for the types of wastes received for processing;

(C) proposed odor control measures for each storage, separation, and processing unit;

(D) generalized construction details of all treatment and storage components with regard to approximate dimensions and capacities, construction materials, vents, covers, enclosures, protective coatings of exposed surfaces, etc. (Vendor performance data sheets on all units shall be provided if available and where applicable);

(E) generalized details of the method of maintaining records for quantities of liquids and quantities of solids disposed of;

(F) a spill control plan;

(G) plans for monitoring effluent; and

(H) proposed disposition of effluent and sludge resulting from all mobile treatment and processing operations.

(6) Unit operating plan. The operating plan must consider the requirements of §§330.152, 330.156, and 330.156 of this title (relating to Sanitation, Safety, and Fire Protection). The unit operating plan shall include:

(A) provisions for handling accidental spillage at the mobile unit;

(B) provisions for periodic cleaning of mobile storage, treatment, and processing units;

(C) maximum allowable period of time unprocessed and processed waste are to remain in the mobile unit;

(D) contingency plans for unit breakdown;

(E) quality control plans to ensure that hazardous waste and other unauthorized wastes will not be processed by the mobile unit;

(F) a description of how the mobile liquid waste processing unit will conform to the trip ticket system as required by §312.145 of this title, (relating to Transporters -- Recording Keeping) including provisions to monitor quantities of discharge of processed water and waste materials;

(G) a description of the unit's operation;

(H) operational characteristics of the equipment;

(I) maintenance of the unit;

(J) catastrophic spill control procedures;

(K) a description of how sampling and analysis records will be maintained;

(L) vector control procedures;

(M) alternate processing procedures in the event the processing unit becomes inoperable;

(N) generalized indication of the expected waste discharge locations;

(O) record retention for processed wastes;

(P) training of personnel to recognize hazardous waste; and

(Q) handling procedures for hazardous waste suspected or discovered.

(7) Sampling and analysis plan. A plan shall be submitted to show the method of sampling and analysis for the effluent discharged to a trap, interceptor, or treatment facility permitted under the Texas Water Code, Chapter 26. At a minimum the method of sampling, the frequency of sampling, and the tests to be made shall be part of the sampling and analysis plan. All sampling and analysis shall be done according to approved EPA methods. Records shall be maintained for a three year period.

(8) Evidence of competency.

(A) The applicant shall submit a list of all solid waste, liquid waste, or mobile waste units which the applicant has owned or operated within the past ten years. The applicant shall submit a list of any felony convictions dealing with improper handling of solid or liquid waste within the last ten years.

(B) The names of the principals and supervisors of the applicant's organization shall be provided, together with previous affiliations with other organizations engaged in solid or liquid waste activities in Texas.

(9) Evidence of financial assurance. Evidence of financial assurance shall be provided in accordance with Subchapter K of this chapter (relating to Closure, Post-Closure, and Corrective Action) and Chapter 37, Subchapter R of this title (relating to Financial Assurance for Municipal Solid Waste Facilities). A cost estimate of the cost to dispose of the contents of the unit, if abandoned or rendered unusable, shall be submitted prior to operation.

(10) Statement of applicant. The following document shall be signed, notarized, and submitted with the application:

Figure: 30 TAC §330.72(f)(10) (No change.)

(11) Design criteria. The engineering report for the registration application shall consider the following criteria.

(A) Operating hours.

(B) Miscellaneous design details. The unit shall be designed in accordance with all local ordinances, codes, and requirements.

(C) Water pollution control. Provisions for the treatment of wastewaters leaving the mobile unit shall be provided. A connection into a public sewer system is acceptable if approved in writing by the local treatment facility permitted under the Texas Water Code, Chapter 26. The applicant shall obtain any permit or other approval required by state or local code for the system operation. The effluent design standard for oil and grease concentration leaving the mobile unit and entering a public sewer system shall not exceed the lesser of 200 mg/liter total or the concentration established in the local wastewater discharge permit pretreatment limit. Discharge to a septic system is prohibited.

(D) Air pollution.

- (i) Suitable deodorants such as biological deodorants, shall be made available to control odors from spills of treated or untreated liquid waste.
- (ii) Mobile processing units shall be designed to prevent release of nuisance odors to the atmosphere.
- (iii) Cleaning and maintenance of mobile waste processing unit equipment shall be performed each day of operation to reduce odors.
- (iv) Loading of liquid waste into the mobile unit will be in a manner that minimizes waste contact with air.
- (v) Air emissions from this mobile unit must not cause or contribute to a condition of air pollution as defined in the Texas Clean Air Act.
- (vi) All units and air pollution abatement devices constructed pursuant to this registration must obtain authorization, pursuant to Chapter 116 of this title (relating to Control of Air Pollution By Permits for New Construction or Modifications), from the Office of Air Quality prior to the start of construction.
- (vii) Notification for upsets and maintenance shall be made in accordance with §101.6 and §101.7 of this title (relating to Notification Requirements for Major Upset and Notification

Requirements for Maintenance).

(E) Storage requirements. Control of odors and vectors from the storage of waste shall be maintained. Storage of processed or unprocessed waste shall be in an enclosed vessel or container.

(F) Fire protection. A fire protection plan shall be prepared. The fire protection plan shall comply with local fire codes.

(G) Waste analysis. After a registration is issued by the executive director, the registrant shall provide the executive director an analysis of a representative sample of each type of waste received annually. At a minimum analyses shall be made for fats, oil, and greases, pH, benzene, lead, and total petroleum hydrocarbons (TPH). Solids or sludge that are disposed of at a municipal solid waste landfill must be analyzed annually for benzene, lead, and TPH. Effluent from the mobile unit must be analyzed annually for TPH, fats, oil, and grease and pH. If grit trap waste is processed, BOD, total suspended solids (TSS), benzene, TPH, and lead shall be analyzed annually. All effluent results shall be provided to the receiving treatment facility permitted under Texas Water Code, Chapter 26. Records of each analysis shall be maintained at the mobile unit's headquarters for a minimum of three years.

(H) Sludge control. The unit should be designed and operated in a manner that sludges produced for landfilling are dewatered to a point that they pass the Paint Filter Liquids Test, (EPA method 9095) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods"

(EPA Publication Number SW-846) (September 1986). The unit shall be designed and operated to produce a sludge that does not exceed the following standards:

Figure: 30 TAC §330.72(f)(11) (No change.)

(I) Storage limits. The maximum time allowed for storage of unprocessed waste is four days.

(J) Hazardous waste. The mobile processing unit may not receive hazardous waste.

(g) Fees and fee reports.

(1) The mobile liquid waste processing unit shall pay a quarterly fee to the commission based on requirements of §§330.601, 330.602, and 330.603 of this title (relating to Purpose and Applicability, Fees, and Reporting).

(2) Fee reports shall be submitted to the commission as required by applicable portions of §330.601(b)(3) and §330.603 of this title.

(h) General prohibitions. A person may not cause, suffer, allow, or permit the collection, storage, transportation, processing, or disposal of liquid waste or solid waste, or the use or operation of a mobile liquid waste processing unit to store, process, or dispose of liquid waste or solid waste, in violation of the Texas Solid Waste Disposal Act, or any regulations, rules, permit, license, registration,

or order of the commission or in such a manner so as to cause:

(1) the discharge or imminent threat of discharge of liquid waste or solid waste to the waters of the state without obtaining specific authorization for such discharge from the commission;

(2) the creation and maintenance of a nuisance;

(3) the endangerment of the human health and welfare or the environment.

(i) Enforceability. The regulations under this section are enforceable by local governments of Texas.

(j) Notice to local governments. Upon filing a registration application, the applicant shall mail notice to the city, county, and local health department of any local government in which operations will be conducted notifying local governments that an application has been filed. Proof of mailing shall be provided in the form of return receipts for registered mail.

§330.73. Registration of Demonstration Projects for Liquid Waste Processing Facilities.

(a) Applicability. This section shall apply to new municipal solid waste Type VI processing or handling facilities that manage only grease trap waste, grit trap waste, or septage or any combination of these three liquid wastes, and are seeking a registration to authorize such activities in accordance with

§330.4(u) of this title (relating to Permit Required). For the purposes of this subsection grit trap waste means grit trap waste from car washes. Type VI facilities not meeting the exemption criteria may apply for a regular permit under §330.51 of this title (relating to Permit Application for Municipal Solid Waste Facilities).

(b) General facility design requirements.

(1) A statement justifying the facility's exemption from permit requirements as established under §330.4(u) of this title must be included in the registration application. For the purposes of this subchapter, new processes for processing grit trap waste, grease trap waste, and septage are intended to be processes that are not currently in use in Texas.

(2) The facility size shall be limited to a demonstration facility size, which shall be limited to no greater than 10,000 gallons per day.

(3) The project duration shall be limited to a two year period. Re-registration of a demonstration facility may be considered only if the new method being demonstrated is not widely used in Texas.

(4) The facility design and operation shall be coordinated with a consultant connected with an accredited college or university or with a consultant that has demonstrated the ability to carry out a scientific experiment for demonstrating new and unproven waste handling methods.

(5) The registrant shall submit to the executive director an annual and final status report to document the viability of the method being demonstrated. The report, at a minimum, must document the effluent standards and solid waste standards achieved.

(6) If applicable, waste solids produced by the processing facility shall be disposed of in a permitted solid waste disposal facility.

(7) If applicable, liquid wastes produced by the processing facility may be discharged to a treatment facility permitted under the Texas Water Code, Chapter 26. In no event, however, shall such discharge inhibit or disrupt the treatment facility permitted under the Texas Water Code, Chapter 26, its treatment processes or operations, or its sludge processes, use or disposal as defined in 40 Code of Federal Regulations Part 403 "General Pretreatment Regulations for Existing and New Sources of Pollution."

(8) At such time as the executive director determines that the registrant has documented viability of the method being demonstrated, the registrant shall file an application for a permit or registration, as applicable, pursuant to §330.4 of this title (relating to Permit Required). Timely filing of an administratively and technically complete application shall extend the demonstration project duration until such time as the registration or permit is issued. In the event that an application is not timely filed, is withdrawn by the executive director, or is denied, the demonstration project shall terminate.

(c) General registration, construction, and operation requirements.

(1) Prior to beginning construction, a registration application must be submitted containing all information required by this section to demonstrate compliance with these regulations.

(2) Prior to beginning construction, the applicant together with the executive director shall conduct a public meeting in the local area to describe the proposed action to the general public. A public meeting under this section is not a contested case hearing under the Administrative Procedure Act, Texas Government Code, Chapter 2001. Notice of the public meeting shall be given as prescribed by §305.107(c) of this title (relating to Public Meeting and Notice Requirements).

(3) The operation of the facility shall not begin until a pre-opening inspection has been conducted and written authorization to accept waste has been given by the Executive Director.

(4) Owners and operators must comply with all applicable requirements of this section.

(5) Owners and operators shall remain responsible for making corrections or changes that are necessary to meet requirements prior to operating the facility.

(6) If a registered facility does not begin construction within two years of obtaining its registration, the registration shall terminate and shall no longer be effective.

(7) Any change in the site operating plan must be approved prior to implementation.

(d) Registration application. The registration application shall be a completed Part A Application Form and an engineering report prepared and sealed by a professional engineer as required by the Texas Engineering Practice Act. The engineering report shall consist of all applicable information required in §330.52 of this title (relating to Technical Requirements of Part I of the Application). Information required by §330.52 of this title includes, but is not limited to: maps, legal description, property owner affidavit, legal authority, evidence of competency, and evidence of financial assurance. Additional requirements of the contents of the engineering report are outlined as follows.

(1) Number of copies. Applicants for registration shall submit four copies of the completed application for registration.

(2) Land use narrative.

(A) A land use narrative shall be included in the engineering report with a description of the surrounding land use within one-half mile of the site and generalized indications of land use shall be shown on a topographic map or recent aerial photograph (scale not over 1:12,000).

(B) Where applicable, the applicant shall include documentation of local government review, approval, or acceptance of the site location, e.g., conformity with local zoning restrictions,

building permit, license, nonconforming use authorization, etc. These regulations do not grant authorization for development/operation of the facility in noncompliance with local government ordinances and regulations.

(C) Maps shall be supplied that comply with the requirements of §281.5 of this title (relating to Application for Wastewater Discharge, Underground Injection, Municipal Solid Waste, Hazardous Waste, and Industrial Solid Waste Management Permits) by locating the property owned by adjacent and potentially affected landowners. The maps should show all property ownership within 500 feet of the site.

(D) The Adjacent and Potentially Affected Landowners List shall be keyed to the Land Ownership Maps and shall give each property owner's name and mailing address. The list shall comply with the requirements of §281.5 of this title. The list shall include all property owners within 500 feet of the site.

(3) Site plan. A site plan shall be included in the engineering report showing the general design criteria incorporated in a set of general plans and specifications. A site layout plan, signed and sealed by the registered professional engineer preparing the plans shall be provided.

(A) Waste identification. Design information shall be submitted identifying the sources and characteristics of waste proposed to be received for processing. An analysis of each general type of waste to be processed by the facility shall be submitted to include constituent concentrations and

characteristics, including, but not limited to: pH; oil and grease concentration; total suspended solids; biochemical oxygen demand; biological oxygen demand; and other constituents that may impact the design or operation of the facility.

(B) Solid waste data. The solid waste data shall include: the types and an estimate of the amount of each liquid waste to be received; the maximum amount of solid waste to be stored at any one point in time; the maximum and average lengths of time that solid waste is to remain on the site; the maximum and average waste processing times; and the intended destination of the solids and liquids generated by this facility, where applicable.

(C) Processed wastes. The specifications for the general characteristics and constituent concentrations of all wastes leaving the facility shall be submitted, if applicable. Written documentation shall be included in the registration application for assurance that all processed waste (liquid and solid) leaving the facility will be adequately handled by other facilities, which are licensed, permitted, registered or otherwise authorized by the appropriate agencies to receive the solid and liquid wastes generated at the facility at the volumes and concentrations estimated in the facility design. An estimate shall be given for the amount and planned method for testing and final disposal of wastes resulting from the process. An estimate of the volume of process water and the planned method of treatment of such process water shall be provided.

(D) Process design. A process design shall be included to show the general design of the overall processing facility. At a minimum, the following data shall be included:

(i) flow diagrams indicating the processing sequences proposed for the various types of wastes received;

(ii) schematic view drawings showing the various phases of collection, separation, treatment, and disposal, as applicable, for the types of wastes received for processing;

(iii) proposed odor control measures for each storage, separation, and processing unit;

(iv) generalized construction details of all treatment and storage components (i.e., tanks, sumps, etc.) with regard to approximate dimensions and capacities, construction materials, vents, covers, enclosures, protective coatings of exposed surfaces, etc. (Vendor performance data sheets on all units shall be provided if available and where applicable);

(v) generalized construction details of slab and subsurface supports of all treatment and storage components;

(vi) locations and engineering design details, including supporting calculations, of all spill containment dikes or walls (with indicated freeboard) proposed to enclose all treatment, processing, and storage components and all loading and unloading areas;

(vii) plans for the on-site storage of grease, oil, and sludge, including

maximum periods of time all recovered materials will remain on-site and the ultimate disposition of such materials off-site; and

(viii) proposed disposition of effluent and sludge resulting from all treatment and processing operations.

(4) Site operating plan. The operating plan must consider applicable requirements of Subchapter G of this chapter (relating to Operational Standards For Solid Waste Processing and Experimental Sites). Where applicable, the site operating plan shall include:

(A) provisions for the control of accidental spillage at the facility;

(B) provisions for periodic cleaning of storage, treatment, and processing units;

(C) maximum allowable period of time unprocessed and processed waste are to remain on-site;

(D) contingency plans for facility breakdown, catastrophic vessel failure, and accidental discharges;

(E) quality control plans to ensure that hazardous waste and other unauthorized wastes will not be unloaded or processed at the facility;

(F) plans indicating how wash waters will be collected and disposed of in an authorized manner;

(G) a description of the facility operation;

(H) operational characteristics of the equipment;

(I) facility maintenance;

(J) emergency procedures;

(K) operating hours;

(L) vector control procedures;

(M) alternate processing procedures in the event the processing facility becomes inoperable for longer than 24 hours;

(N) inspection of incoming loads;

(O) record retention provisions for results of incoming load inspections;

(P) training of personnel to recognize hazardous waste;

(Q) handling procedures for hazardous waste suspected or discovered on-site;

(R) record retention provisions for trip tickets as required by §312.145 of this title (relating to Transporters -- Record Keeping); and

(S) record retention provisions documenting the process or handling method.

(5) Legal description. A legal description of the property, including the book and page number of the county deed records, and the name and address of the current property owner shall be submitted. The legal description shall be a metes and bounds description of the site signed and sealed by a registered professional land surveyor. A drawing of the description, signed and sealed by the surveyor, shall also be submitted. If the property is platted, the book and page number of the final plat record and a copy of the final plat shall be submitted.

(6) Evidence of competency.

(A) The applicant shall submit a list of all solid waste facilities which the applicant has owned or operated within the past ten years. The facility name, permit or registration number, location, and dates of operation shall also be submitted.

(B) The names of the principals and supervisors of the applicant's organization shall be provided, together with previous affiliations with other organizations engaged in solid waste activities in Texas.

(7) Evidence of financial assurance. Evidence of financial assurance shall be provided in accordance with Subchapter K of this chapter (relating to Closure, Post-Closure, and Corrective Action) and Chapter 37, Subchapter R of this title (relating to Financial Assurance for Municipal Solid Waste Facilities). A cost estimate of the cost to close the facility shall be submitted as part of the application.

(8) Statement of applicant. The following document shall be signed, notarized, and submitted with the application:

Figure: 30 TAC §330.73(d)(8) (No change.)

(e) Design criteria. The engineering report for the registration application shall consider the following criteria.

(1) Site access. The site access road from a publicly-owned roadway shall be at least a two-lane paved road, designed for the expected traffic flow. The access road design shall include adequate turning radii according to the vehicles that will utilize the site and shall avoid disruption of normal traffic patterns. A positive means to control dust and mud shall be provided.

(2) Access control. Access to the site should be controlled by a perimeter fence with

lockable gates. A sign shall be provided that gives the site name, registrant name, registration number, and operating hours.

(3) Miscellaneous design details. The facility shall be designed in accordance with all local building code and land development code requirements.

(4) Water pollution control. Provisions for the treatment of wastewaters from the facility shall be provided. A connection into a public sewer system is acceptable. The applicant shall obtain any permit or other approval required by state or local code for the system installed. A statement from the treatment facility permitted under the Texas Water Code, Chapter 26 of indicating the compatibility of the facility with the treatment facility shall be attached to the application. The daily effluent design standard for oil and grease concentration leaving the facility and entering a public sewer system shall not exceed 200 mg/liter or the concentration established in the wastewater discharge permit pretreatment limit. A discharge to a septic system is prohibited. In general, the following effluent standards should be used for design considerations:

Figure: 30 TAC §330.73(3)(4) (No change.)

(5) Air pollution and ventilation.

(A) The facility shall be designed to prevent nuisance odors from leaving the property boundary of the authorized facility.

(B) The facility shall be designed to allow a minimal time of exposure of liquid waste to the air.

(C) All facilities and air pollution abatement devices constructed pursuant to this registration must obtain authorization, pursuant to Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification), from the Office of Air Quality prior to the start of construction.

(D) Ventilation of structures designed in accordance with applicable codes shall be provided. An air scrubber unit or equivalent technology for odor control shall be provided for any facility structure that houses a portion of the facility process that handles unprocessed liquid waste. Suitable deodorants such as biological deodorants, shall be made available to control odors from spills of untreated liquid waste.

(E) Openings to processing buildings shall be controlled to prevent release of nuisance odors to the atmosphere. All air pollution emission capture and abatement equipment or equivalent technology shall be properly maintained and operated during the facility operation. Cleaning and maintenance of the abatement equipment shall be performed as recommended by the manufacturer and as necessary so that the equipment efficiency can be adequately maintained.

(F) A design must be provided showing the unloading of liquid waste into the facility will be in a manner that minimizes waste contact with air. Air emissions from this facility must not

cause or contribute to a condition of air pollution as defined in the Texas Clean Air Act.

(G) All liquid waste and solid waste shall be stored in odor retaining containers and vessels.

(H) If nuisance odors are found to be passing the facility boundary, the facility owner or operator may be required to suspend operations until the nuisance is abated. Notification for upsets and maintenance shall be made in accordance with §101.6 and §101.7 of this title (relating to Notification for Major Upset and Notification for Requirements for Maintenance).

(6) Storage requirements. Storage of unprocessed waste shall be in an enclosed building, vessel, or container.

(7) Fire protection. A fire protection plan shall be prepared. This fire protection plan shall describe fire protection procedures (a local fire department, fire hydrants, fire extinguishers, water tanks, water well, etc.), and employee training and safety procedures. The fire protection plan shall comply with local fire codes.

(8) Noise pollution and screening. Screening or other measures to minimize noise pollution and adverse visual impacts shall be provided.

(9) Site drainage. Drainage provisions for controlling surface water on or near the facility

shall be provided. Drainage calculations shall be provided such as those established by standards in §330.55 of this title (relating to Site Development Plan).

(10) Spill control facilities. The process area shall have secondary containment structures to prevent releases to the waters of the state and to control spills.

(11) Waste analysis. After a registration is issued by the executive director, the registrant shall provide the executive director an analysis of a representative sample of each type of waste received each quarter or at a frequency determined by the executive director. At a minimum, analyses shall be made for benzene, lead, and total petroleum hydrocarbons (TPH). Sludges that are disposed of at a municipal solid waste landfill must be analyzed quarterly for benzene, lead, and TPH. Effluent from the facility must be analyzed quarterly for fats, oils, grease and pH. Records of each analysis shall be maintained at the facility for a minimum of five years.

(12) Sludge control. Where applicable, the facility shall be designed and operated in a manner that sludges produced are dried to a point that they pass the Paint Filter Liquids Test, (EPA method 9095) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication Number SW-846) (September 1986). Generally, the facility should be designed and operated to produce a sludge that is acceptable at municipal landfills and does not exceed the following standards:

Figure: 30 TAC §330.73(e)(12) (No change.)

(13) Storage limits. The maximum time allowed for storage of unprocessed waste is 72 hours.

(14) Hazardous waste. Receipt of hazardous waste is prohibited.

(15) 100-year flood. The facility shall not be located in a 100-year floodplain.

(f) General prohibitions. A person may not cause, suffer, allow, or permit the collection, storage, transportation, processing, or disposal of liquid waste or solid waste, or the use or operation of a liquid waste processing facility to store, process, or dispose of liquid waste or solid waste, in violation of the Texas Solid Waste Disposal Act, or any regulations, rules, permit, license, registration, or order of the commission or in such a manner so as to cause:

(1) the discharge or imminent threat of discharge of liquid waste or solid waste into or adjacent to the waters in the state without obtaining specific authorization for such discharge from the commission;

(2) the creation and maintenance of a nuisance; or

(3) the endangerment of the human health and welfare or the environment.

(g) Enforceability. The regulations under this section are enforceable by local governments of

Texas.

(h) Motion for reconsideration. In regard to motions for reconsideration, notwithstanding §50.31(c)(8) of this title (relating to Purpose and Applicability), applications for registration under this subchapter are governed by §50.31(b)-(f) of this title (relating to Motion for Reconsideration). The rights of the public regarding motion for reconsideration shall be explained in public notices given under this section. Notice of issuance of registration shall be mailed to adjacent and potentially affected landowners as shown on the land ownership map and landowners list under subsection (d)(2)(C) and (D) of this section, and to any other person requesting notice. The applicant or a person affected may file with the chief clerk a motion for reconsideration, under §50.39(b)-(f) of this title, of the executive director's final approval of an application. Notice of issuance of registration shall be published once in the same manner as prescribed by §305.107(c) of this title.

(i) Variances.

(1) In specific cases the executive director may approve a variance from the requirements of this section if the variance is not contrary to the public health and safety. A variance may not be approved concerning the procedural requirements of this section.

(2) A request for a variance must be submitted in writing to the executive director. The request may be made in an application for a registration. Any approval of a variance must be in writing from the executive director.

**SUBCHAPTER I : GROUNDWATER MONITORING AND
CORRECTIVE ACTION**

§330.238

STATUTORY AUTHORITY

The amendment is adopted under TWC, §5.103 and §5.105, which provide the commission with the authority to adopt any rules necessary to carry out its powers and duties under the laws of this state.

This amendment is also adopted under the Solid Waste Disposal Act in HSC, §361.011, which provides the commission with the authority to manage municipal solid waste; HSC, §361.024, which provides the commission with the authority to adopt rules and establish standards of operation for the management of solid waste; and HSC, §361.085, which provides the commission with the authority to require financial assurance demonstrations for solid waste, hazardous waste, and permitted facilities.

Together, these statutes authorize the commission to adopt any rules necessary to carry out its powers and duties under TWC and other laws of Texas and to establish and approve all general policy of the commission.

§330.238. Implementation of the Corrective Action Program.

(a) Based on the schedule established under §330.237(d) of this title (relating to Selection of Remedy) for initiation and completion of remedial activities, the owner or operator shall:

- (1) establish and implement a corrective action groundwater monitoring program that:
 - (A) at least meets the requirements of an assessment monitoring program under §330.235 of this title (relating to Assessment Monitoring Program);
 - (B) indicates the effectiveness of the corrective action remedy; and
 - (C) demonstrates compliance with groundwater protection standards pursuant to subsection (e) of this section;
- (2) implement the corrective action remedy selected under §330.237 of this title (relating to Selection of Remedy); and
- (3) take any interim measures necessary to ensure the protection of human health and the environment. Interim measures should, to the greatest extent practicable, be consistent with the objectives of and contribute to the performance of any remedy that may be required pursuant to §330.237 of this title (relating to Selection of Remedy). The following factors shall be considered by an owner or operator in determining if interim measures are necessary:
 - (A) time required to develop and implement a final remedy;
 - (B) actual or potential exposure of nearby populations or environmental receptors to

hazardous constituents;

(C) actual or potential contamination of drinking-water supplies or sensitive ecosystems;

(D) further degradation of the groundwater that may occur if remedial action is not initiated expeditiously;

(E) weather conditions that may cause hazardous constituents to migrate or be released;

(F) risks of fire or explosion, or potential for exposure to hazardous constituents as a result of an accident or failure of a container or handling system; and

(G) other situations that may pose threats to human health and the environment.

(b) An owner or operator may determine, based on information developed after implementation of the remedy has begun or other information, that compliance with requirements of §330.237(b) of this title (relating to Selection of Remedy) are not being achieved through the remedy selected. In such cases, the owner or operator shall, with approval of the executive director, implement other methods or techniques that could practicably achieve compliance with the requirements unless the owner or operator makes the determination under subsection (c) of this section and if it is approved by the executive director. Failure to obtain approval from the executive director for the other methods and

techniques does not relieve the owner or operator of the burden to implement an acceptable remedy.

(c) If the owner or operator determines that compliance with requirements under §330.237(b) of this title (relating to Selection of Remedy) cannot be practically achieved with any currently available methods, the owner or operator shall:

(1) present to the executive director certification by a qualified groundwater scientist that compliance with requirements under §330.237(b) of this title (relating to Selection of Remedy) cannot be practically achieved with any currently available methods;

(2) implement alternate measures, with the approval of the executive director, to control exposure of humans or the environment to residual contamination, as necessary to protect human health and the environment;

(3) implement alternate measures, with the approval of the executive director, for control of the sources of contamination, or for removal or decontamination of equipment, units, devices, or structures that are technically practicable and consistent with the overall objective of the remedy; and

(4) place a copy of all approved alternate measures in the operating record.

(d) All solid wastes that are managed pursuant to a remedy required under §330.237 of this title (relating to Selection of Remedy), or an interim measure required under subsection (a)(3) of this

section, shall be managed in a manner that is protective of human health and the environment and that complies with applicable RCRA requirements.

(e) Remedies selected pursuant to §330.237 of this title (relating to Selection of Remedy) shall be considered complete when:

(1) the owner or operator complies with the groundwater protection standards established under §330.235(h) or (i) of this title (relating to Assessment Monitoring Program) at all points within the plume of contamination that lies within or beyond the groundwater monitoring system established under §330.231(a) of this title (relating to Groundwater Monitoring Systems);

(2) compliance with the groundwater protection standards established under §330.235(h) or (i) of this title (relating to Assessment Monitoring Program) has been achieved by demonstrating that concentrations of assessment constituents have not exceeded the groundwater protection standards for a period of three consecutive years, using the statistical procedures and performance standards in §330.233(g) and (h) of this title (relating to Groundwater Sampling and Analysis Requirements). The executive director may specify an alternative length of time during which the owner or operator shall demonstrate that concentrations of assessment constituents have not exceeded the groundwater protection standards. The alternative length of time shall be based on:

(A) extent and concentration of the release;

(B) behavior characteristics of the hazardous constituents in the groundwater;

(C) accuracy of monitoring or modeling techniques, including any seasonal, meteorological, or other environmental variabilities that may affect the accuracy; and

(D) characteristics of the groundwater.

(3) All actions required to complete the remedy have been satisfied.

(f) Within 15 days of completion of the remedy, the owner or operator shall submit to the executive director and also place in the operating record a certification by a qualified groundwater scientist that the remedy has been completed in compliance with the requirements of subsection (e) of this section.

(g) Upon submittal of satisfactory certification of the completion of the corrective action remedy, the executive director may release the owner or operator from the requirements for financial assurance for corrective action under §330.284 of this title (relating to Corrective Action for Landfills).

SUBCHAPTER J : CLOSURE AND POST-CLOSURE

§330.253, §330.254

STATUTORY AUTHORITY

The amendments are adopted under TWC, §5.103 and §5.105, which provide the commission with the authority to adopt any rules necessary to carry out its powers and duties under the laws of this state.

The amendments are also adopted under the Solid Waste Disposal Act in HSC, §361.011, which provides the commission with the authority to manage municipal solid waste; HSC, §361.024, which provides the commission with the authority to adopt rules and establish standards of operation for the management of solid waste; and HSC, §361.085, which provides the commission with the authority to require financial assurance demonstrations for solid waste, hazardous waste, and permitted facilities.

Together, these statutes authorize the commission to adopt any rules necessary to carry out its powers and duties under TWC and other laws of Texas and to establish and approve all general policy of the commission.

§330.253. Closure Requirements for MSWLF Units That Receive Waste on or after October 9, 1993 and MSW Sites.

(a) The owner or operator of these municipal solid waste landfill facility (MSWLF) units or municipal solid waste (MSW) sites shall comply with all requirements of this subchapter unless otherwise specified.

(b) Within 180 days of the last receipt of wastes for a MSWLF unit, the owner or operator shall complete the installation of a final cover system for that unit that is designed and constructed to minimize infiltration and erosion. The final cover system shall be composed of no less than two feet of soil and consist of an infiltration layer overlain by an erosion layer as follows.

(1) For MSWLF units with a synthetic bottom liner, the infiltration layer shall consist of a minimum of 18 inches of earthen material with a coefficient of permeability no greater than 1×10^{-5} cm/sec overlain by a synthetic membrane that has a permeability less than or equal to the permeability of any bottom liner system. The minimum thickness of the synthetic membrane shall be 20 mils, or 60 mils in the case of high-density polyethylene (HDPE), in order to ensure proper seaming of the synthetic membrane.

(2) For MSWLF units with no synthetic bottom liner, the infiltration layer shall consist of a minimum of 18 inches of earthen material with a coefficient of permeability less than or equal to the permeability of any constructed bottom liner or natural subsoil present. The coefficient of permeability of the infiltration layer shall in no case exceed 1×10^{-5} cm/sec, even though the coefficient of permeability of the constructed bottom liner or natural subsoil is greater than 1×10^{-5} or no data exist for the value(s) of the coefficient of permeability of the constructed bottom liner or natural subsoil; and

(3) For all MSWLF units, the erosion layer shall consist of a minimum of six inches of earthen material that is capable of sustaining native plant growth and shall be seeded or sodded immediately following the application of the final cover in order to minimize erosion.

(c) The executive director may approve an alternative final cover design that includes:

(1) an infiltration layer that achieves an equivalent reduction in infiltration as the infiltration layer specified in subsection (b)(1) or (2) of this section; and

(2) an erosion layer that provides equivalent protection from wind and water erosion as the erosion layer specified in subsection (b)(3) of this section.

(d) The owner or operator of all MSWLF units or lateral expansions at a facility shall prepare a written final closure plan for submittal to the executive director for review and approval that describes the steps necessary to close all MSWLF units or MSW sites at any point during the active life of the unit or MSW site in accordance with §330.254(a) or (b) of this title (relating to Post-Closure Care Maintenance Requirements), as applicable. The final closure plan, at a minimum, shall include the following information:

(1) a description of the final cover design and methods and procedures to be used to install the cover;

(2) an estimate of the largest area of the MSWLF unit or MSW site ever requiring a final cover at any time during the active life of the unit or MSW site;

(3) an estimate of the maximum inventory of wastes ever on site over the active life of the

unit or MSW site;

- (4) a schedule for completing all activities necessary to satisfy the closure criteria; and
- (5) a final contour map depicting the proposed final contours, establishing top slopes and side slopes, proposed surface drainage features, and protection of any 100-year floodplain;
- (6) a detailed written estimate, in current dollars, of the cost of hiring a third party to close the largest area of all MSWLF units ever requiring a final cover at any time during the active life when the extent and manner of its operation would make closure most expensive, as indicated by the closure plan and which satisfies the requirements specified in Subchapter K of this chapter (relating to Closure, Post-Closure, and Corrective Action). During the active life of the MSWLF unit, the owner or operator shall annually adjust the closure cost estimate and the amount of financial assurance for inflation in accordance with Chapter 37, Subchapter R of this title (relating to Financial Assurance for Municipal Solid Waste Facilities). The revised closure cost estimate shall be submitted to the executive director. Evidence of any additional financial assurance shall be provided to the executive director within 30 days after the annual anniversary date.

(e) Implementation of the final closure plan is as follows.

- (1) The owner or operator of all existing MSWLF units and lateral expansions at a facility shall submit to the executive director for review and approval the final closure plan required by

subsection (d) of this section and place a copy of the approved final closure plan in the operating record no later than the effective date of this title or by the initial receipt of waste, whichever is later. For all new MSWLF units or MSW sites, the final closure plan shall be submitted to the executive director for review and approval in conjunction with the site development plan.

(2) No later than 45 days prior to the initiation of closure activities for a MSWLF unit or MSW site, the owner or operator of the unit or MSW site shall provide written notification to the executive director of the intent to close the unit or MSW site and place this notice of intent in the operating record.

(3) No later than 90 days prior to the initiation of a final facility closure, the owner or operator shall, through a public notice in the newspaper(s) of largest circulation in the vicinity of the facility, provide public notice for final facility closure. This notice shall provide the name, address, and physical location of the facility, the permit number, and the last date of intended receipt of waste. The owner or operator shall also make available an adequate number of copies of the approved final closure and post-closure plans for public access and review.

(4) The owner or operator of all MSWLF units at a facility or of a MSW site shall begin final closure activities for each unit or site no later than 30 days after the date on which the unit or site receives the known final receipt of wastes or, if the unit or site has remaining capacity and there is a reasonable likelihood that the unit or site will receive additional wastes, no later than one year after the most recent receipt of wastes. A request for an extension beyond the one-year deadline for the

initiation of final closure may be submitted to the executive director for review and approval and shall include all applicable documentation necessary to demonstrate that the unit or site has the capacity to receive additional waste and that the owner or operator has taken and will continue to take all steps necessary to prevent threats to human health and the environment from the unclosed MSWLF unit or MSW site.

(5) The owner or operator of a MSWLF unit or MSW site shall complete final closure activities for the unit or site in accordance with the approved final closure plan within 180 days following the initiation of final closure activities as specified in paragraph (7) of this subsection. A request for an extension for the completion of final closure activities may be submitted to the executive director for review and approval and shall include all applicable documentation necessary to demonstrate that final closure will, of necessity, take longer than 180 days and all steps have been taken and will continue to be taken to prevent threats to human health and the environment from the unclosed MSWLF unit or MSW site.

(6) Following completion of all final closure activities for the MSWLF unit or MSW site, the owner or operator shall submit to the executive director for review and approval a documented certification, signed by an independent registered professional engineer, verifying that final closure has been completed in accordance with the approved final closure plan. The submittal to the executive director shall include all applicable documentation necessary for certification of final closure. Once approved, this certification shall be placed in the operating record.

(7) Upon notification to the executive director as specified in paragraph (2) of this subsection, the owner or operator of a MSWLF unit or MSW site shall post a minimum of one sign at the main entrance and all other frequently used points of access for the facility notifying all persons who may utilize the facility or site of the date of closing for the entire facility or site and the prohibition against further receipt of waste materials after the stated date. Further, suitable barriers shall be installed at all gates or access points to adequately prevent the unauthorized dumping of solid waste at the closed facility or site.

(8) Within 10 days after completion of final closure activities of a facility or site, the owner or operator shall submit to the executive director a certified copy of an "affidavit to the public" in accordance with the requirements of §330.7 of this title (relating to Deed Recordation) and place a copy of the affidavit in the operating record. In addition, the owner or operator of the closed facility or site shall record a certified notation on the deed to the facility or site property, or on some other instrument that is normally examined during title search, that will in perpetuity notify any potential purchaser of the property that the land has been used as a landfill facility and use of the land is restricted according to the provisions specified in §330.255 of this title (relating to Post-Closure Land Use). The owner or operator shall submit a certified copy of the modified deed to the executive director and place a copy of the modified deed in the operating record within the timeframe specified in this paragraph.

(9) The owner or operator of a MSWLF unit or MSW site may request permission from the executive director to remove the notation from the deed if all wastes are removed from the facility

or site in accordance with §330.4(a) of this title (relating to Permit Required).

(10) Following receipt of the required final closure documents, as applicable, and an inspection report from the commission's district office verifying proper closure of the MSWLF facility or site according to the approved final closure plan, the executive director may acknowledge the termination of operation and closure of the facility or site and deem it properly closed. Post-closure care maintenance shall begin immediately upon the date of final closure as approved by the executive director.

(f) Quality control testing documentation is as follows. Each owner or operator responsible for placing and compacting clay soils for the final cover infiltration layer shall test the 18 inches of compacted material for its coefficient of permeability at a frequency of no less than one test per surface acre of final cover. Permeability data shall be submitted to the executive director in a format stipulated in technical guidelines furnished by the executive director.

§330.254. Post-Closure Care Maintenance Requirements.

(a) Post-closure care maintenance requirements for municipal solid waste landfill facility (MSWLF) units closing prior to October 9, 1993, and municipal solid waste (MSW) sites.

(1) For a minimum of the first five years after the completion of final closure, the owner or operator shall retain the right of entry to and maintain all rights-of-way of a closed MSWLF unit or

MSW site in order to conduct periodic inspections of the closed unit or site. The owner or operator shall correct, as needed, erosion of cover material, lack of vegetative growth, leachate or methane migration, and subsidence or ponding of water on the unit or site. If any of these problems occur after the end of the five-year post-closure maintenance period or persist for longer than the first five years of post-closure care maintenance, the owner or operator shall be responsible for their correction until the executive director determines that all problems have been adequately resolved. The executive director may reduce the post-closure maintenance period for MSW sites if all wastes and waste residues have been removed during closure.

(2) Any monitoring programs (groundwater monitoring, resistivity surveys, methane monitoring, etc.) in effect during the life of the MSWLF unit or MSW site shall be continued during the post-closure care maintenance period.

(b) Post-closure care maintenance requirements for MSWLF units closing on or after October 9, 1993.

(1) Immediately upon completion of final closure requirements for a MSWLF unit as approved by the executive director, the owner or operator shall conduct post-closure care maintenance for the unit or facility for 30 years, except as specified by paragraph (2)(A) or (B) of this subsection. Post-closure care maintenance shall consist, at a minimum, of the following.

(A) The owner or operator shall retain the right of entry to the closed unit and shall

maintain all rights-of-way and conduct maintenance and/or remediation activities, as needed, in order to maintain the integrity and effectiveness of all final cover, site vegetation, and drainage control system(s), to correct any effects of settlement, subsidence, ponded water, erosion, or other events or failures detrimental to the integrity of the closed unit and to prevent any surface run-on and run-off from eroding or otherwise damaging the final cover system.

(B) The owner or operator shall maintain and operate the leachate collection system in accordance with the requirements in §330.200 and §330.201 of this title (relating to Design Criteria and Leachate Collection System, respectively). The executive director may allow the owner or operator to stop managing leachate if the owner or operator demonstrates to the approval of the executive director that leachate no longer poses a threat to human health and the environment.

(C) The owner or operator shall monitor groundwater in accordance with the requirements of §§330.230-330.242 of this title (relating to Groundwater Monitoring and Corrective Action) and maintain the groundwater monitoring system, if applicable.

(D) The owner or operator shall maintain and operate the gas monitoring system in accordance with the requirements of §330.54 of this title (relating to Technical Requirements of Part III of the Application).

(E) The owner or operator shall continue earth electrical resistivity surveys at the frequency stated in the approved site development plan.

(2) The length of the post-closure care maintenance period may be:

(A) decreased by the executive director if the owner or operator submits to the executive director for review and approval a documented certification, signed by an independent registered professional engineer and including all applicable documentation necessary to support the certification, that demonstrates that the reduced period is sufficient to protect human health and the environment; or

(B) increased by the executive director if it is determined that the lengthened period is necessary to protect human health and the environment.

(3) The owner or operator of all existing MSWLF units or lateral expansions at a facility shall submit a post-closure plan to the executive director for review and approval and place a copy of the approved post-closure plan in the operating record no later than the effective date of this title or by the initial receipt of waste, whichever is later. For all new MSWLF units, the post-closure plan shall be submitted to the executive director for review and approval in conjunction with the site development plan. The post-closure plan shall include, at a minimum, the following information:

(A) a description of the monitoring and maintenance activities required in paragraph (1) of this subsection for each unit, and the frequency at which these activities will be performed;

(B) the name, address, and telephone number of the office or person responsible for

overseeing and/or conducting the post-closure care maintenance activities at the closed unit or facility during the post-closure period; and

(C) a description of the planned uses of any portion of the closed unit during the post-closure period in accordance with §330.255 of this title (relating to Post-Closure Land Use);

(D) a detailed written estimate, in current dollars, of the cost of post-closure care maintenance and any corrective action as described in the post-closure care plan or required by the commission and which satisfies the requirements specified in Subchapter K of this chapter (relating to Closure, Post-Closure, and Corrective Action). The owner or operator shall annually adjust this estimate and the amount of financial assurance for inflation in accordance with Chapter 37, Subchapter R of this title (relating to Financial Assurance for Municipal Solid Waste Facilities). The revised estimate shall be submitted to the executive director. Evidence of any additional financial assurance shall be provided to the executive director within 30 days after the annual anniversary date.

SUBCHAPTER K : CLOSURE, POST-CLOSURE, AND CORRECTIVE ACTION

§§330.280-330.284

STATUTORY AUTHORITY

The amendments are adopted under TWC, §5.103 and §5.105, which provide the commission with the authority to adopt any rules necessary to carry out its powers and duties under the laws of this state.

The amendments are also adopted under the Solid Waste Disposal Act in HSC, §361.011, which provides the commission with the authority to manage municipal solid waste; HSC, §361.024, which provides the commission with the authority to adopt rules and establish standards of operation for the management of solid waste; and HSC, §361.085, which provides the commission with the authority to require financial assurance demonstrations for solid waste, hazardous waste, and permitted facilities.

Together, these statutes authorize the commission to adopt any rules necessary to carry out its powers and duties under TWC and other laws of Texas and to establish and approve all general policy of the commission.

§330.280. Applicability.

The closure, post-closure, or corrective action requirements of this section apply to owners and operators of any municipal solid waste facility authorized under this chapter.

§330.281. Closure for Landfills.

(a) A detailed written cost estimate, in current dollars, showing the cost of hiring a third party to close the largest area of the landfill ever requiring a final closure at any time during the active life of the unit in accordance with the final cost closure plan shall be provided. For any landfill this means the completion of the final closure requirements. The cost estimate for financial assurance shall be submitted with any new permit application, with any application for a permit transfer, and as a modification for all existing municipal solid waste permits that remain in effect after October 9, 1993.

(1) The cost estimate shall equal the cost of closing the largest area of all landfill units ever requiring a final cover at any time during the active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan.

(2) An increase in the closure cost estimate and the amount of financial assurance provided under subsection (b) of this section shall be made if changes to the final closure plan or the landfill conditions increase the maximum cost of closure at any time during the remaining active life of the unit.

(3) A reduction in the closure cost estimate and the amount of financial assurance provided under subsection (b) of this section may be approved if the cost estimate exceeds the maximum cost of closure at any time during the remaining life of the unit and the owner or operator has provided written notice to the executive director of the situation that includes a detailed justification for the reduction of the closure cost estimate and the amount of financial assurance. A reduction in the cost estimate and

the financial assurance shall be considered a permit modification and shall be handled as such. After approval of the permit modification, a request to reduce the cost estimate and the financial assurance amount will be submitted within 60 days prior to the anniversary date of the first establishment of the financial assurance mechanism and shall include the documentation necessary for the annual review.

(b) The owner or operator of any municipal solid waste unit shall establish financial assurance for closure of the unit in accordance with Chapter 37, Subchapter R of this title (relating to Financial Assurance for Municipal Solid Waste Facilities). Continuous financial assurance coverage for closure shall be provided until the site is officially placed under the post-closure maintenance period and all requirements of the final closure plan have been approved as evidenced in writing by the executive director.

§330.282. Closure for Process Facilities.

(a) A detailed written cost estimate, in current dollars, showing the cost of hiring a third party to close the process facility by cleaning up the litter and debris from the site and the equipment, hauling the litter and debris to an approved landfill, and to render the facility closed by dismantling vital operational parts and locking up the facility shall be provided. The cost estimate for financial assurance shall be submitted with any new permit application, with any application for a permit transfer, and as a modification for all existing municipal solid waste process facilities that remain in operation after October 9, 1993.

(1) The cost estimate shall equal the cost of closing the facility at any time during the active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan.

(2) An increase in the closure cost estimate and the amount of financial assurance provided under subsection (b) of this section shall be made if changes to the closure plan or the facility conditions increase the maximum cost of closure at any time during the remaining active life of the facility.

(3) A reduction in the closure cost estimate and the amount of financial assurance provided under subsection (b) of this section may be approved if the cost estimate exceeds the maximum cost of closure at any time during the remaining life of the facility and the owner or operator has provided written notice to the executive director of the detailed justification for the reduction of the closure cost estimate and the amount of financial assurance. A reduction in the cost estimate and the financial assurance shall be considered a permit modification and shall be handled as such. After approval of the permit modification, a request to reduce the cost estimate and the financial assurance amount will be submitted 60 days prior to the anniversary date of the first establishment of the financial assurance mechanism and shall include the documentation necessary for the annual review.

(b) The owner or operator of any municipal solid waste process facility shall establish financial assurance for closure of the facility in accordance with Chapter 37, Subchapter R of this title (relating to Financial Assurance for Municipal Solid Waste Facilities). Continuous financial assurance coverage for closure shall be provided until all requirements of the final closure plan have been completed and

the site is determined to be officially closed in writing by the executive director.

§330.283. Post-Closure Care for Landfills.

(a) A detailed written cost estimate, in current dollars, of the cost of hiring a third party to conduct post-closure care activities for the municipal solid waste unit, in accordance with the post-closure care plan, shall be provided. The post-closure care cost estimate used to demonstrate financial assurance in subsection (b) of this section shall account for the total costs of conducting post-closure care including annual and periodic costs as described in the post-closure care plan over the entire post-closure care period. The cost estimate for financial assurance shall be submitted with any new permit application, with any application for a permit transfer, and as a modification for all existing municipal solid waste permits that remain in effect after October 9, 1993.

(1) The cost estimate for post-closure care shall be based on the most expensive costs of post-closure care during the post-closure care period.

(2) An increase in the post-closure care cost estimate and the amount of financial assurance provided under subsection (b) of this section shall be made if changes in the post-closure care plan or the unit conditions increase the maximum costs of post-closure care.

(3) A reduction in the post-closure care cost estimate and the amount of financial assurance provided under subsection (b) of this section may be allowed if the cost estimate exceeds the maximum

costs of post-closure care remaining over the post-closure care period and the owner or operator has provided written notice to the executive director of the detailed justification for the reduction of the post-closure cost estimate and the amount of financial assurance. A reduction in the cost estimate and the financial assurance shall be considered a permit modification and shall be handled as such. After approval of the permit modification, a request to reduce the cost estimate and the financial assurance amount will be submitted 60 days prior to the anniversary date of the first establishment of the financial assurance mechanism and shall include the documentation necessary for the annual review.

(b) The owner or operator of any municipal solid waste landfill unit shall establish financial assurance for the costs of post-closure care of the unit in accordance with Chapter 37, Subchapter R of this title (relating to Financial Assurance for Municipal Solid Waste Facilities). Continuous financial assurance coverage for post-closure care shall be provided until the site is officially released in writing by the executive director from the post-closure care period in accordance with all requirements of the post-closure care plan.

§330.284. Corrective Action for Landfills.

(a) A municipal solid waste landfill unit required to undertake a corrective action program under §330.238 of this title (relating to Implementation of the Corrective Action Program) shall prepare a detailed written cost estimate, in current dollars, of the cost of hiring a third party to perform the

corrective action program. The corrective action cost estimate shall account for the total costs of corrective action activities as described in the corrective action plan for the entire corrective action period. The cost estimate for financial assurance shall be submitted with the corrective action plan. Financial assurance shall be required for each separate corrective action program established for a municipal solid waste unit.

(1) The corrective action cost estimate and the amount of financial assurance provided under subsection (b) of this section shall be increased if changes in the corrective action program or unit conditions increase the maximum costs of corrective action.

(2) A reduction in the cost estimate and the amount of financial assurance for corrective action provided under subsection (b) of this section may be approved if the cost estimate exceeds the maximum remaining costs of corrective action at any time during the remaining corrective action period and the owner or operator has provided written notice to the executive director that includes a detailed justification for the reduction of the corrective action cost estimate and the amount of financial assurance. A reduction in the cost estimate and the financial assurance shall be considered a modification to the corrective action plan. After this agency's approval of the modification, a request to reduce the cost estimate and the financial assurance amount will be submitted 60 days prior to the anniversary date of the first establishment of the financial assurance mechanism and shall include the documentation necessary for the annual review.

(b) The owner or operator of any municipal solid waste landfill unit required to undertake a

corrective action program established under §330.238 of this title (relating to Implementation of the Corrective Action Program) shall establish financial assurance for the costs of the most recent corrective action program in accordance with Chapter 37, Subchapter R of this title (relating to Financial Assurance for Municipal Solid Waste Facilities). Continuous financial assurance coverage for each corrective action program shall be provided until the site is officially released in writing by the executive director from all requirements of the corrective action program after completion of all work specified in the corrective action plan.

SUBCHAPTER K : CLOSURE, POST-CLOSURE, AND CORRECTIVE ACTION

§330.285, §330.286

STATUTORY AUTHORITY

The repeals are adopted under TWC, §5.103 and §5.105, which provide the commission with the authority to adopt any rules necessary to carry out its powers and duties under the laws of this state.

The repeals are also adopted under the Solid Waste Disposal Act in HSC, §361.011, which provides the commission with the authority to manage municipal solid waste; HSC, §361.024, which provides the commission with the authority to adopt rules and establish standards of operation for the management of solid waste; and HSC, §361.085, which provides the commission with the authority to require financial assurance demonstrations for solid waste, hazardous waste, and permitted facilities.

Together, these statutes authorize the commission to adopt any rules necessary to carry out its powers and duties under TWC and other laws of Texas and to establish and approve all general policy of the commission.

§330.285. Financial Assurance Mechanisms.

§330.286. Wording of the Instruments.

SUBCHAPTER N : LANDFILL MINING

§330.416

STATUTORY AUTHORITY

The amendment is adopted under TWC, §5.103 and §5.105, which provide the commission with the authority to adopt any rules necessary to carry out its powers and duties under the laws of this state.

The amendment is also adopted under the Solid Waste Disposal Act in HSC, §361.011, which provides the commission with the authority to manage municipal solid waste; HSC, §361.024, which provides the commission with the authority to adopt rules and establish standards of operation for the management of solid waste; and HSC, §361.085, which provides the commission with the authority to require financial assurance demonstrations for solid waste, hazardous waste, and permitted facilities.

Together, these statutes authorize the commission to adopt any rules necessary to carry out its powers and duties under TWC and other laws of Texas and to establish and approve all general policy of the commission.

§330.416. Registration Application Preparation.

(a) General instruction and title page. To assist the executive director in evaluating the technical merits of a landfill mining facility, a site development plan shall be prepared and submitted to the commission along with a Registration Application Form. The site development plan shall be sealed

by a registered professional engineer in accordance with the provisions of 22 TAC §131.166. All submittals shall be in a complete final form. The site development plan shall contain all of the information specified in this section. A title page shall show the name of the project, the county (and city if applicable) in which the proposed project is located, the name of the applicant, the name of the engineer, the date the application was prepared and the latest date the application was revised.

(b) Table of contents. A table of contents shall be included which lists the main sections of the plan, any requested variances and includes page numbers.

(c) Engineer's appointment. An engineer's appointment shall be included which consists of a letter from the applicant to the executive director identifying the consulting engineering firm responsible for the submission of the plan, specifications and any other technical data to be evaluated by the commission regarding the project. The notice of appointment shall identify by name both the applicant's consulting and the individual engineer of record. Include the mailing address, phone number and facsimile (FAX) number of the engineer.

(d) Construction plans and specifications. Those applications receiving authorization shall be required to prepare and maintain Construction Plans and Specifications, and Record Documents.

(1) Construction Plans and Specifications of the proposed or modified facility shall be prepared and one copy maintained at the facility at all times during construction.

(2) After completion of a construction phase, a record document set of construction plans and specifications shall prepared and maintained at the facility and/or at the owner or operator's main office. These plans shall be made available for inspection by the commission or other interested parties.

(3) Final Construction Plans and Specifications are not required for authorization.

(e) Applicants responsibilities.

(1) All aspects of the application must be addressed by the applicant, even if only to show why they are not applicable for that particular site.

(2) It is the responsibility of the applicant to provide the executive director data of sufficient completeness, accuracy, and clarity to provide assurance that operation of the site will pose no reasonable probability of adverse effects on the health, welfare, environment, or physical property of nearby residents or property owners. Failure to provide complete information as required by this chapter may be cause for the executive director to return the application without further action. Submission of false information shall constitute grounds for denial.

(3) The applicant is responsible for determining and reporting to the executive director any site-specific conditions that require special design considerations.

(f) Soil boring plan approval. The applicant is responsible for submitting to the executive director a Soil Boring Plan which shall conform to the requirements found in the applicable subchapter. The Soil Boring Plan shall be approved by the executive director prior to initiation of the work.

(g) Permanent site benchmark. A permanent benchmark shall be established at the site in an area of the site that is readily accessible. This benchmark shall be a bronze or other suitable metal survey marker set in concrete at a sufficient depth to retain a stable and distinctive location and be of sufficient size to withstand the deteriorating forces of nature to best achieve this goal. The benchmark elevation and survey date shall be stamped on it. The benchmark elevation shall be surveyed from a known National Geodetic Survey benchmark or other compatible and comparable benchmark. The location and elevation of the reference benchmark and the permanent benchmark shall be identified on a map and shall be included in the Site Development Plan. Horizontal monumentation shall be in accordance with 22 TAC §663.15 (relating to Precision) of the Texas Board of Professional Land Surveying rules. Vertical control precision shall be ± 0.1 feet relative to the elevation of the benchmark of origin.

(h) Application considerations. The application for a municipal solid waste registration shall be organized in the order of the rules of the subchapter and in conformance with the following requirements.

(1) Preparation. Preparation of the application shall conform with the Texas Civil Statutes, Engineering Practice Act, Article 3271a.

(A) The responsible engineer shall affix his seal, sign his name, place the date of execution and state the intended purpose on each sheet of engineering plans, drawings, maps, calculations, computer models, cost estimates, and on the title or contents page of the application as required by the Texas Engineering Practice Act.

(B) Applications that have not been signed and sealed shall be considered incomplete for the intended purpose and shall be returned to the applicant.

(2) Application Document.

(A) Applications shall be submitted in three-ring loose-leaf binders.

(B) The narrative of the report shall be printed on 8 1/2 by 11 inches white paper.

(C) All pages shall contain a page number and date.

(D) During technical review revisions shall have the revision date and note that the sheet is revised in the header or footer of each revised sheet. The cover sheet to the application shall note all revision dates. The revised text shall be marked to highlight the revision.

(E) Dividers and tabs are encouraged.

(F) The application shall be organized in the format directed by these rules.

(G) Applications shall be initially submitted in three copies. The applicant shall furnish additional copies of the application for use by required reviewing agencies, on request of the executive director.

(i) Application drawings.

(1) All information contained on a drawing shall be legible, even if it has been reduced. The drawings shall be 8 1/2 by 11 inches or 11 by 17 inches. Standard sized drawings (24 by 36 inches) folded to 8 1/2 by 11 inches may be submitted or required if reduction would render them illegible or difficult to interpret.

(2) If color coding is used, it should be legible and the code distinct when reproduced on black and white photocopy machines.

(3) Drawings shall be submitted at a standard engineering scale.

(4) Each map or plan drawing shall have:

(A) a dated title block;

(B) a bar scale at least one inch long;

(C) a revision block;

(D) the responsible engineer's signature and seal with intended purpose, if required;

(E) the drawing number and a page number;

(F) a north arrow. Preferred orientation is to have the north arrow pointing toward the top of the page;

(G) a reference to the base map source and date if the map is based on another map.

The latest published edition of the base map should be used;

(H) a legend;

(I) two longitudes and two latitudes showing on all general location maps;

(J) the boundary of the site; and

(K) match lines and section lines which shall reference the drawing where the match or section is shown. Section drawings should note from where the section was taken.

(j) Application format.

(1) General information. The first part of the application, Part A, is designed to provide information that is required regardless of the type of site involved. All items required by this section shall be submitted.

(2) Title page. The title page shall show the name of the project, the municipal solid waste registration application number if known, the name of the applicant, the location by city and county, the date of preparation and, if appropriate, the number and date of the revision. It shall be signed and sealed as required by the Texas Engineering Practice Act.

(3) Table of contents. The table of contents shall list and give the page numbers for the main sections of the application.

(4) Part A Application Form. The Part A Application Form shall be completed, signed by the applicant, and notarized on a form provided by the agency.

(k) Land use. To assist the executive director in evaluating the impact of the facility on the surrounding area, the applicant shall provide the following:

(1) a description of the zoning, if any, at the facility and within one mile of the facility. If the facility requires approval as a nonconforming use or a special use permit from the local government

having jurisdiction, a copy of such approval shall be submitted with the application;

(2) a description of the character of the surrounding land uses within one mile of the proposed facility;

(3) proximity to residences and other uses (e.g. schools, churches, cemeteries, historic structures, historic sites, archaeologically significant sites, sites having exceptional aesthetic quality, parks, recreational sites, recreational facilities, licensed day care etc.). Give the approximate number of residences and business establishments within one mile of the proposed facility including the distances and directions to the nearest residences and businesses;

(4) a discussion that shows the facility is compatible with the surrounding land uses; and

(5) a constructed land use map showing the land use, zoning, residences, businesses, schools, churches, cemeteries, historic structures, historic sites, archaeologically significant sites, sites having exceptional aesthetic quality, licensed day care centers, parks, recreational sites and recreational facilities within one mile of the facility and wells within 500 feet of the facility.

(l) Access. To assist the executive director in evaluating the impact of the facility on the surrounding roadway system, the applicant shall provide the following:

(1) data on the roadways, within one mile of the facility, used to access the facility. The

data shall include dimensions, surfacing, general condition, capacity and load limits;

(2) data on the volume of vehicular traffic on access roads within one mile of the proposed facility. The applicant shall include both existing and projected traffic during the life of the facility (for projected include both traffic generated by the facility and anticipated increase without the facility);

(3) an analysis of the impact the facility will have on the area roadway system, including a discussion on any mitigating measures (turning lanes, roadway improvements, intersection improvements, etc.) proposed with the project; and

(4) an access roadway map showing all area roadways within a mile of the facility. The data and analysis required in paragraphs (1), (2), and (3) of this subsection shall be keyed to this map.

(m) Site plans. To assist the executive director in evaluating the impact of the facility on the environment, public safety, and public health, the applicant shall provide the following.

(1) Surface water protection plan. The surface water protection plan shall be prepared by a registered professional engineer. At a minimum the applicant shall provide all of the following.

(A) A design for a run-on control system capable of preventing flow onto the facility and into active excavation areas during the peak discharge from at least a 25-year, 24-hour rainfall event.

(B) A design for a run-off management system to collect and control at least the peak discharge from the facility generated by a 25-year 24-hour rainfall event.

(C) A design for a contaminated water collection system to collect and contain all leachate. Leachate shall not be used in any of the facility processes.

(D) Drainage calculations as follows.

(i) Calculations for areas of 200 acres or less shall follow the rational method as specified in the Texas Department of Transportation Bridge Division Hydraulic Manual.

(ii) Calculations for discharges from areas greater than 200 acres shall be computed by using USGS/DHT hydraulic equations compiled by the United States Geological Survey and the Texas Department of Transportation Bridge Division Hydraulic Manual, the HEC-1 and HEC-2 computer programs developed through the Hydrologic Engineering Center of the United States Army Corps of Engineers, or an equivalent or better method approved by the executive director.

(iii) Calculations for sizing containment facilities for leachate shall be shown to be determined based on the facilities proposed leachate disposal method.

(iv) Temporary and permanent erosion control measures shall be discussed.

(v) Drainage Maps and Drainage Plans shall be provided as follows:

(I) an off-site topographic drainage map showing all areas which contribute to the facilities run-on. The map shall delineate the drainage basins and sub-basins, show the direction of flow, time of concentration, basin area, rainfall intensity and flow rate. This map shall also show all creeks, rivers, intermittent streams, lakes, bayous, bays, estuaries, arroyos, and other surface waters in the state. All calculations shall be provided.

(II) a pre-construction on-site drainage map. The map shall delineate the drainage basins and sub-basins, show the direction of flow, time of concentration, basin area, rainfall intensity and flow rate. All calculations shall be provided.

(III) a post-construction on-site drainage map. The map shall delineate the drainage basins and sub-basins, show the direction of flow, time of concentration, basin area, rainfall intensity and flow rate. All calculations shall be provided.

(IV) a drainage facilities map. The map shall show all proposed drainage facilities (ditches, ponds, piping, inlets, outfalls, structures, etc.) and design parameters (velocities, cross-section areas, grades, flowline elevations, flow rates, etc.). Complete cross sections of all ditches and ponds shall be included.

(V) a profile drawing. The drawing shall include profiles of all ditches

and pipes. Profiles shall include top of bank, flowline, hydraulic grade flowrate, velocities, and existing groundline. Ditches and swales shall have a minimum of one foot of freeboard.

(VI) a floodplain and wetlands map. The map shall show the location and lateral extent of all floodplains and wetlands on the site and on lands within 500 feet of the site.

(VII) an erosion control map and sedimentation control plan which indicates placement of erosion control features on the site.

(E) The test pit evaluation report shall be prepared by an engineer. Prior approval of a test pit plan must be obtained from the executive director before excavation of test pits including location and depth of all test pits. The applicant shall include a discussion and information on the following:

(i) a description of the characteristics of waste observed in test pits excavated on the site to include the percent of paper, plastics, ferrous metal, other metal, glass, other constituents, and soil fraction by weight.

(ii) test pits shall extend four feet beneath the waste or to a depth authorized by the executive director and information submitted shall include a Toxicity Characteristic Leaching Procedure (TCLP) of the soil to characterize the soil beneath the site. Liners if present shall not be disrupted.

(iii) a TCLP of each representative type of waste excavated shall be included in the report. Additionally, waste excavated from each test pit shall be analyzed for asbestos and PCBs. Consideration should be given to analysis of waste material from each test pit for hazardous waste constituents.

(iv) a sufficient number of test pits shall be performed to establish the properties of the waste. The number of test pits shall be three for a site of five acres or less. For sites larger than five acres the required number of test pits shall be three pits plus one for every five acres or fraction thereof. The number of test pits shall be approved by the executive director prior to making the pits. The test pits should be sufficiently large to provide representative information.

(v) all test pits where waste is removed shall be backfilled with clean CH or CL clay. The excavation shall be backfilled to exceed the existing grade and provide positive drainage.

(vi) the applicant shall prepare a cross-section drawing using the information from the test pits to depict the top and bottom elevations of the landfill.

(vii) the applicant shall include a plan view map depicting the location and extent (vertical and lateral) of the waste unit and proposed extent of mining/recovery operations. In areas with liners, mining operations should not extend below the top of the protective cover of the liner. In areas where no liner exists, excavation operations may extend below the waste.

(viii) as a part of the test pit evaluation report, historical records of landfill operations, where available, shall be evaluated to determine such things as hazardous waste potential, receipt of special waste, types of waste received, special waste disposal areas, construction and demolition material disposal areas, methane and leachate records, age, volume, and disposal methods, existence of liners, gas collection systems, and leachate collection systems.

(ix) all waste removed in test pit evaluation must be disposed of in a permitted landfill.

(F) In cases where a geologic/hydrogeologic report is determined to be needed by the executive director, the geologic/hydrogeologic report shall be prepared and signed by an engineer or qualified geologist/hydrogeologist. If determined to be needed by the executive director, the applicant shall include discussion and information on all of the following:

(i) a description of the regional geology of the area. This section shall include:

(I) a geologic map of the region with text describing the stratigraphy and lithology of the map units. An appropriate section of a published map series such as the Geologic Atlas of Texas prepared by the Bureau of Economic Geology is acceptable;

(II) a description of the generalized stratigraphic column in the facility area from the base of the lowermost aquifer capable of providing usable ground water, or from a depth

of 1,000 feet, whichever is less, to the land surface. The geologic age, lithology, variation in lithology, thickness, depth geometry, hydraulic conductivity, and depositional history of each geologic unit should be described based upon available geologic information.

(ii) a description of the geologic processes active in the vicinity of the facility.

This description shall include an identification of any faults and/or subsidence in the area of the facility.

(iii) a description of the regional aquifers in the vicinity of the facility based upon published and open-file sources. The section shall provide:

(I) aquifer names and their association with geologic units described in clause (ii) of this subparagraph;

(II) a description of the composition of the aquifer(s);

(III) a description of the hydraulic properties of the aquifer(s);

(IV) information on whether the aquifers are under water table or artesian conditions;

(V) information on whether the aquifers are hydraulically connected;

(VI) a regional water-table contour map or potentiometric surface map for each aquifer, if available;

(VII) an estimate of the rate of ground-water flow;

(VIII) typical values or a range of values for total dissolved solids content of ground water from the aquifers;

(IX) identification of areas of recharge to the aquifers within five miles of the site; and

(X) the present use of ground water withdrawn from aquifers in the vicinity of the facility. The identification, location, and aquifer of all water wells within one mile of the property boundaries of the facility shall be provided.

(iv) a subsurface investigation report. If determined to be needed by the executive director, the subsurface investigation report shall include all or any part of the following details. The report shall describe all borings drilled on-site to test soils and characterize ground water and shall include a site map drawn to scale showing the surveyed locations and elevations of the boring. Boring logs shall include a detailed description of materials encountered including any discontinuities such as fractures, fissures, slickensides, lenses, or seams. Each boring shall be presented in the form of a log that contains, at a minimum, the boring number; surface elevation and location coordinates;

and a columnar section with text showing the elevation of all contacts between soil and rock layers description of each layer using the Unified Soil Classification, color, degree of compaction and moisture content. A key explaining the symbols used on the boring logs and the classification terminology for soil type, consistency, and structure shall be provided.

(I) If determined to be necessary by the executive director, a sufficient number of borings shall be performed to establish subsurface stratigraphy and to determine geotechnical properties of the soils and rocks beneath the facility. If borings records exist from a previous authorization, additional borings may not be necessary. The number of borings necessary can only be determined after the general characteristics of a site are analyzed. The minimum number of borings required for a site shall be three for sites of five acres or less, for sites larger than five acres the required number of borings shall be three borings plus one boring for each additional five acres or fraction thereof. The boring plan shall be approved by the executive director prior to making the borings.

(II) Borings shall be sufficiently deep to allow identification of the uppermost aquifer and underlying hydraulically interconnected aquifers. Borings shall penetrate the uppermost aquifer and all deeper hydraulically interconnected aquifers and be deep enough to identify the aquiclude at the lower boundary. All the borings shall be at least five feet deeper than the elevation of the deepest excavation. In addition, at least the number of borings shown on the Table of Borings shall be drilled to a depth at least 30 feet below the deepest excavation planned at the waste management unit, unless the executive director approves a different depth. If no aquifers exist within

50 feet of the elevation of the deepest excavation, at least one test hole shall be drilled to the top of the first perennial aquifer beneath the site, if sufficient data does not exist to accurately locate it. The executive director may accept data equivalent to a deep boring on the site to determine information for aquifers more than 50 feet below the site. Aquifers more than 300 feet below the lowest excavation and where the estimated travel times for constituents to the aquifer are in excess of 30 years plus the estimated life of the site, need not be identified through borings. The number of borings shall be determined in consultation with the executive director.

(III) All borings shall be conducted in accordance with established field exploration methods. Care must be taken to not extend borings through buried waste and into groundwater.

(IV) Installation, abandonment, and plugging of the boring shall be in accordance with the rules of the commission.

(V) The applicant shall prepare cross-sections utilizing the information from the boring and depicting the generalized strata at the facility.

(VI) The report shall contain a summary of the investigator's interpretations of the subsurface stratigraphy based upon the field investigation.

(v) a ground water investigation report. If required by the executive director,

this report shall establish and present the ground water flow characteristics at the site which shall include ground water elevation, gradient and direction of flow. The flow characteristics and most likely pathway(s) for pollutant migration shall be discussed in a narrative format and shown graphically on a piezometric contour map. The ground water data shall be collected from piezometers installed at the site. The minimum number of piezometers required for the site shall be three for sites of five acres or less, for sites greater than five acres the total number of piezometers required shall be three piezometers plus one piezometer for each additional five acres or fraction thereof unless otherwise approved by the executive director.

(G) The application shall demonstrate the processing facility is designed so as not to contaminate the groundwater and so as to protect the existing groundwater quality from degradation.

At a minimum, groundwater protection shall consist of all of the following:

(i) Liner system. All excavated waste storage, processing, and screening shall be located on a surface which is adequately lined to control seepage. The liner shall be covered with a material designed to withstand normal traffic from the processing operations.

(ii) Ground water monitor system. If required by the executive director, a ground water monitoring system shall be designed and installed such that the system will reasonably assure detection of any contamination of the ground water before it migrates beyond the boundaries of the processing area.

(I) If required, details of monitor well construction and placement of monitor wells shall be shown on the site plan;

(II) A groundwater sampling program in accordance with Subchapter I of this chapter (relating to Ground-Water Monitoring and Corrective Action) shall be provided. Monitoring shall be continued through the duration of processing and until the executive director determines monitoring is no longer needed.

(iii) Interface with existing groundwater protection facilities. Consideration must be given to how excavations around any existing liners, leachate collection systems, and gas collection systems will be handled. Any existing liner, leachate collection system, or gas collection system must be maintained as functional and operated until made obsolete by the progression of excavation.

(H) The facility plan and facility layout shall be prepared by a registered professional engineer. All proposed facilities, structures and improvements shall be clearly shown and annotated on this drawing. The plan shall be drawn to standard engineering scale. Any necessary details or sections shall be included. As a minimum the plan shall show property boundaries, fencing, internal roadways, processing area, facility office, sanitary facilities, potable water facilities, storage areas, etc. If phasing is proposed for the facility, a separate facility plan for each phase is required.

(I) The process description shall be composed of a descriptive narrative along with a

process diagram. The process description shall include all of the following.

(i) Material identification. The applicant shall prepare a list of the typical materials intended for processing along with the anticipated volume to be processed. This section shall also contain an estimate of the daily quantity of material to be processed at the facility along with a description of the proposed process of screening for hazardous materials.

(ii) Excavation process. Indicate the methods of excavating the buried waste materials. Indicate how the material is handled, how long it remains in the area, what equipment is used, how the material is moved from the excavation area, how the area of excavation can be held to a minimum, the maximum side slopes in buried waste, and the maximum area of excavation at any one time. The sequence of excavation shall be shown.

(iii) Process. Indicate what happens to process the waste to recover reusable or recyclable material. Indicate what process or processes are used. The narrative shall include, any water addition, processing rates, equipment, and mass balance calculations.

(iv) Process waters. Indicate how any process water will be handled and disposed of if a wet mining process is to be used.

(v) Product distribution. Provide a complete narrative on product distribution to include items such as disposition of material recovered and probable use of soils on-site and off-site.

(vi) Process diagram. Provide a process diagram that depicts graphically the general process.

(J) The health and safety plan shall be composed of a descriptive narrative describing types of equipment and methods of its use for all of the following.

(i) Air monitoring.

(ii) Radiation monitoring.

(iii) Pathogen monitoring.

(iv) Hazardous constituent monitoring.

(v) Personal protective equipment.

(vi) Decontamination plans.

(vii) Emergency response plans.

(viii) Fire protection.

(K) Contingency plans must include a description of the courses of action which should be taken in response to abnormal or unsafe events that may occur during excavation or material processing. The contingency plan must address hazard evaluation and protection from potential hazards, including engineering controls, personal protection equipment, and air monitoring techniques. The plan must include decontamination procedures, on-site communication procedures, and emergency procedures. The contingency plan shall be composed of a narrative describing actions taken in response to all of the following.

- (i) Hazardous constituents.
- (ii) Leachate.
- (iii) Drums.
- (iv) Compressed gas cylinders.
- (v) Unanticipated releases.
- (vi) Unanticipated emergency.
- (vii) Fires and explosions.

(viii) Hydrogen sulfide.

(ix) Respiratory protection.

(2) Site operating plan. This document is to provide guidance from the design engineer to site management and operating personnel in sufficient detail to enable them to conduct day to day operations in a manner consistent with the engineer's design. As a minimum, the site operating plan shall include specific guidance or instructions on the all of the following:

(A) the minimum number of personnel and their functions to be provided by the site operator in order to have adequate capability to conduct the operation in conformance with the design and operational standards;

(B) the minimum number and operational capacity of each type of equipment to be provided by the site operator in order to have adequate capability to conduct the operation in conformance with the design and operational standards;

(C) security, site access control, traffic control and safety;

(D) control of dumping within designated areas, screening for unprocessable or unauthorized material;

(E) fire prevention and control plan that shall comply with provisions of the local fire code, provision for fire-fighting equipment, and special training requirements for fire fighting personnel;

(F) control of windblown material;

(G) vector control;

(H) quality assurance and quality control. As a minimum the applicant shall provide testing and assurance in accordance with the provisions of §330.417 of this title (relating to Sampling and Analysis Requirements for Soil Final Product);

(I) control of airborne emissions;

(J) minimizing odors;

(K) equipment failures and alternative disposal and storage plans in the event of equipment failure;

(L) a description of the intended final use of materials;

(M) a description of how saturated waste will be dried;

(N) a description of how mining operations will be conducted;

(O) a description of how oversized material such as white goods will be managed;

(P) consideration of odor masking agents;

(Q) a description of how mining operations will be conducted to avoid interference with any daily landfill practices; and

(R) evaluation of excavated material at a determined frequency.

(3) Legal description of the facility. The applicant shall submit an official metes and bounds description, and plat of the landfill area to be mined and an official metes and bounds description, and plat of the process area if the process area is not within the boundaries of the landfill to be mined. The description and plat shall be prepared and sealed by a registered professional land surveyor.

(4) Financial assurance. Municipal solid waste landfill facilities are subject to the requirements specified in Subchapter K of this chapter (relating to Closure, Post-Closure, and Corrective Action) and Chapter 37, Subchapter R of this title (relating to Financial Assurance for Municipal Solid Waste Facilities).

(5) Landowner list. The applicant shall include a list of landowners, residents, and businesses within one half mile of the facility boundaries along with an appropriately scaled map locating property owned by the landowners.

SUBCHAPTER Y : MEDICAL WASTE MANAGEMENT

§330.1005, §330.1010

STATUTORY AUTHORITY

The amendments are adopted under TWC, §5.103 and §5.105, which provide the commission with the authority to adopt any rules necessary to carry out its powers and duties under the laws of this state.

The amendments are also adopted under the Solid Waste Disposal Act in HSC, §361.011, which provides the commission with the authority to manage municipal solid waste; HSC, §361.024, which provides the commission with the authority to adopt rules and establish standards of operation for the management of solid waste; and HSC, §361.085, which provides the commission with the authority to require financial assurance demonstrations for solid waste, hazardous waste, and permitted facilities.

Together, these statutes authorize the commission to adopt any rules necessary to carry out its powers and duties under TWC and other laws of Texas and to establish and approve all general policy of the commission.

§330.1005. Transporters of Medical Waste.

(a) The requirements of this section are applicable to any person who collects for transport or who transports untreated medical waste which is designated as a special waste from health care related facilities unless that person is exempt under the provisions of subsection (p) of this section.

(b) Transporters shall register their operations with the commission no later than the effective date of these sections. Persons who plan to transport untreated special waste from health care related facilities after the effective date of this section shall register with the commission prior to commencing operations. Registration forms will be provided by the commission upon request. The following information must be provided for registration:

- (1) name, address, and telephone number of registrant;
- (2) name, address, and telephone number of partners, corporate officers, and directors;
- (3) description of vehicles to be registered, including:
 - (A) make, model, and year of vehicle;
 - (B) motor vehicle identification number;
 - (C) vehicle license plate (tag) number including state and year; and
 - (D) name of vehicle owner; and
- (4) name and driver's license number (including the state issuing the license) for all vehicle operators.

(c) Persons who apply to the commission for registration and receive said registration shall maintain a copy of the registration form, as annotated by the commission with an assigned registration number, at their designated place of business and in each vehicle used to transport untreated special waste from health care related facilities.

(d) Registrations shall expire 12 months after the date of issuance. Registrations are required to be renewed annually prior to the expiration date. Applications for renewal must contain the same information as the initial registration and shall be submitted to the commission at least 60 days prior to the expiration date. An application for renewal may be obtained from the Permits Section of the Municipal Solid Waste Division.

(e) Transporters shall notify the commission, by letter, within 15 days of any changes to their registration if:

(1) the amount of untreated special waste from health care related facilities or total operation is expanded by 50% over that originally registered;

(2) the office or place of business is moved;

(3) the name of registrant or owner of the operation is changed;

(4) the name of the partners, corporate directors, or corporate officers change; or

(5) additional drivers are employed. The notification for additional drivers may be done at six-month intervals.

(f) Revocation or denial of registration procedures are as follows.

(1) The commission may revoke a registration or refuse to issue a registration for:

(A) failure to maintain a complete and accurate record of shipments of waste;

(B) failure to maintain vehicles in safe working order as evidenced by citations from the Texas Department of Public Safety or local traffic law enforcement agencies;

(C) falsification of waste shipping documents or shipment records;

(D) delivery of untreated special waste from health care related facilities to a facility not authorized to handle the waste;

(E) failure to comply with any rule or order issued by the commission pursuant to the requirements of this chapter;

(F) failure to submit required annual reports or pay registration fees;

(G) failure to maintain insurance or provide proof of insurance as required in subsection (j) of this section;

(H) illegal disposal of untreated or treated medical waste; or

(I) collection or transportation of medical waste without registration as required in this section; or

(J) such other cause sufficient to warrant termination or suspension of the registration.

(2) Appeal of revocation or denial procedures are as follows:

(A) An opportunity for a public hearing on the revocation of registration may be requested in writing by the registrant by certified mail, return receipt requested, provided the request is postmarked within 20 days after a notice of revocation has been sent from the commission to the last known address of the registrant. If the registration is revoked, a transporter shall not transport untreated special waste from health care related facilities regulated under this subchapter. The period of revocation shall be not less than one year nor more than five years.

(B) An opportunity for a public hearing on the denial of registration or renewal of registration may be requested in writing by the applicant by certified mail, return receipt requested, provided the request is postmarked within 20 days after a notice of denial has been sent from the

commission to the address listed on the application. If the registration is denied, a person shall not collect or transport untreated special waste from health care related facilities regulated under this subchapter.

(g) Requirements for vehicles used to collect or transport untreated medical waste are as follows.

- (1) Vehicles used to collect and or transport medical waste shall:
 - (A) have a fully enclosed, leak-proof, cargo-carrying body, such as a cargo compartment, box trailer, or roll-off box;
 - (B) protect the waste from mechanical stress or compaction;
 - (C) carry spill cleanup equipment including, but not limited to, disinfectants, absorbent materials, personal protective equipment, such as gloves, coveralls, and eye protection, and leakproof containers or packaging materials; and
 - (D) have the following identification on the two sides and back of the cargo-carrying compartment in letters at least three inches high: (the name of the transporter) TNRCC: (the TNRCC-assigned registration number) Caution: Medical Waste.

- (2) The cargo compartment of the vehicle shall:
 - (A) be maintained in a sanitary condition;
 - (B) be locked when the vehicle is in motion;
 - (C) be locked when waste is present in the compartment except during loading or unloading of waste;
 - (D) have a floor and sides made of an impervious, nonporous material; and
 - (E) have all discharge openings securely closed during operation of the vehicle.

- (h) Vehicles used to transport medical waste shall not be used to transport any other material until the vehicle has been cleaned and the cargo compartment disinfected. A written record of the date and the process used to clean and disinfect the vehicle shall be maintained for three years unless the commission shall direct a longer holding period. The record must identify the vehicle by motor vehicle identification number or license tag number. The owner of the vehicle, if not the registrant, shall be notified in writing that the vehicle has been used to transport medical waste and when and how the vehicle was disinfected.

- (i) Shipments of untreated special waste from health care related facilities shall not be

commingled or mixed during transport or storage with trash, rubbish, garbage, hazardous waste, asbestos, or radioactive waste regulated under 25 TAC Chapter 289 (relating to Radiation Control).

(j) Financial assurance required under this section shall be provided in accordance with Chapter 37, Subchapter U of this title (relating to Financial Assurance for Medical Waste Transporters).

(k) The transporter shall furnish the generator a signed receipt for each shipment at the time of collection of the waste. The receipt shall include the name, address, telephone number, and registration number of the transporter. The receipt shall also identify the generator by name and address, and shall list the weight of waste collected and date of collection. If certified scales are not available, the number of containers shall be listed, and the transporter must provide the generator with a written statement of the total weight of the containers within 30 days.

(l) The transporter shall initiate and maintain a record of each waste shipment collection and deposition. Such record shall be in the form of a waste shipping document or other similar documentation approved by the commission. Forms will be provided by, or may be approved by, the commission. The transporter shall retain a copy of all waste shipping documents showing the collection and disposition of the medical waste. The transporter shall provide to the generator a copy of the waste shipping document bearing documentation of receipt of the untreated special waste from health care related facilities by a permitted facility which is not subject to §330.171 of this title (relating to Recordkeeping Requirements Applicable to Owners or Operators of Type V Processing Facilities)

within 30 days of receipt by such facility. Copies of waste shipping documents shall be retained by the transporters for three years in the main transporter office and made available to the commission upon request. The waste shipping document shall include the:

(1) transporter's name, address, telephone number, and commission's assigned transporter registration number;

(2) name and address of the person who generated the untreated special waste from health care related facilities and the date collected;

(3) number of containers of untreated special waste from health care related facilities collected for transportation and the total weight of the containers from each generator which must be added when certified scales are available;

(4) name of persons collecting, transporting, and unloading the medical waste;

(5) date and place where the untreated special waste from health care related facilities was deposited or unloaded;

(6) identification (permit or registration number, location, and operator) of the facility where the untreated special waste from health care related facilities was deposited; and

(7) name and signature of facility representative acknowledging receipt of the untreated special waste from health care related facilities and the weight of waste received.

(m) The transporter must be able to provide documentation of each waste shipment from the point of collection through and including the unloading of the waste at a facility permitted to accept the waste. The original shipping document must accompany each shipment of untreated waste to its final destination. The transporter is responsible for the proper collection and deposition of untreated medical waste accepted for transport.

(n) Shipments of untreated special waste from health care related facilities shall be deposited only at a facility which has been permitted by the commission to accept untreated special waste from health care related facilities. Untreated special waste from health care related facilities which is transported out of the state must be deposited at a facility which is permitted by the appropriate state agency having jurisdiction to accept such waste.

(o) Transporters shall not accept untreated medical waste which is not packaged in accordance with the provisions of §330.1004(i) of this title (relating to Generators of Medical Waste). Transporters shall not accept containers of medical waste which are leaking or damaged unless or until the shipment has been repackaged.

(p) Exemptions are as follows:

(1) Generators who generate less than 50 pounds per month of special waste from health care related facilities may transport their own untreated waste to a registered medical waste collection station, a transfer station, a storage facility, or a processing facility without complying with the requirements of this section.

(2) Generators who generate more than 50 pounds per month of special waste from health care related facilities may transport their own waste to a transfer station, a storage facility, or a processing facility and shall comply with subsections (g)-(o) of this section; they shall be exempt from subsections (a)-(f) of this section. These generators must notify the commission that they are transporting their own waste and must submit an annual summary report.

(3) Generators who are located in facilities contiguous to a permitted processing facility may transport their untreated waste to the processing facility without complying with the requirements of §330.1004(i) of this title (relating to Generators of Medical Waste) provided the waste is identified as untreated waste, and provided the waste is not transported along a public roadway or right-of-way.

(q) Transporter fees are as follows.

(1) Transporters are required to pay an annual registration fee to the commission based upon the total weight of untreated medical waste transported.

(2) The amount of the annual registration fee shall be based upon the total weight of

untreated medical waste transported under each registration. The fee for the first year of operation under a registration shall be based upon an estimate of the total weight of untreated medical waste to be transported. The fee paid for the first year of operation will be adjusted after submission of at least one annual report and one registration renewal, indicating the actual weight of untreated medical waste transported. An overpayment will be credited to the next year's registration fee or will be refunded. A billing notice for underpayment of the registration fee will be sent and payment will be due within 30 days after the date of the notice.

- (3) The fees shall be determined as follows.
 - (A) For a total annual weight transported of 1,000 pounds of medical waste or less, the fee is \$100.
 - (B) For a total annual weight transported greater than 1,000 pounds of medical waste but equal to or less than 10,000 pounds of medical waste, the fee is \$250.
 - (C) For a total annual weight transported greater than 10,000 pounds of medical waste but equal to or less than 50,000 pounds of medical waste, the fee is \$400.
 - (D) For a total annual weight transported greater than 50,000 pounds of medical waste, the fee is \$500.

(4) The transporter's annual registration fee shall accompany the applicant's original or renewal registration application and shall be submitted in the form of a check or money order made payable to the Texas Natural Resource Conservation Commission and delivered or mailed to: the Permits Section of the Municipal Solid Waste Division, Texas Natural Resource Conservation Commission, P.O. Box 13088, Austin, Texas 78711-3088.

(r) Transporters shall submit to the Permits Section of the Municipal Solid Waste Division an annual summary report of their activities through December 31 of each year. The report shall be submitted no later than March 1 of the year following the end of the report period. The report shall include the name(s) and address(es) of the facilities where the waste was deposited/unloaded, the registration/permit number of the facilities, and the amount of waste deposited/unloaded at each facility. The report shall indicate the amount of waste shipped out of state, the amount of waste shipped into the state, and the amount of waste generated and unloaded in the state. Forms for use in submitting the annual report may be obtained from the Permits Section of the Municipal Solid Waste Division.

§330.1010. On-Site Treatment Services on Mobile Vehicles.

(a) The requirements of this section are applicable to any person who treats special waste from health care related facilities on mobile vehicles on the site of generation, but is not the generator of the waste.

(b) Providers of on-site treatment of special waste from health care related facilities on mobile

vehicles shall register their operations with the commission no later than the effective date of these sections. Persons who plan to provide on-site treatment of special waste from health care related facilities on mobile vehicles after the effective date of this section shall register with the commission prior to commencing operations. Registration forms will be provided by the commission upon request.

The following information shall be provided for registration:

- (1) name, address, and telephone number of registrant;
- (2) name, address, and telephone number of partners, corporate officers, and directors;
- (3) description of vehicles to be registered, including:
 - (A) make, model, and year of vehicle;
 - (B) motor vehicle identification number;
 - (C) vehicle license plate (tag) number including state and year; and
 - (D) name of vehicle owner;
- (4) name and driver's license number (including the state issuing the license) for all vehicle operators; and

(5) description of intended approved treatment method to be employed as well as routine performance testing/parameter monitoring to be utilized.

(c) Persons who receive a registration from the commission shall maintain a copy of the registration form, as annotated by the commission with an assigned registration number, at their designated place of business and in each vehicle used in treating special waste from health care related facilities.

(d) Registrations shall expire 12 months after the date of issuance unless renewed annually prior to the expiration date. Applications for renewal must contain the same information as the initial registration and shall be submitted to the commission at least 60 days prior to the expiration date. An application for renewal may be obtained from the Permits Section of the Municipal Solid Waste Division.

(e) Providers of on-site treatment of special waste from health care related facilities on mobile vehicles shall notify the commission, by letter, within 15 days of any changes to their registration if:

(1) the method employed to treat special waste from health care related facilities changes;

(2) the office or place of business is moved;

(3) the name of registrant or owner of the operation is changed;

- (4) the name of the partners, corporate directors, or corporate officers change; or

- (5) additional drivers are employed.

- (f) Revocation or denial of registration procedures are as follows:
 - (1) The commission may revoke a registration issued under this section or refuse to issue a registration for:
 - (A) failure to maintain complete and accurate records of waste treated on-site;

 - (B) failure to maintain vehicles in safe working order as evidenced by citations from the Texas Department of Public Safety or local traffic law enforcement agencies;

 - (C) falsification of waste treatment records;

 - (D) treatment of special waste from health care related facilities which is not in accordance with the provisions of 25 TAC §1.136(a) (relating to Approved Methods of Treatment and Disposition);

 - (E) failure to comply with any rule or order issued by the commission pursuant to the requirements of this chapter;

(F) failure to submit required annual reports or pay registration fees;

(G) illegal disposal of untreated or treated medical waste; or

(H) treatment or disposal of special waste from health care related facilities without registration as required in this section; or

(I) such other cause sufficient to warrant termination or suspension of the registration.

(2) Appeal of revocation or denial procedures are as follows.

(A) An opportunity for a public hearing on the revocation of registration may be requested in writing by the registrant by certified mail, return receipt requested, provided the request is postmarked within 20 days after a notice of revocation has been sent from the commission to the last known address of the registrant. If the registration is revoked, a provider of on-site treatment of special waste from health care related facilities on mobile vehicles shall not treat such waste unless the provider is the generator. The period of revocation shall not be less than one year nor more than five years.

(B) An opportunity for a public hearing on the denial of registration may be requested in writing by the applicant by certified mail, return receipt requested, provided the request is postmarked within 20 days after a notice of denial has been sent from the commission to the address listed on the application. If the registration is denied, a provider of on-site treatment of special waste

from health care related facilities on mobile vehicles shall not treat such waste unless the provider is the generator.

(g) Requirements for mobile vehicles used in the treatment of special waste from health care related facilities are as follows.

(1) Vehicles used in the treatment of special waste from health care related facilities shall:

(A) have a fully-enclosable, leak-proof, cargo carrying body; such as a cargo compartment, or box trailer;

(B) carry spill cleanup equipment including, but not limited to, disinfectants, absorbent materials, personal protective equipment, such as gloves, coveralls, and eye protection, and leakproof containers or packaging materials.

(2) The cargo compartment of the vehicle and any self-contained treatment unit(s) shall:

(A) be maintained in a sanitary condition;

(B) be secured when the vehicle is in motion;

(C) be made of such impervious, non-porous materials as to allow adequate

disinfection/cleaning of the compartment or unit(s); and

(D) have all discharge openings securely closed during operation of the vehicle.

(h) Mobile vehicles used in the treatment of special waste from health care related facilities shall not be used to transport any other material until the vehicle has been cleaned and the cargo compartment disinfected. A written record of the date and the process used to clean and disinfect the vehicle shall be maintained for three years unless the commission shall direct a longer holding period. The record must identify the vehicle by motor vehicle identification number or license tag number. The owner of the vehicle, if not the registrant, shall be notified in writing that the vehicle has been used in the treatment of special waste from health care related facilities and when and how the vehicle was disinfected.

(i) Untreated special waste from health care related facilities shall not be commingled or mixed with hazardous waste, asbestos, or radioactive waste regulated under 25 TAC Chapter 289 (relating to Radiation Control) either before or after treatment.

(j) Providers of on-site treatment of special waste from health care related facilities on mobile vehicles shall furnish the generator the documentation required in §330.1004(c)(4) of this title (relating to Generators of Medical Waste) for the generator's records.

(k) Providers of on-site treatment of special waste from health care related facilities on mobile

vehicles shall maintain records of all waste treatment which includes the following information:

- (1) the name, address, and phone number of each generator;
- (2) the date of treatment;
- (3) the amount of waste treated;
- (4) the method/conditions of treatment;
- (5) the name (printed) and initials of the person(s) performing the treatment; and
- (6) a written procedure for the operation and testing of any equipment used and a written procedure for the preparation of any chemicals used in treatment. Routine performance testing using biological indicators and/or monitoring of parametric controls shall be conducted in accordance with §330.1004(c)(4)(E) of this title.

(l) Providers of on-site treatment of special waste from health care related facilities on mobile vehicles shall not transport waste unless they are registered in accordance with §330.1005 of this title. Treated waste shall be left on-site for disposal with that facility's routine municipal solid waste and in a form that is suitable for landfill disposal.

(m) Providers of on-site treatment of special waste from health care related facilities on mobile vehicles shall ensure adequate training of all operators in the use of any equipment used in treatment.

(n) Providers of on-site treatment of special waste from health care related facilities on mobile vehicles shall have a contingency plan available in the event of any malfunction of equipment.

If there is any question as to the adequacy of treatment of any load, that load shall be run again utilizing biological indicators to test for microbial reduction before the material is released for landfill disposal.

If the waste must be removed from the site before treatment is accomplished, a registered transporter shall remove the waste and all other applicable sections of this chapter shall be in effect.

(o) Fees to be assessed of providers of on-site treatment of special waste from health care related facilities on mobile vehicles are as follows.

(1) Treatment providers are required to pay an annual registration fee to the commission based upon the total weight of special waste from health care related facilities treated on-site under each provider registration.

(2) The amount of the annual registration fee shall be based upon the total weight of special waste from health care related facilities treated on-site.

(3) The fees shall be determined as follows.

(A) For a total annual weight of waste treated on-site of 1,000 pounds or less, the fee is \$100.

(B) For a total annual weight of waste treated on-site greater than 1,000 but equal to or less than 10,000 pounds, the fee is \$250.

(C) For a total annual weight of waste treated on-site greater than 10,000 but equal to or less than 50,000 pounds, the fee is \$400.

(D) For a total annual weight of waste treated on-site greater than 50,000 pounds, the fee is \$500.

(4) The annual registration fee for each provider of on-site treatment of special waste from health care related facilities on mobile vehicles shall accompany the applicant's original or renewal registration application and shall be submitted in the form of a check or money order made payable to the Texas Natural Resource Conservation Commission and delivered or mailed to: Permits and Registrations Section of the Municipal Solid Waste Division, Texas Natural Resource Conservation Commission, P.O. Box 13088, Austin, Texas 78711-3088.

(p) Providers of on-site treatment of special waste from health care related facilities on mobile vehicles shall submit to the commission's Permits Section of the Municipal Solid Waste Division an annual summary report of their activities for the calendar year from January 1 through December 31 of

each year. The report shall be submitted no later than March 1 of the year following the end of the report period and shall contain all the information required in subsection (k) of this section.

(q) When a vehicle used to provide on-site treatment of special waste from health care related facilities has been jointly purchased by two or more health care related facilities and is used only to treat the waste generated by the facilities included in that purchase, those facilities shall be exempt from subsection (o) of this section. Such facilities shall be subject to all other subsections of this section. The vehicle/treatment unit shall be operated on the premises whereon the waste was generated, and only by a staff member of that facility, a member of the joint operating group, or the group's authorized operating contractor.