

The Texas Commission on Environmental Quality (commission) proposes amendments to §§285.2, 285.7, 285.33, 285.50, 285.61, 285.70, 285.71, and 285.90. The commission also proposes the repeal of §285.64 and new §285.64 and §285.65.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES

The proposed rules would implement requirements in House Bill (HB) 2510, 79th Legislature, 2005, relating to the regulation of on-site sewage disposal systems using aerobic treatment and the maintenance of those systems. The proposed rules would also address enforcement for noncompliance. HB 2510 impacts two chapters within 30 TAC. These are Chapter 30, Occupational Licenses and Registrations, and Chapter 285, On-Site Sewage Facilities. This proposal would address the revisions to Chapter 285. The changes to Chapter 30 have previously been addressed in a separate rulemaking (Rule Project Number 2005-040-285-CE).

This proposed rulemaking would address the registration requirements for maintenance companies that provide service or maintenance of on-site sewage disposal systems using aerobic treatment. It also would address requirements for a homeowner who wishes to maintain the aerobic system at the homeowner's residence without the necessity of a maintenance contract with a maintenance company. Additionally, there are three changes to Chapter 285 not related to HB 2510. The first relates to revising the definition of subdivision, and the other two changes relate to more specific direction for design of mound and soil substitution disposal options.

The commission administers the On-Site Sewage Facility (OSSF) Program that currently includes executive director delegation of OSSF authority to counties, municipalities, and river authorities.

The proposed rules would create requirements for maintenance companies, individuals who provide maintenance for compensation, and homeowners who perform their own maintenance. The proposed rules would also clarify the definitions of maintenance company (to include the Chapter 30 definition of maintenance provider) and subdivision (to agree with the definition of subdivision within the Local Government Code). Finally, the proposed rules would also clarify OSSF disposal options of mound drainfields and soil substitution drainfield design options.

The proposed rules would further define the commission's regulations regarding servicing or maintenance of OSSFs using aerobic treatment under Texas Health and Safety Code (THSC), Chapter 366. The purpose of the statute is to regulate maintenance companies and their ability to service and maintain on-site sewage disposal systems using aerobic treatment. The failure of an OSSF is the fundamental cause of OSSF-related public health hazards and provides a medium for the transmission of disease. The failure of an OSSF may be caused by a number of factors, including inadequate soil texture, improper construction, improper planning, improper installation, and inadequate maintenance. Approximately 25% of all homes in Texas use OSSFs because options for centralized collection, treatment, and disposal systems are not available. In Fiscal Year 2004 alone, there were more than 41,000 newly permitted OSSFs in Texas. Of these, nearly 23,000 (53%) were aerobic systems.

The proposed rules would specify requirements for maintenance companies to obtain an occupational registration to perform service and maintenance of on-site sewage disposal systems using aerobic treatment. The significant revisions in these rules would include changes to the requirements for maintenance companies, installers, enforcement proceedings, and training for maintenance companies.

Finally, the proposed rules would delineate the training requirements for both homeowners, installers, and maintenance companies. Specifically, these rules propose six hours of training for homeowners who perform their own maintenance and a minimum of 16 hours of training for registered maintenance companies.

SECTION BY SECTION DISCUSSION

The commission proposes administrative changes throughout these sections to be consistent with Texas Register requirements and other agency rules and guidelines and to conform to the drafting standards in the *Texas Legislative Council Drafting Manual*, November 2004.

Subchapter A - General Provisions

The proposed amendment to §285.2, Definitions, would provide for consistency with the definition of Edwards Aquifer Recharge Zone, as provided in 30 TAC Chapter 213, Edwards Aquifer. The proposed amendment to §285.2 would also provide additional scope to the definition for maintenance company to include maintenance providers, as defined in §30.7, Definitions, and to include the new provisions from HB 2510 relating to maintenance provided for compensation. Additionally, the

proposed amendment to §285.2 would provide an updated definition of subdivision to reflect the subdivision definition found in Local Government Code, §232.001(a-1).

The proposed amendment to §285.7, Maintenance Requirements, would revise current rules for maintenance companies, which reflects changes to THSC, §366.0515(n), relating to certification, training, and registration for both maintenance companies and individuals employed by maintenance companies. The statute also eliminates the current acceptance of a wastewater Class D license as a prerequisite for performing maintenance. However, provisions have been added for wastewater Class D licensees to continue to provide maintenance until September 1, 2008, provided that they held a valid wastewater Class D license as of August 31, 2006. Finally, the current rules allow homeowner maintenance in counties with a population less than 40,000. The proposed amendment would reflect the provisions of THSC, §366.051(g) - (k), and would allow homeowners in every county to perform their own aerobic system maintenance if the homeowner has six hours of commission-approved training from either the manufacturer or installer, under specified time frames, and the county has not imposed more stringent standards. The proposed amendment would also provide for routine inspections by the permitting authority, not to be greater than once every five years unless the owner has failed to properly maintain the aerobic system and requires a homeowner to obtain a maintenance contract if the aerobic system is not properly maintained.

Subchapter D - Planning, Construction, and Installation Standards For OSSFs

The proposed amendment to §285.33, Criteria for Effluent Disposal System, would provide the construction requirements for a mound drainfield in subsection (d)(3) and would quantify the positive

allowances for slopes and the existing or new soil interface. The proposed amendment to §285.33 would also provide clearer requirements for designing a soil substitution drainfield in subsection (d)(4) and would not allow for soil substitution using Class III soils, which generally tend to erratically treat and disperse effluent.

Subchapter F - Licensing and Registration Requirements For Installers, Apprentices, Designated Representatives, Site Evaluators, and Maintenance Companies

The proposed amendment to §285.50, General Requirements, would provide for commission registration of maintenance companies.

The proposed amendment to §285.61, Duties and Responsibilities of Installers, would provide for mandatory homeowner training by the installer of an aerobic system when requested by the homeowner.

The proposed repeal of §285.64, Suspension or Revocation of License or Registration, would be replaced by new proposed §285.64, Duties and Responsibilities of Maintenance Companies. This section would address the requirements in §285.7 for maintenance companies and assist in enforcement referrals by permitting authorities and the commission.

The proposed new §285.65, Suspension or Revocation of License or Registration, would include all of the provisions currently found in §285.64 and add the revocation of a maintenance company's registration for failure to either properly maintain an aerobic system or submit required reports. This

section would reflect the provisions of §285.7 for maintenance companies and assist in enforcement referrals.

Subchapter G - OSSF Enforcement

The proposed amendment to §285.70, Duties of Owners With Malfunctioning OSSFs, includes specific language for homeowners who desire to maintain their own aerobic systems, as reflected in §285.7(c)(4).

The proposed amendment to §285.71, Authorized Agent Enforcement of OSSFs, adds provisions in the rules for complaints regarding the performance of the maintenance of an aerobic system by maintenance companies or homeowners.

Subchapter I - Appendices

The proposed amendment to §285.90, Figures, would revise references in Figure 2, the model deed and affidavit, from the Texas Natural Resource Conservation Commission (TNRCC) to the Texas Commission on Environmental Quality (TCEQ). Additionally, the proposed amendment to §285.90 would add instructions in Figure 3, the sample testing and reporting record for homeowners providing their own maintenance. This also reflects the provisions within §285.7(d), Maintenance Requirements. The proposed amendment to §285.90 would also delete Class III soils as fill in Figure 4, soil substitution drainfields for the typical drainfields - sectional view diagram. This reflects the design changes in §285.33(d)(4), Criteria For Effluent Disposal Systems, relating to soil substitution drainfields.

FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENT

Jeff Horvath, Analyst, Strategic Planning and Assessment Section, determined that for the first five-year period the proposed rules are in effect, fiscal implications are anticipated for the commission and other units of local government due to the administration and enforcement of the proposed rules. Maintenance companies, homeowners, manufacturers, and installers of aerobic on-site sewage disposal systems will also be fiscally impacted by the new requirements.

The proposed rules would implement provisions of HB 2510, 79th Legislature, 2005, by creating requirements for aerobic on-site sewage disposal system manufacturers, installers, maintenance companies, individuals who provide maintenance for compensation, and homeowners who perform their own maintenance. The proposed rules would specify the requirements needed for manufacturers, installers, maintenance companies, and homeowners in order to perform service and maintenance of on-site sewage disposal systems using aerobic treatment. The proposed rules also provide changes for enforcement responsibilities for the commission and units of local government.

The proposed rules are expected to result in additional responsibilities for local units of government that are permitting authorities for on-site sewage facilities. The commission, counties, municipalities, and river authorities will have to monitor compliance with the new rules by installers, maintenance companies, and homeowners who choose to provide their own maintenance of aerobic OSSFs.

Permitting authorities will have to ensure that maintenance companies and homeowners who provide their own maintenance have received the required training from the manufacturer or installer and that

they have obtained the proper certification. In addition, maintenance companies will need to have obtained the proper registration from the commission.

Permitting authorities will also have to ensure that maintenance companies and homeowners submit the required maintenance report three times each year and that each facility is routinely inspected no more than once every five years. It is expected that the permitting authorities will also have to respond to any complaints, and may have to pursue other enforcement related activities including litigation. These additional responsibilities are expected to result in costs for the estimated 325 affected local permitting authorities, although costs will depend upon how many aerobic facilities are in their jurisdiction and the necessity for personnel and equipment upgrades as well as their ability to provide enforcement. These costs may be as high as \$100,000, but program staff at the commission have estimated that on average, these additional costs will be in the range of \$10,000 each year. Local authorities are expected to adjust fees for their on-site facility programs to cover these additional costs.

Additional costs are also expected for the commission as a result of the proposed rules. Modifications will be required for the current enforcement database in order to incorporate the new maintenance company registration program. These modifications will need to be completed prior to March 1, 2006, the date that the commission is required to accept applications for the registrations. The modifications to the database are estimated to cost approximately \$20,000.

Additionally, there may be increased responsibility for personnel in some commission regional offices in order to monitor manufacturer, installer, maintenance company, and homeowner compliance as well

as additional responsibilities for central office staff to approve training modules expected to be provided by the manufacturers or installers. Costs to implement the new program will be offset through the collection of the \$70 registration fee for each employee who provides maintenance. Maintenance companies will also be required to pay \$70 every two years for renewal of the registration. It is estimated that there may be anywhere from 2,500 to 4,000 separate registrations with the commission over a two-year period that would generate approximately \$175,000 to \$280,000 in fee revenue. Fee revenue will be deposited into, and expenses will be paid from, the Occupational Licensing Account 0468. The legislature appropriated the commission \$166,960 in Fiscal Year 2006 and \$127,470 in Fiscal Year 2007 to administer the program. Local authorities and the commission will also have the authority to assess and collect fines for noncompliance with the proposed rules.

PUBLIC BENEFITS AND COSTS

Mr. Horvath also determined that for each year of the first five years the proposed rules are in effect, the public benefit anticipated from the changes seen in the proposed rules will be compliance with state law and the enhanced protection of the public health and environment through the proper servicing and maintenance of on-site sewage disposal systems using aerobic treatment.

Fiscal implications are anticipated for homeowners, manufacturers, installers, and maintenance companies within the state that sell, install, and service aerobic on-site sewage facilities.

The proposed rules are expected to affect at least 32 different manufacturers of aerobic on-site sewage treatment equipment as they will be required to provide training to homeowners and installers and

employees of companies that provide installation and maintenance of on-site sewage facilities. The manufacturing companies will be officially tracking and certifying all maintenance company personnel who provide maintenance in addition to all homeowners who have been trained to maintain their own aerobic OSSFs. Some maintenance companies may have to be certified by all 32 manufacturers. It is assumed that there will be administrative costs for the certification and that these costs will be recovered through fees charged to those who are required to be certified. Installers and maintenance companies will also be tracking and reporting to permitting authorities which homeowners have been trained to provide their own maintenance. There will be costs to provide this required tracking and training (16 hours minimum and 32 hours maximum for registered maintenance companies and six hours maximum of training for homeowners). These costs are expected to be recovered through fees that are estimated to be between \$200 and \$400 for the one-time training. Both individuals providing maintenance for compensation and maintenance companies will have to register with the commission and pay a fee of \$70 every two years to maintain their registration. Homeowners do not have to register with the commission.

Homeowners and registered maintenance companies will have to test systems three times each year and report the results to the local permitting authority. There will be costs for test kits, especially for homeowners, but these costs are not expected to be significant. Homeowners who choose not to provide their own maintenance will have to secure a maintenance contract with a maintenance company. Costs for a maintenance contract are expected to be between \$150 to \$600 each year. Any additional costs for manufacturers, installers, or maintenance companies to implement the proposed

rules are expected to be passed on to consumers, though in general costs are not anticipated to be significant.

SMALL BUSINESS AND MICRO-BUSINESS ASSESSMENT

Adverse fiscal implications are anticipated for small or micro-businesses that maintain aerobic on-site sewage facilities. Costs are anticipated for those small or micro-businesses that manufacture aerobic on-site sewage equipment, but these costs are anticipated to be recovered through training and certification fees. Maintenance companies will have costs in the first year the proposed rules are in effect for training, registration, and certification. Training and registration costs are estimated to be between \$270 and \$470. A small business is defined as having fewer than 100 employees or less than \$1 million in annual gross receipts. Maintenance companies that are small businesses are estimated to have costs of at least \$2.70 to \$4.70 per employee. A micro-business is defined as having no more than 20 employees. The cost per employee for a micro-business providing maintenance is estimated to be approximately \$13.50 to \$23.50 during the first year of implementation.

LOCAL EMPLOYMENT IMPACT STATEMENT

The commission reviewed this proposed rulemaking and determined that a local employment impact statement is not required because the proposed rules do not adversely affect a local economy in a material way for the first five years that the proposed rules are in effect.

DRAFT REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed this rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the rulemaking is not subject to §2001.0225 because it does not meet the definition of a “major environmental rule” as defined in that statute.

Major environmental rule means a rule, the specific intent of which, is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The intent of this proposal is to implement legislation that allows regulation of on-site sewage disposal systems using aerobic treatment and the maintenance of those systems. This proposal does not adversely affect, in a material way, the economy, a section of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

In addition, the proposed rules are not subject to Texas Government Code, §2001.0225, because they do not meet the four criteria specified in §2001.0225(a). Texas Government Code, §2001.0225(a) applies to a rule adopted by a commission, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and a commission or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the commission instead of under a specific state law. The proposed rules do not meet any of these requirements. First, these revisions do not exceed a standard set by federal law as there are no federal requirements for maintaining OSSFs. Second, these revisions do not exceed an express

requirement of state law but are being proposed to implement state law. Therefore, the rulemaking does not exceed an express requirement of state law. Third, the commission is not a party to a delegation agreement with the federal government concerning a state and federal program that would be applicable to requirements set forth in these rules. Therefore, there are no delegation agreement requirements that could be exceeded by these rules. Fourth, this proposed rulemaking does not adopt a rule solely under the general powers of the commission. The requirements that would be implemented through these rules are specified in THSC, Chapter 366, which requires the commission to enact rules governing the installation of OSSFs. Therefore, the commission does not propose these rules solely under the commission's general powers.

Thus, a regulatory analysis is not required because the proposed rules do not meet the criteria of a major environmental rule contained in Texas Government Code, §2001.0225. The commission invites public comment regarding this draft regulatory impact analysis determination.

TAKINGS IMPACT ASSESSMENT

The commission performed a preliminary assessment of these rules in accordance with Texas Government Code, §2007.043. The following is a summary of that assessment. The specific purpose of the rules is to regulate activities having the potential for causing pollution of the waters in Texas.

The rules will substantially advance this specific purpose by the regulation of on-site sewage disposal systems using aerobic treatment as well as maintenance and enforcement of those systems.

Promulgation and enforcement of the proposed rules would be neither a statutory nor a constitutional taking because they do not adversely affect private real property. The rulemaking does not affect

private property in a manner that restricts or limits an owner's right to the property that would otherwise exist in the absence of a governmental action. Texas Government Code, Chapter 2007, does not apply to this rulemaking because the promulgation and enforcement of these rules will not create a burden on private real property. The commission invites public comment on this preliminary takings impact assessment.

CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission reviewed the proposed rulemaking and found that the proposal is subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act, Texas Natural Resources Code, §§33.201 *et seq.*, and therefore must be consistent with all applicable CMP goals and policies. The commission conducted a consistency determination for the proposed rules in accordance with Coastal Coordination Act Implementation Rules, 31 TAC §505.22, and found the proposed rulemaking is consistent with the applicable CMP goals and policies.

CMP goals applicable to the proposed rule(s) include: to protect, preserve, restore, and enhance the diversity, quality, quantity, functions, and values of coastal natural resource areas; to ensure sound management of all coastal resources by allowing for compatible economic development and multiple human uses of the coastal zone; and to ensure and enhance planned public access to and enjoyment of the coastal zone in a manner that is compatible with private property rights and other uses of the coastal zone.

CMP policies applicable to the proposed rule(s) include that commission rules under THSC, Chapter 366, governing on-site sewage disposal systems require that on-site disposal systems be located, designed, operated, inspected, and maintained so as to prevent releases of pollutants that may adversely affect coastal waters.

The proposed rules are consistent with the goals and policies because they require testing, sampling, and maintenance of aerobic systems sufficient to prevent releases of pollutants.

Promulgation and enforcement of these rules will not violate or exceed any standards identified in the applicable CMP goals and policies because the proposed rules are consistent with these CMP goals and policies and because these rules do not create or have a direct or significant adverse effect on any coastal natural resource areas.

Written comments on the consistency of this rulemaking may be submitted to the contact person at the address listed under the SUBMITTAL OF COMMENTS section of this preamble.

SUBMITTAL OF COMMENTS

Comments may be submitted to Holly Vierk, MC 205, Texas Register Team, Office of Legal Services, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to (512) 239-4808. All comments should reference Rule Project Number 2005-040-285-CE.

Comments must be received by 5:00 p.m., March 27, 2006. For further information, please contact Joseph L. Strouse, P.E., Compliance Support Division, at (512) 239-6003.

SUBCHAPTER A: GENERAL PROVISIONS

§285.2, §285.7

STATUTORY AUTHORITY

The amendments are proposed under the authority granted to the commission by the Texas Legislature in Texas Water Code (TWC), Chapter 37, and THSC, Chapter 366. The amendments are also proposed under the general authority granted in TWC, §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's authority necessary to carry out its jurisdiction; TWC, §5.103 and §5.105, which authorize the commission to adopt rules and policies necessary to carry out its responsibilities and duties under TWC, §5.013; and TWC, §7.002, which authorizes the commission to enforce provisions of the TWC and the THSC.

The proposed amendments implement TWC, §37.002, which requires the commission to adopt rules to establish registration requirements for maintenance providers that will service and maintain on-site sewage disposal systems using aerobic treatment under THSC, §366.0515, and to impose administrative and criminal penalties under TWC, §§7.173 - 7.175.

§285.2. Definitions.

The following words and terms in this section are in addition to the definitions in Chapter 3 and Chapter 30 of this title (relating to Definitions and Occupational Licenses and Registrations). The words and terms in this section, when used in this chapter, [shall] have the following meanings.

(1) (No change.)

(2) **Alter**--To change an on-site sewage facility [(OSSF)] resulting in:

(A) - (E) (No change.)

(3) (No change.)

(4) **Apprentice**--An individual who has been properly registered with the executive director according to Chapter 30 of this title (relating to Occupational Licenses and Registrations), and is undertaking a training program under the direct supervision of a licensed installer.

(5) **Authorization to construct**--Written permission from the permitting authority to construct an on-site sewage facility [OSSF] showing the date the permission was granted. The authorization to construct is the first part of the permit.

(6) - (11) (No change.)

(12) **Compensation**--A payment to construct, alter, repair, extend, maintain, or install an on-site sewage facility [OSSF]. Payment may be in the form of cash, check, charge, or other form of monetary exchange or exchange of property or services for service rendered.

(13) - (14) (No change.)

(15) **Construct**--To engage in any activity related to the installation, alteration, extension, or repair of an on-site sewage facility (OSSF) [OSSF], including all activities from disturbing the soils through connecting the system to the building or property served by the OSSF. Activities relating to a site evaluation are not considered construction.

(16) **Delegate**--The executive director's act of assigning authority to implement the on-site sewage facility [OSSF] program under this chapter.

(17) **Designated representative**--An individual who holds a valid license issued by the executive director according to Chapter 30 of this title (relating to Occupational Licenses and Registrations), and who is designated by the authorized agent to review permit applications, site evaluations, or planning materials, or conduct inspections on on-site sewage facilities [OSSFs].

(18) (No change.)

(19) **Direct supervision**--The responsibility of an installer to oversee, direct, and approve all actions of an apprentice relating to the construction of an on-site sewage facility [OSSF].

(20) - (21) (No change.)

(22) **Edwards Aquifer Recharge Zone [zone]**--That area where the stratigraphic units constituting the Edwards Aquifer crop out, including the outcrops of other geologic formations in proximity to the Edwards Aquifer, where caves, sinkholes, faults, fractures, or other permeable features would create a potential for recharge of surface waters into the Edwards Aquifer. The recharge zone is identified as a geographic area delineated on official maps located in the agency's central office and in the appropriate regional office [and groundwater conservation district], or as amended by Chapter 213 of this title (relating to Edwards Aquifer).

(23) **Extend**--To alter an on-site sewage facility [OSSF] resulting in an increase in capacity, lengthening, or expansion of the existing treatment or disposal system.

(24) - (31) (No change.)

(32) **Install**--To put in place or construct any portion of an on-site sewage facility [OSSF].

(33) **Installer**--An individual who is compensated by another to construct an on-site sewage facility [OSSF].

(34) (No change.)

(35) **Maintenance**--Required or routine performance checks, examinations, upkeep, cleaning, or mechanical adjustments to an on-site sewage facility [OSSF], including replacement of pumps, filters, aerator lines, valves, or electrical components. Maintenance does not include alterations.

(36) **Maintenance company**--A person or business that maintains on-site sewage facilities [OSSFs]. For the purposes of this chapter, the definition of a maintenance company includes all maintenance providers, as defined in §30.7 of this title (relating to Definitions).

(37) **Maintenance findings**--The results of a required performance check or component examination on a specific on-site sewage facility [OSSF].

(38) **Malfunctioning OSSF**--An on-site sewage facility [OSSF] that is causing a nuisance or is not operating in compliance with this chapter.

(39) - (40) (No change.)

(41) **Notice of approval**--Written permission from the permitting authority to operate an on-site sewage facility [OSSF]. The notice of approval is the final part of the permit.

(42) **Nuisance**--

(A) (No change.)

(B) an overflow from a septic tank or similar device, including surface discharge from or groundwater contamination by a component of an on-site sewage facility [OSSF]; or

(C) (No change.)

(43) - (45) (No change.)

(46) **Operate**--To use an on-site sewage facility [OSSF].

(47) **Owner**--A person who owns property served by an on-site sewage facility [OSSF], or a person who owns an OSSF. This includes any person who holds legal possession or ownership of a total or partial interest in the structure or property served by an OSSF.

(48) (No change.)

(49) **Permit**--An authorization, issued by the permitting authority, to construct or operate an on-site sewage facility [OSSF]. The permit consists of the authorization to construct (including the approved planning materials) and the notice of approval.

(50) - (55) (No change.)

(56) **Proprietary system**--An on-site sewage facility [OSSF] treatment or disposal system that is produced or marketed under exclusive legal right of the manufacturer or designer or for which a patent, trade name, trademark, or copyright is used by a person or company.

(57) **Recharge feature**--Permeable geologic or manmade feature located on the Edwards Aquifer Recharge Zone [recharge zone] where:

(A) (No change.)

(B) rapid infiltration from the on-site sewage facility [OSSF] to the subsurface may occur.

(58) - (59) (No change.)

(60) **Repair**--To replace any components of an on-site sewage facility (OSSF) [OSSF] in situations not included under emergency repairs according to §285.35 of this title (relating to

Emergency Repairs), excluding maintenance. The replacement of tanks or drainfields is considered a repair and requires a permit for the entire OSSF system.

(61) - (66) (No change.)

(67) **Site evaluator**--An individual who holds a valid license issued by the executive director according to Chapter 30 of this title (relating to Occupational Licenses and Registrations) and who conducts preconstruction site evaluations, including visiting a site and performing soil analysis, a site survey, or other activities necessary to determine the suitability of a site for an on-site sewage facility [OSSF]. A professional engineer may perform site evaluations without obtaining a site evaluator license.

(68) - (70) (No change.)

(71) **Subdivision**--A division of a tract of land, [property] regardless of whether it is made by using a metes and bounds description in a deed of conveyance or in a contract for a deed, by using a contract of sale or other executory contract to convey, or by using any other method [divided into two or more parts either by platting or field notes with metes and bounds, and transferred by deed or contract for deed].

(72) **Well**--A water well, injection well, dewatering well, monitoring well, piezometer well, observation well, or recovery well as defined under Texas Water Code, Chapters 26, 32, and 33, and 16 TAC Chapter 76 (relating to Water Well Drillers and Water Well Pump Installers).

§285.7. Maintenance Requirements.

(a) Maintenance requirements. Maintenance requirements for all on-site sewage facilities (OSSFs) [OSSFs] are identified in §285.91(12) of this title (relating to Tables).

(b) Maintenance company.

(1) An individual must be certified by the manufacturer of an OSSF using aerobic treatment to maintain the system under a maintenance contract with the owner of the system or to provide training to the owner in maintenance of the system. A manufacturer may not unreasonably withhold certification and, except as otherwise provided by this subsection, must offer the certification to individuals who are not employees of the manufacturer on the same terms as the manufacturer offers the certification to the manufacturer's employees.

(A) Additionally, the individual shall:

(i) satisfactorily complete an executive director-approved course for persons who provide aerobic system maintenance. This course must be a minimum of 16 classroom

hours of instruction in public health and safety, proper maintenance procedures, and recordkeeping and reporting. This course must have been approved by the executive director after September 1, 2005;

(ii) be employed by a maintenance company in which at least one employee holds an Installer II license;

(iii) meet all of the manufacturer's criteria and requirements for entering into a business relationship; and

(iv) satisfactorily complete any other reasonable requirements imposed for certification by the manufacturer.

(B) A person providing maintenance with a valid wastewater Class D license on or before August 31, 2006, may continue to do so until August 31, 2008, provided that person also satisfies the requirements of subparagraph (A)(i), (iii), and (iv) of this title.

[(1) At least one individual in the company shall hold either an Installer II license or a Class D or higher wastewater operator license.]

[(A) That individual shall also be certified by the manufacturer for the system being maintained. Effective 180 days after the effective date of these rules, the manufacturer shall certify the individual only after the individual has attended a training class approved by the executive director and conducted by the manufacturer.]

[(B) That individual shall also be trained by the professional engineer or professional sanitarian responsible for preparing the planning materials, if performing required maintenance on an OSSF that is professionally designed as a non-standard system.]

(2) For non-standard systems, an individual providing maintenance shall be trained by the professional engineer or professional sanitarian responsible for preparing the planning materials for a non-standard system.

(3) [(2)] The maintenance company and the individual certified by the manufacturer will be responsible for fulfilling the requirements of the maintenance contract.

(c) Maintenance contracts. OSSFs required to have maintenance contracts are identified in §285.91(12) of this title. The OSSF shall be maintained and tested by the maintenance company holding a maintenance contract.

(1) Contract provisions. The OSSF maintenance contract shall, at a minimum:

(A) - (B) (No change.)

(C) specify the name of the individual employed by the maintenance company who is certified by the manufacturer of the system and is responsible for fulfilling the terms of the maintenance contract;

(D) - (E) (No change.)

(2) Contract submittals. Unless excepted by paragraph (4) of this subsection, a copy of the signed maintenance contract shall be provided by the owner to the permitting authority before the authorization to construct is issued. Before the current contract expires, the owner of an OSSF is required to have a new maintenance contract signed. A copy of a new contract shall be submitted to the permitting authority at least 30 days before the contract expires.

(A) (No change.)

(B) Ongoing [On-going] maintenance contract. After the expiration of the two-year initial maintenance contract, the owner shall have ongoing [on-going] maintenance performed by either the original maintenance company or another maintenance company qualified under subsection (b)(1) of this section, unless the exceptions in paragraph (4) of this subsection apply.

(3) Amendments or terminations.

(A) - (C) (No change.)

(D) If a maintenance contract is discontinued or terminated, the owner shall contract with another maintenance company and provide the permitting authority with a copy of the new signed maintenance contract no later than 30 days after termination, unless the owner meets the requirements of paragraph (4) of this subsection.

(4) Exceptions to maintenance contract. At the end of the initial two-year maintenance period, the owner of an aerobic treatment system for a single family residence shall either maintain the system personally or obtain a new maintenance contract.

(A) If the owner of an OSSF using aerobic treatment for a single-family residence elects to maintain the system directly and in accordance with §30.244(a) of this title (relating to Exemptions), the owner must obtain specific on-site maintenance training for the system from either the manufacturer or an installer who has been certified by the manufacturer.

(i) Training for the homeowner of an aerobic OSSF must be given within 30 calendar days of the date when requested by the homeowner. Additionally, this training must be completed a minimum of 30 days prior to the end of the existing maintenance contract.

(I) A manufacturer shall train the owner of the aerobic OSSF when requested by the owner, under the time frames described in this subsection. Failure to provide the owner with approved training within the specified time frame may result in removal of the manufacturer's product(s) from the list of approved systems.

(II) An installer shall train the owner of the aerobic OSSF when requested by the owner, under the time frames described in this subsection. Failure to provide the owner with approved training within the specified time frame may result in penalties to the installer, as described in §285.61 of this title (relating to Duties and Responsibilities of installers). These penalties may include revocation of the installer's license and registration as a maintenance provider.

(III) The specific on-site maintenance training for owners of aerobic systems must:

(-a-) have been previously approved by the executive director;

(-b-) provide for no more than six hours of training;

(-c-) be provided and completed in a timely manner that allows the owner to be trained and comply with the requirements of training and maintenance of this subsection and §285.70 of this title (relating to Duties of Owners With Malfunctioning OSSFs);

(-d-) include the importance to public health and safety of proper maintenance of the system; and

(-e-) a demonstration of the procedure for performing scheduled maintenance.

(ii) Within 30 days after the owner's completion of the training, the manufacturer or installer shall provide both the owner and the permitting authority with a written certificate or letter, signed by the manufacturer or installer, stating that the owner has received and completed the required training.

(B) Maintenance of an aerobic system by a homeowner is subject to any inspection and reporting requirements imposed by an authorized agent or the commission applicable to a maintenance company that contracts to maintain a system.

(C) If the residence is sold, the new homeowner, not later than the 30th day after the date the owner takes possession of the property, must obtain the training required by this subsection from either an installer certified by the manufacturer of the system or the manufacturer. If the homeowner does not request training, then the homeowner must contract with a maintenance company for the maintenance of the system.

[(4) Exceptions to maintenance contract. At the end of the initial two-year maintenance period, the owner of an aerobic treatment system for a single family dwelling located in a county with a population of less than 40,000 shall either maintain the system personally or shall obtain a new maintenance contract. If the owner elects to maintain the system directly, the owner shall,

before performing any maintenance, obtain training for the system from an installer who has been certified by the manufacturer. At least 30 days before the expiration of the maintenance contract, the owner must provide the permitting authority a written statement, signed by the installer, stating that the owner has been trained to maintain the system. In the absence of a maintenance contract, the owner is responsible for maintenance, testing, and reporting results to the permitting authority. The permitting authority cannot require a contract as a condition for approval of a permit for an OSSF in a county with a population of less than 40,000 if the owner chooses to maintain the system.]

(d) Testing and reporting. OSSFs that must be tested are identified in §285.91(12) of this title.

(1) The maintenance company, or the homeowner, if applicable under subsection (c)(4) of this section, shall test and report for each system as required in §285.90(3) of this title and §285.91(4) of this title (relating to Tables). The report must:

(A) include any responses to owner complaints, the results of the maintenance company's findings or the owner's findings, and the test results; and

(B) be submitted to the permitting authority and, if applicable, the owner within 14 days after the date the test is performed.

[(1) The maintenance company or the owner, if the owner decides to maintain the OSSF personally as allowed in subsection (c)(4) of this section, shall test and report for each system as required in §285.91(4) of this title. The report shall include any responses to owner complaints, the results of the maintenance company's findings, or the owner's findings, and the test results. The report shall be submitted to the permitting authority and the owner within 14 days after the date the test is performed.]

(2) (No change.)

(3) The number of required tests may be reduced to two per year for all systems having electronic monitoring and automatic telephone or radio access that will notify the maintenance company, or the owner if applicable under subsection (c)(4) of this section, of system or components failure and will monitor the amount of disinfection in the system. The maintenance company shall be responsible for ensuring that the electronic monitoring and automatic telephone or radio access systems are working properly.

(4) The manufacturer of the installed on-site aerobic system shall make available to the homeowner all replacement parts for that aerobic system to any homeowner who elects to maintain the on-site aerobic system as identified in subsection (c)(4) of this section. Failure to do so may result in removal of the manufacturer's product(s) from the list of approved systems.

(5) An authorized agent or the commission may routinely inspect an on-site sewage system using aerobic treatment for a single-family residence that is maintained directly by the owner of the system not more than once every five years.

SUBCHAPTER D: PLANNING, CONSTRUCTION, AND INSTALLATION

STANDARDS FOR OSSFS

§285.33

STATUTORY AUTHORITY

The amendment is proposed under the authority granted to the commission by the Texas Legislature in TWC, Chapter 37, and THSC, Chapter 366. The amendment is also proposed under the general authority granted in TWC, §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's authority necessary to carry out its jurisdiction; TWC, §5.103 and §5.105, which authorize the commission to adopt rules and policies necessary to carry out its responsibilities and duties under TWC, §5.013; and TWC, §7.002, which authorizes the commission to enforce provisions of the TWC and the THSC.

The proposed amendment implements TWC, §37.002, which requires the commission to adopt rules to establish registration requirements for maintenance providers that will service and maintain on-site sewage disposal systems using aerobic treatment under THSC, §366.0515, and to impose administrative and criminal penalties under TWC, §§7.173 - 7.175.

§285.33. Criteria for Effluent Disposal Systems.

- (a) (No change.)

(b) Standard disposal systems. Acceptable standard disposal methods shall consist of a drainfield to disperse the effluent either into adjacent soil (absorptive) or into the surrounding air through evapotranspiration (evaporation and transpiration).

(1) Absorptive drainfield. An absorptive drainfield shall only be used in suitable soil. There shall be two feet of suitable soil from the bottom of the excavation to either a restrictive horizon or to groundwater.

(A) Excavation. The excavation must be made in suitable soils as described in §285.31(b) of this title (relating to Selection [General] Criteria for Treatment and Disposal Systems).

(i) - (v) (No change.)

(vi) If the borings or backhoe pits excavated during the site evaluation encounter a rock horizon and the site evaluation shows that there is both suitable soil from the bottom of the rock horizon to two feet below the bottom of the proposed excavation and no groundwater anywhere within two feet of the bottom of the proposed excavation, a standard subsurface disposal system may be used, providing the following are met.

(I) - (VI) (No change.)

(VII) No single pipe drainfields on sloping ground as shown in §285.90(5) of this title (relating to Figures) or no systems using serial loading shall be used.

(vii) The size of the excavation shall be calculated using data from §285.91(1) and (3) of this title (relating to Tables). The soil application rate is based on the most restrictive horizon along the media, or within two feet below the bottom of the excavation. The formula $A = Q/Ra$ shall be used to determine the total absorptive area where:

Figure: 30 TAC §285.33(b)(1)(A)(vii) (No change.)

(I) The absorptive area shall be calculated by adding the bottom area ($L \times W$) of the excavation to the total absorptive area along the excavated perimeter $2(L+W)$, (in feet) [$2(L+W)$, in feet] multiplied by one foot.

Figure: 30 TAC §285.33(b)(1)(A)(vii)(I) (No change.)

(II) - (III) (No change.)

(B) (No change.)

(C) Drainline. The drainline shall be constructed of perforated distribution pipe and fittings in compliance with any one of the following specifications: [.]

(i) three- or four-inch [three or four inch] diameter PVC pipe with an SDR of 35 or stronger;

(ii) four-inch [four inch] diameter corrugated polyethylene, ASTM F405 in rigid ten foot joints;

(iii) three- or four-inch [three or four inch] diameter polyethylene smoothwall, ASTM F810;

(iv) three- or four-inch [three or four inch] diameter PVC ASTM D2729 pipe;

(v) three- or four-inch [three or four inch] diameter polyethylene ASTM F892 corrugated pipe with a smoothwall interior and fittings; or

(vi) (No change.)

(D) Drainline installation requirements [Installation Requirements]. The drainline shall be placed in the media with at least six inches of media between the bottom of the excavation and the bottom of the drainline. The drainline shall be completely covered by the media and the drainline perforations shall be below the horizontal center line of the pipe. For typical drainfield configurations, see §285.90(5) of this title [(relating to Figures)]. For excavations greater

than four feet in width, the maximum distance between parallel drainlines shall be four feet (center to center). Multiple drainlines shall be manifolded together with solid or perforated pipe. Additionally, the ends of the multiple drainlines opposite the manifolded end shall either be manifolded together with a solid line, looped together using a perforated pipe and media, or capped.

(E) Permeable soil barrier. Geotextile fabric shall be used as the permeable soil barrier and shall be placed between the top of the media and the excavation backfill. Geotextile fabric shall conform to the following specifications for unwoven, spun-bounded polypropylene, polyester, or nylon filter wrap.

Figure: 30 TAC §285.33(b)(1)(E) (No change.)

(F) - (H) (No change.)

(2) Evapotranspirative (ET) system. An ET system may be used in soils which are classified as unsuitable for standard subsurface absorption systems according to §285.31(b) of this title with respect to texture, restrictive horizons, or groundwater. Water saving devices must be used if an ET system is to be installed. ET systems shall only be used in areas of the state where the annual average evaporation exceeds the annual rainfall. Evaporation data is provided in §285.91(7) of this title.

(A) Liners. An impervious liner shall be used between the excavated surface and the ET system in all Class Ia soils, where seasonal groundwater tables penetrate the excavation, and where a minimum of two feet of suitable soil does not exist between the excavated surface and either a restrictive horizon or groundwater. Liners shall be rubber, plastic, reinforced concrete, gunite, or compacted clay (one foot thick or more). If the liner is rubber or plastic, it must be impervious, and each layer must be at least 20 mils thick. Rubber or plastic liners must be protected from exposed rocks and stones by covering the excavated surface with a uniform sand cushion at least four inches thick. Clay liners shall have a permeability of 10^{-7} centimeters/second [cm/sec] or less, as tested by a certified soil laboratory.

(B) - (F) (No change.)

(3) Pumped effluent drainfield. Pumped effluent drainfields shall use the specifications for low pressure dosed drainfields described in subsection (d)(1) of this section, with the following exceptions.

(A) - (C) (No change.)

(D) Lateral depth and vertical separation. All drainfield laterals shall be between 18 inches and three [3] feet deep. There shall be a minimum vertical separation distance of one foot from the bottom of the excavation to a restrictive horizon, and a minimum vertical separation of two feet from the bottom of the excavation to groundwater.

(E) Media. Each dosing pipe shall be placed with the drain holes facing down and placed on top of at least six [6] inches of media (pea gravel or media up to two inches measured along its greatest dimension).

(F) - (H) (No change.)

(c) Proprietary disposal systems.

(1) Gravel-less drainfield piping. Gravel-less pipe may be used only on sites suitable for standard subsurface sewage disposal methods. Gravel-less pipe shall be eight-inch or ten-inch diameter corrugated perforated polyethylene pipe. The pipe shall be enclosed in a layer of unwoven spun-bonded polypropylene, polyester, or nylon filter wrap. Gravel-less pipe shall meet ASTM F-667 Standard Specifications for large diameter corrugated high density polyethylene (ASTM D 1248) tubing. The filter cloth must meet the same material specifications as described under subsection (b)(1)(E) of this section.

(A) - (B) (No change.)

(C) Drainfield sizing. To determine appropriate drainfield sizing, use a drainfield width of $W = 2.0$ feet for an eight-inch diameter gravel-less pipe, and an excavation width of $W = 2.5$ for a ten-inch [10-inch] gravel-less pipe.

Figure: 30 TAC §285.33(c)(1)(C) (No change.)

(2) Leaching chambers. Leaching chambers are bottomless chambers that are installed in a drainfield excavation with the open bottom of the chamber in direct contact with the excavation. The ends of the chamber rows shall be linked together with non-perforated sewer pipe. The chambers shall completely cover the excavation, and adjacent chambers must be in contact with each other in such a manner that the chambers will not separate. To obtain the reduction in drainfield size allowed in subparagraph (A)(i) and (ii) [(i) - (ii)] of this paragraph for excavations wider than the chambers, the chambers shall be placed edge to edge.

(A) - (C) (No change.)

(3) Drip irrigation [Irrigation]. Drip irrigation systems using secondary treatment may be used in all soil classes including Class IV soils. The system must be equipped with a filtering device capable of filtering particles larger than 100 microns and that meets the manufacturer's requirements.

(A) - (C) (No change.)

(D) Loading rates. Pressure reducing emitters can be used in all classes of soils using loading rates specified in §285.91(1) of this title. Pressure reducing emitters are assumed to wet four square feet of absorptive area per emitter;[,] however, overlapping areas shall only be

counted once toward absorptive area requirements. The loading rate shall be based on the most restrictive soil horizon within one foot of the pressure reducing emitter. When solid rock is less than 12 inches below the pressure reducing emitter, the loading rate shall be based on Class IV soils.

(E) - (F) (No change.)

(4) (No change.)

(d) Non-standard disposal systems. All disposal systems not described or defined in subsections (b) and (c) of this section are non-standard disposal systems. Planning materials for non-standard disposal systems must be developed by a professional engineer or professional sanitarian using basic engineering and scientific principles. The planning materials for paragraphs (1) - (5) of this subsection shall be submitted to the permitting authority and the permitting authority shall review and either approve or disapprove them on a case-by-case basis according to §285.5 of this title (relating to Submittal Requirements for Planning Materials). Electrical wiring for non-standard disposal systems shall be installed according to §285.34(c) of this title (relating to Other Requirements). Upon approval of the planning materials, an authorization to construct will be issued by the permitting authority. Approval for a non-standard disposal system is limited to the specific system described in the planning materials for the specific location. The systems identified in paragraphs (1) - (5) of this subsection must meet these requirements, in addition to the requirements identified for each specific system in this section.

(1) Low pressure dosed drainfield. Effluent from this type of system shall be pumped, under low pressure, into a solid wall force main and then into a perforated distribution pipe installed within the drainfield area.

(A) - (B) (No change.)

(C) Pressure dosing systems shall be installed according to either design criteria in the *North Carolina State University Sea Grant College Publication UNC-S82-03* (1982) or other publications containing criteria or data on pressure dosed systems which are acceptable to the permitting authority. Additionally, the following sizing parameters are required for all low pressure dosed drainfields and shall be used in place of the sizing parameters in the *North Carolina State University Sea Grant College Publication* or other acceptable publications.

(i) The low pressure dosed drainfield area shall be sized according to the effluent loading rates in §285.91(1) of this title and the wastewater usage rates in §285.91(3) of this title. The effluent loading rate (Ra) in the formula in §285.91(1) of this title shall be based on the most restrictive horizon one foot below the bottom of the excavation. Excavated areas can be as close as three feet apart, measured center to center. All excavations shall be at least six inches wide. To determine the length of the excavation, use the following formulas, where L = excavation length, and A = absorptive area. [:]

(I) - (II) (No change.)

(ii) - (iv) (No change.)

(2) Surface application systems. Surface application systems include those systems that spray treated effluent onto the ground.

(A) - (B) (No change.)

(C) Technical report. A technical report shall be prepared for any system using surface application and shall be submitted with the planning materials required in §285.5(a) of this title. The technical report shall describe the operation of the entire on-site sewage facility OSSF [OSSF] system, and shall include construction drawings, calculations, and the system flow diagram. Proprietary aerobic systems may reference the executive director's approval list instead of furnishing construction drawings for the system.

(D) - (F) (No change.)

(G) Uniform application of effluent. Distribution pipes, sprinklers, and other application methods or devices must provide uniform distribution of treated effluent. The application rate must be adjusted so that there is no runoff.

(i) (No change.)

(ii) Planning criteria [Criteria]. Circular spray patterns may overlap to cover all irrigated area including rectangular shapes. The overlapped area will be counted only once toward the total application area. For large systems, multiple sprinkler heads are preferred to single gun delivery systems.

(iii) - (v) (No change.)

(3) Mound drainfields. A mound drainfield is an absorptive drainfield constructed above the native soil surface. The mound consists of a distribution area installed within fill material placed on the native soil surface. The required area of the fill material is a function of the texture of the native soil surface, the depth of the native soil, basal area sizing considerations, and sideslope requirements. A description of mound construction, as well as construction requirements not addressed in this section can be found in the *North Carolina State University Sea Grant College Publication UNC-SG-82-04 (1982)*.

(A) A mound drainfield shall only be installed at a site where there is at least one foot of native soil; however, approval for installation on sites with less than one foot of native soil may be granted by the permitting authority on a case-by-case basis.

(B) Mounds and mound distribution systems must be constructed with the longest dimension parallel to the contour of the site.

(C) Soil classification, loading rates (R(a)), and wastewater usage rates (Q)

shall all be obtained from this chapter.

(D) The depth of soil material (with less than 30% gravel) between the bottom of the media and a restrictive horizon must be at least 1.5 feet to the restrictive horizon or two feet to groundwater. The soil material includes both the fill and the native soil.

(E) The distribution area is defined as the interface area between the media containing the distribution piping and the fill material or the native soil, if applicable. The distribution length is the dimension parallel with the contour and equivalent to the length of the distribution lines which must also run parallel with the contour. The distribution width is defined as the required distribution area divided by the distribution length.

(i) The formula $A(d) = Q/R(a)$ shall be used for calculating the required distribution area of the mound where:

Figure: 30 TAC §285.33(d)(3)(E)(i)

$A(d)$ = required minimum distribution absorptive area in square feet

Q = design wastewater usage rate in gallons per day

$R(a)$ = most restrictive application rate between the fill material or the soil surface if the soil surface is within four inches of the bottom of the distribution media. The application rate is in gallons per square foot per day.

(ii) The area credited toward the required distribution area can be determined in either of the following ways.

(I) If the distribution area consists of a continuous six-inch layer of media over the fill, the credited area is the bottom interface area between the media and soil beneath the media.

(II) If the distribution area consists of rows of media and distribution pipe covered piping, the credited area can be calculated using the formulas listed in paragraph (1)(C)(i)(I) or (II) of this subsection depending on the depth of the media.

(iii) For sites with greater than 2% slopes, the length to width ratio of the distribution area must be at least 7 : 1. No length to width ratio is required on a site with 2% slope or less.

(iv) Effluent must be pressure dosed into the distribution piping to ensure equal distribution and to control application rates.

(v) If a continuous layer of media is used, the dosing lines must not be spaced more than three feet apart. If rows of media are used, the rows may be as close as three feet apart, measured edge to edge.

(vi) The dosing holes must not be greater than four feet apart.

(F) The basal area is defined as the interface area between the native soil surface and the fill material. The formula $A(b) = Q/R(a)$ must be used for calculating the minimum required basal area of the mound where:

Figure: 30 TAC §285.33(d)(3)(F)

$A(b)$ = required minimum basal absorptive area in square feet

Q = design wastewater usage rate in gallons per day

$R(a)$ = application rate of the native soil surface in gallons per square foot per day.

(i) On sites with greater than 2% slope, the area credited toward the required basal area is computed by multiplying the length of the distribution system by the distance from the upslope edge of the distribution system to the downslope toe of the mound.

(ii) On sites with 2% slopes or less, the area credited toward the required basal area sizing must include all areas below the distribution system as well as the side slope area on all side slope areas greater than six inches deep.

(G) Mounds shall only be installed on sites with less than 10% slope.

(H) The toe of the mound is considered the edge of the soil absorption system.

(I) The side slopes must be no steeper than three to one.

(J) There must be at least six inches of backfill over the distribution media and the mound shall be crowned to shed water.

[(3) Mound drainfields. A mound drainfield, an absorptive drainfield constructed above the native soil surface, shall only be installed on sites with less than 10% slope. A mound drainfield shall only be installed at a site where there is at least one foot of native soil; however, approval for installation on sites with less than one foot of native soil may be granted by the permitting authority on a case-by-case basis. Planning criteria for mound construction shall either use the design criteria in the North Carolina State University Sea Grant College Publication UNC-SG-82-04 (1982), the EPA's *On-site Wastewater Treatment and Disposal Systems Design Manual* (1980) or any technical publication containing mound system criteria acceptable to the executive director.]

[(A) The depth of the suitable soil material between the bottom of the media shall be 1.5 feet to the restrictive horizon or two feet to groundwater.]

[(B) Effluent shall be pressure dosed into the distribution piping to ensure equal distribution and to control application rates. Shallow placement of the pressure distribution pipe is recommended to reduce mound height. The toe of the mound is considered the edge of the disposal area in determining the appropriate separation distances as listed in §285.91(10) of this title.]

(4) Soil substitution drainfields. Soil substitution drainfields may be constructed in Class Ia soils, fractured rock, fissured rock, or Class II and III soils with greater than 30% gravel.

(A) A soil substitution drainfield must not be used in Class IV soils or Class IV soils with greater than 30% gravel. Class III or IV soil shall not be used as the substituted soil in a soil substitution drainfield. There must be at least two feet of substituted soil between the bottom of the media and groundwater.

(B) A soil substitution drainfield is constructed similar to a standard absorptive drainfield except that a minimum two foot thick Class Ib or Class II soil buffer shall be placed below and on all sides of the drainfield excavation. The soil buffer must extend at least to the top of the media. The two-foot buffer area along the sides of the excavation is not credited as bottom area in calculating absorptive area. However, the interface between the media and the substituted soil is credited as absorptive area.

(C) Soil substitution drainfields must be designed to address soil compaction to prevent unlevel disposal. It is recommended that low pressure dosing be used for effluent distribution. The edge of the substituted soil is considered the edge of the soil absorption drainfield in determining the appropriate separation distances as listed in §285.91(10) of this title.

(D) Class Ia soils do not provide adequate treatment of wastewater through soil contact. A soil substitution drainfield may be constructed in Class Ia soils in order to provide adequate soil for treatment. Absorptive area sizing must be based on the textural class of the substituted soil and must follow the formulas in subsection (b)(1)(A)(vii)(I) of this section.

(E) Permeable fractured and fissured rock, which contains soil in the fractures and fissures, does not provide adequate treatment of wastewater through soil contact. A soil

substitution drainfield can be constructed in this permeable fractured and fissured rock in order to provide adequate soil for treatment. Absorptive area sizing must be based on the most restrictive textural class between either the native soil residing in the fractures or fissures or the substituted soil. The sizing must follow the formulas in subsection (b)(1)(A)(vii)(I) of this section.

(F) Class II and III soils with greater than 30% gravel do not provide adequate treatment of wastewater through soil contact. A soil substitution drainfield can be constructed in Class II or III soils with greater than 30% gravel in order to provide adequate soil for treatment. Absorptive area sizing must be based on the most restrictive textural class between either the non-gravel portion of the native soil or the substituted soil. The sizing must follow the formulas in subsection (b)(1)(A)(vii)(I) of this section.

[4) Soil substitution drainfields. Soil substitution drainfields may be constructed in Class Ia soils, fractured rock, fissured rock, or other areas of high permeability where septic tank effluent could rapidly reach groundwater without undergoing adequate treatment through soil contact. A soil substitution drainfield is constructed similar to a standard absorptive drainfield except that a two foot thick Class Ib, Class II or Class III soil buffer shall be placed below and on all sides of the drainfield excavation. The soil buffer shall extend at least to the top of the media. There shall be two feet of soil between the bottom of the media and groundwater. A soil substitution drainfield shall not be used in Class IV soils, and Class IV soils shall not be used in a soil substitution drainfield. Disposal areas shall be sized based on the textural class of the substituted soil. Soil substitution drainfields shall be designed to address soil compaction to prevent unlevel systems. It is recommended that low pressure dosing be used for effluent distribution.]

(5) Drainfields following secondary treatment and disinfection. Subsurface drainfields following secondary treatment and disinfection may be constructed in Class Ia soils, fractured rock, fissured rock, or other conditions where insufficient soil depth will allow septic tank effluent to reach fractured rock or fissured rock, as long as the following conditions are met.

(A) - (B) (No change.)

(C) Other requirements. The affidavit, maintenance, and testing and reporting requirements of §285.3(b)(3) of this title and §285.7(a) and (d) of this title (relating to Maintenance Requirements) apply to these systems.

(6) (No change.)

**SUBCHAPTER F: LICENSING AND REGISTRATION REQUIREMENTS FOR
INSTALLERS, APPRENTICES, DESIGNATED REPRESENTATIVES, [AND] SITE
EVALUATORS, AND MAINTENANCE COMPANIES**

§§285.50, 285.61, 285.64, 285.65

STATUTORY AUTHORITY

The amendments and new sections are proposed under the authority granted to the commission by the Texas Legislature in TWC, Chapter 37, and THSC, Chapter 366. The amendments and new sections are also proposed under the general authority granted in TWC, §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's authority necessary to carry out its jurisdiction; TWC, §5.103 and §5.105, which authorize the commission to adopt rules and policies necessary to carry out its responsibilities and duties under TWC, §5.013; and TWC, §7.002, which authorizes the commission to enforce provisions of the TWC and the THSC.

The proposed amendments and new sections implement TWC, §37.002, which requires the commission to adopt rules to establish registration requirements for maintenance providers that will service and maintain on-site sewage disposal systems using aerobic treatment under THSC, §366.0515, and to impose administrative and criminal penalties under TWC, §§7.173 - 7.175.

§285.50. General Requirements.

(a) - (i) (No change.)

(j) Any individual or company that performs maintenance of aerobic OSSFs under §285.64 of this title (relating to Duties and Responsibilities of Maintenance Companies) shall possess a current maintenance registration with the commission.

§285.61. Duties and Responsibilities of Installers.

An installer shall:

(1) possess a current Installer I or Installer II license before beginning construction of an on-site sewage facility (OSSF) [OSSF];

(2) record the installer's [his] license number on all bids, proposals, contracts, invoices, proposed construction drawings, or other correspondence with owners, the executive director, or authorized agents;

(3) - (4) (No change.)

(5) notify the permitting authority of the date on which the installer [he] plans to begin the construction of an OSSF, unless a permit is not required;

(6) - (13) (No change.)

(14) perform maintenance, keep a maintenance record, and submit maintenance reports to the permitting authority and the owner for an OSSF for which the installer has contracted to provide maintenance or, when requested by the homeowner of an aerobic OSSF, train the owner according to §285.7 of this title (relating to Maintenance Requirements); and

(15) (No change.)

§285.64. Duties and Responsibilities of Maintenance Companies.

A maintenance company shall:

(1) possess a current registration from the executive director and a current certification from the manufacturer;

(2) employ at least one individual who is licensed as an Installer II and who is certified by the manufacturer of the on-site sewage facility (OSSF) system as qualified to provide maintenance services, or, if the company is a sole proprietorship, then the owner shall possess a current Installer II license and shall be certified by the manufacturer;

(3) ensure maintenance of accurate records of permitting, fees, inspections, and reports;

(4) satisfy the requirements of the maintenance contract between the homeowner of the OSSF system and the maintenance company according to §285.7(a) of this title (relating to Maintenance Requirements);

(5) maintain a current address and phone number with the executive director and submit any change in address or phone number to the executive director in writing within 30 days after the date of the change;

(6) perform maintenance on each OSSF system under executed contract, keep a maintenance record, and submit maintenance reports to the permitting authority and the owner of the OSSF for whom the installer has contracted to provide maintenance, according to §285.7 of this title; and

(7) provide maintenance training to any homeowner of an aerobic on-site sewage system when requested, according to §285.7 of this title.

§285.65. Suspension or Revocation of License or Registration.

(a) Suspension. In addition to the items listed in §30.33 of this title (relating to License or Registration Denial, Warning, Suspension, or Revocation), the executive director may suspend the following licenses for the following reasons.

(1) An on-site sewage facility (OSSF) installer's license can be suspended for:

(A) failing to perform required maintenance on an OSSF for at least eight consecutive months (the failure to maintain records is evidence of failure to perform maintenance on the OSSF);

(B) failing to properly submit maintenance reports required by §285.7(d) of this title (relating to Maintenance Requirements) for an individual OSSF in a 12-month period;

(C) failing to properly submit four or more required OSSF maintenance reports over any two-year period;

(D) failing to provide proper maintenance training to an owner of an aerobic OSSF when requested by the owner; or

(E) failing to provide proper maintenance training to an owner of an aerobic OSSF with a commission-approved course.

(2) A designated representative's license can be suspended for:

(A) failing to verify, before the initial inspection for a particular OSSF, that the individual installing the OSSF is a properly licensed installer;

(B) failing to investigate nuisance complaints or complaints against installers, within 30 days of receipt of the complaint, according to §285.71 of this title (relating to Authorized Agent Enforcement of OSSFs); or

(C) failing to enforce the requirements of an order, ordinance, or resolution of an authorized agent;

(b) Revocation. In addition to the items listed in §30.33 of this title, the executive director may revoke an OSSF installer's license, a designated representative's license, a site evaluator's license, an apprentice's registration, or a maintenance company's registration for the following reasons.

(1) an OSSF installer's license can be revoked for:

(A) constructing, or otherwise facilitating the construction of, an OSSF that is not in compliance with this chapter;

(B) allowing, or beginning, the construction of an OSSF without a permit when a permit is required;

(C) failing to provide proper maintenance training to an owner of an aerobic OSSF when requested by the owner;

(D) failing to provide proper maintenance training to an owner of an aerobic OSSF in a timely manner; or

(E) failing to provide proper maintenance training to an owner of an aerobic OSSF with a commission-approved course.

(2) a designated representative's license can be revoked for:

(A) approving construction of an OSSF that is not in conformance with this chapter, the authorized agent's approved order, ordinance, or resolution or the notice of approval;

(B) practicing as an apprentice or an installer in the authorized agent's area of jurisdiction while employed, appointed, or contracted by that authorized agent; or

(C) working for a maintenance company in the authorized agent's area of jurisdiction while employed, appointed, or contracted by that authorized agent.

(3) A site evaluator's license can be revoked for failing to maintain a current Installer II license, designated representative license, professional engineer license, professional sanitarian license, or a certified professional soil scientist certificate.

(4) An apprentice's registration can be revoked for:

(A) acting as, advertising, or performing duties and responsibilities of an installer without the direct supervision of, or direct communication with, the supervising installer; or

(B) receiving compensation for an OSSF installation from someone other than the supervising installer.

(5) A maintenance company's registration can be revoked for:

(A) failing to perform required maintenance on an aerobic OSSF in a 12-
month period; or

(B) failing to properly submit maintenance reports required by §285.7(d) of
this title for an individual homeowner in any consecutive 12-month period.

**SUBCHAPTER F: [LICENSING AND REGISTRATION REQUIREMENTS FOR
INSTALLERS, APPRENTICES, DESIGNATED REPRESENTATIVES,
AND SITE EVALUATORS]**

[§285.64]

STATUTORY AUTHORITY

The repeal is proposed under the authority granted to the commission by the Texas Legislature in TWC, Chapter 37, and THSC, Chapter 366. The repeal is also proposed under the general authority granted in TWC, §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's authority necessary to carry out its jurisdiction; TWC, §5.103 and §5.105, which authorize the commission to adopt rules and policies necessary to carry out its responsibilities and duties under TWC, §5.013; and TWC, §7.002, which authorizes the commission to enforce provisions of the TWC and the THSC.

The proposed repeal implements TWC, §37.002, which requires the commission to adopt rules to establish registration requirements for maintenance providers that will service and maintain on-site sewage disposal systems using aerobic treatment under THSC, §366.0515, and to impose administrative and criminal penalties under TWC, §§7.173 - 7.175.

[§285.64. Suspension or Revocation of License or Registration]

[(a) Suspension. In addition to the items listed in §30.33 of this title (relating to License or Registration Denial, Warning, Suspension, or Revocation), the executive director may suspend a license for the following reasons:]

[(1) for an installer:]

[(A) failing to perform required maintenance on an on-site sewage facility (OSSF) for at least eight consecutive months (failing to maintain records is evidence of failure to perform maintenance on the OSSF);]

[(B) failing to properly submit maintenance reports required by §285.7(d) of this title (relating to Maintenance Requirements) for an individual OSSF in a 12-month period; or]

[(C) failing to properly submit four or more required OSSF maintenance reports over any two-year period;]

[(2) for a designated representative:]

[(A) failing to verify, before the initial inspection for a particular OSSF, that the individual is a properly licensed installer;]

[(B) failing to investigate nuisance complaints or complaints against installers, within 30 days of receipt of the complaint, according to §285.71 of this title (relating to Authorized Agent Enforcement of OSSFs); or]

[(C) failing to enforce the requirements of the order, ordinance, or resolution of an authorized agent;]

[(b) Revocation. In addition to the items listed in §30.33 of this title, the executive director may revoke a license or registration for the following reasons:]

[(1) for an installer:]

[(A) constructing, or allowing the construction of, an OSSF that is not in compliance with Chapter 285 of this title;]

[(B) allowing, or beginning, the construction of an OSSF without a permit when a permit is required;]

[(2) for a designated representative:]

[(A) approving construction of an OSSF that is not in conformance with this chapter, the authorized agent's approved order, ordinance, or resolution, and the notice of approval;]

[(B) practicing as an apprentice or an installer in the authorized agent's area of jurisdiction while employed, appointed, or contracted by that authorized agent; or]

[(C) working for a maintenance company in the authorized agent's area of jurisdiction while employed, appointed, or contracted by that authorized agent;]

[(3) for a site evaluator: failing to maintain a current Installer II license, designated representative license, professional engineer license, professional sanitarian license, or a certified professional soil scientist certificate; or]

[(4) for an apprentice:]

[(A) acting as, advertising, or performing duties and responsibilities of, an installer without the direct supervision of, or direct communication with, the supervising installer; or]

[(B) receiving compensation for an OSSF installation from someone other than the supervising installer.]

SUBCHAPTER G: OSSF ENFORCEMENT

§285.70, §285.71

STATUTORY AUTHORITY

The amendments are proposed under the authority granted to the commission by the Texas Legislature in TWC, Chapter 37, and THSC, Chapter 366. The amendments are also proposed under the general authority granted in TWC, §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's authority necessary to carry out its jurisdiction; TWC, §5.103 and §5.105, which authorize the commission to adopt rules and policies necessary to carry out its responsibilities and duties under TWC, §5.013; and TWC, §7.002, which authorizes the commission to enforce provisions of the TWC and the THSC.

The proposed amendments implement TWC, §37.002, which requires the commission to adopt rules to establish registration requirements for maintenance providers that will service and maintain on-site sewage disposal systems using aerobic treatment under THSC, §366.0515, and to impose administrative and criminal penalties under TWC, §§7.173 - 7.175.

§285.70. Duties of Owners With Malfunctioning OSSFs.

(a) If the executive director or the authorized agent determines that an on-site sewage facility (OSSF) [OSSF] is malfunctioning, as defined in §285.2 of this title (relating to Definitions), the owner shall bring the OSSF into compliance by repairing the malfunction. The owner shall initiate repair of a malfunctioning OSSF no later than:

(1) the 30th day after the date which the owner is notified by the executive director or the authorized agent of the malfunctioning system, if the owner has not been notified of the malfunctioning system during the previous 12 months;

(2) the 20th day after the date on which the owner is notified by the executive director or the authorized agent of the malfunctioning system, if the owner has been notified of the malfunctioning system at least once during the previous 12 months; or

(3) the 10th day after the date on which the owner is notified by the executive director or the authorized agent of the malfunctioning system, if the owner has been notified of the malfunctioning system at least twice during the previous 12 months.

(b) With the exception of §285.7(c)(4) of this title (relating to Maintenance Requirements), an authorized agent or the commission may condition the permit or the approval of a permit for an on-site sewage disposal system using aerobic treatment for a single-family residence on the owner's contracting with a maintenance company for the maintenance of the system if:

(1) the authorized agent or commission determines that the system is a nuisance or has failed a periodic inspection under §285.7(d)(4) of this title;

(2) the owner fails to timely inspect the system or submit a report on the inspection as required by §285.7(d) of this title, if applicable, for three consecutive intervals; or

(3) the owner is notified at least three times during a 12-month period that the system is malfunctioning.

(c) If, under §285.71(d)(1) of this title (relating to Authorized Agent Enforcement of OSSFs), an authorized agent or the commission conditions approval of a permit for an on-site sewage disposal system using aerobic treatment on the system's owner contracting for the maintenance of the system, the order, resolution, or rule may require the maintenance company to:

(1) inspect the system at specified intervals;

(2) submit a report on each inspection to the authorized agent or commission; and

(3) provide a copy of each report submitted to the system's owner.

§285.71. Authorized Agent Enforcement of OSSFs.

(a) Complaints. The authorized agent shall investigate a complaint regarding an on-site sewage facility (OSSF) within 30 days after receipt of the complaint, notify the complainant of the findings, and take appropriate and timely action on all documented violations. Appropriate action may include criminal or civil enforcement action as necessary under the authority of their order, ordinance, or resolution, the Texas Water Code, Chapters 7 and 26, or the Texas Health and Safety Code, Chapters 341 and 366. This may include complaints against:

(1) (No change.)

(2) individuals performing the duties for aerobic system maintenance as an apprentice, installer, designated representative, site evaluator, or a professional engineer who is performing site evaluations without a current registration or license;

(3) - (4) (No change.)

(b) - (c) (No change.)

SUBCHAPTER I: APPENDICES

§285.90

STATUTORY AUTHORITY

The amendment is proposed under the authority granted to the commission by the Texas Legislature in TWC, Chapter 37, and THSC, Chapter 366. The amendment is also proposed under the general authority granted in TWC, §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the TWC and other laws of the state; TWC, §5.102, which establishes the commission's authority necessary to carry out its jurisdiction; TWC, §5.103 and §5.105, which authorize the commission to adopt rules and policies necessary to carry out its responsibilities and duties under TWC, §5.013; and TWC, §7.002, which authorizes the commission to enforce provisions of the TWC and the THSC.

The proposed amendment implements TWC, §37.002, which requires the commission to adopt rules to establish registration requirements for maintenance providers that will service and maintain on-site sewage disposal systems using aerobic treatment under THSC, §366.0515, and to impose administrative and criminal penalties under TWC, §§7.173 - 7.175.

§285.90. Figures.

The following figures are necessary for the proper location, planning, construction, and installation of an on-site sewage facility (OSSF) [OSSF].

- (1) (No change.)
- (2) Figure 2. Model Deed and Affidavit Language.

Figure: 30 TAC §285.90(2)

Figure 2. Model Deed and Affidavit Language.

THE COUNTY OF (insert county [County] name)
STATE OF TEXAS

CERTIFICATION OF OSSF REQUIRING MAINTENANCE

According to Texas Commission on Environmental Quality [Natural Resource Conservation Commission] Rules for On-Site Sewage Facilities, this document is filed in the Deed Records of (insert county name) County, Texas.

I

The Texas Health and Safety Code, Chapter 366 authorizes the Texas Commission on Environmental Quality (commission) [Natural Resource Conservation Commission (TNRCC)] to regulate on-site sewage facilities (OSSFs). Additionally, the Texas Water Code (TWC), §5.012 and §5.013, gives the commission [TNRCC] primary responsibility for implementing the laws of the State of Texas relating to water and adopting rules necessary to carry out its powers and duties under the TWC. The commission [TNRCC], under the authority of the TWC and the Texas Health and Safety Code, requires owner's to provide notice to the public that certain types of OSSFs are located on specific pieces of property. To achieve this notice, the commission [TNRCC] requires a deed recording. Additionally, the owner must provide proof of the recording to the OSSF permitting authority. This deed certification is not a representation or warranty by the commission [TNRCC] of the suitability of this OSSF, nor does it constitute any guarantee by the commission [TNRCC] that the appropriate OSSF was installed.

II

An OSSF requiring a maintenance contract, according to 30 Texas Administrative Code §285.91(12) will be installed on the property described as (insert legal description):

The property is owned by (insert owner's full name)

This OSSF must be covered by a continuous maintenance contract. All maintenance on this OSSF must be performed by an approved maintenance company, and a signed maintenance contract must be submitted to (insert name of the permitting authority) within 30 days after the property has been transferred.

The owner will, upon any sale or transfer of the above-described property, request a transfer of the permit for the OSSF to the buyer or new owner. A copy of the planning materials for the OSSF can be obtained from (insert name of permitting authority).

WITNESS BY HAND(S) ON THIS _____ DAY OF _____, _____.

(Owner(s) signature(s))

SWORN TO AND SUBSCRIBED BEFORE ME ON THIS _____ DAY OF

_____, _____.

Notary Public, State of Texas

Notary's Printed Name:

My Commission Expires:

(3) Figure 3. Sample Testing and Reporting Record.

Figure: 30 TAC §285.90(3)

Figure 3. Sample Testing and Reporting Record.

This testing and reporting record shall be completed, signed, and dated after each maintenance check and test. One copy shall be retained by the maintenance company or, if applicable, the homeowner performing the maintenance. The second copy shall be sent to the local permitting authority and, if applicable, the third copy shall be sent to the system owner.

1. Required frequency of maintenance check and tests - (daily, weekly, monthly, quarterly, every 4 months).
 Actual date of test: _____

2. System inspection: Property Address: _____
 Permit Number: _____
 Person Performing Inspection: _____

 (Signature)

<u>Inspected Item</u>	<u>Operational</u>	<u>Inoperative</u>
Aerators		
Filters		
Irrigation Pumps		
Recirculation Pumps		
Disinfection Device		
Chlorine Supply		
Electrical Circuits		
Distribution System		
Sprayfield Vegetation/Seeding(if applicable)		
Other as Noted		

3. Repairs to system (list all components replaced): _____

4. Tests required and results:

<u>Test</u>	<u>Required</u>	<u>Results</u>	<u>Test</u>
	<u>Yes No</u>	<u>mg/l, mpn/100 ml, or trace</u>	<u>Method</u>
BOD (Grab)			
TSS (Grab)			
Cl ₂ (Grab)			

Fecal Coliform

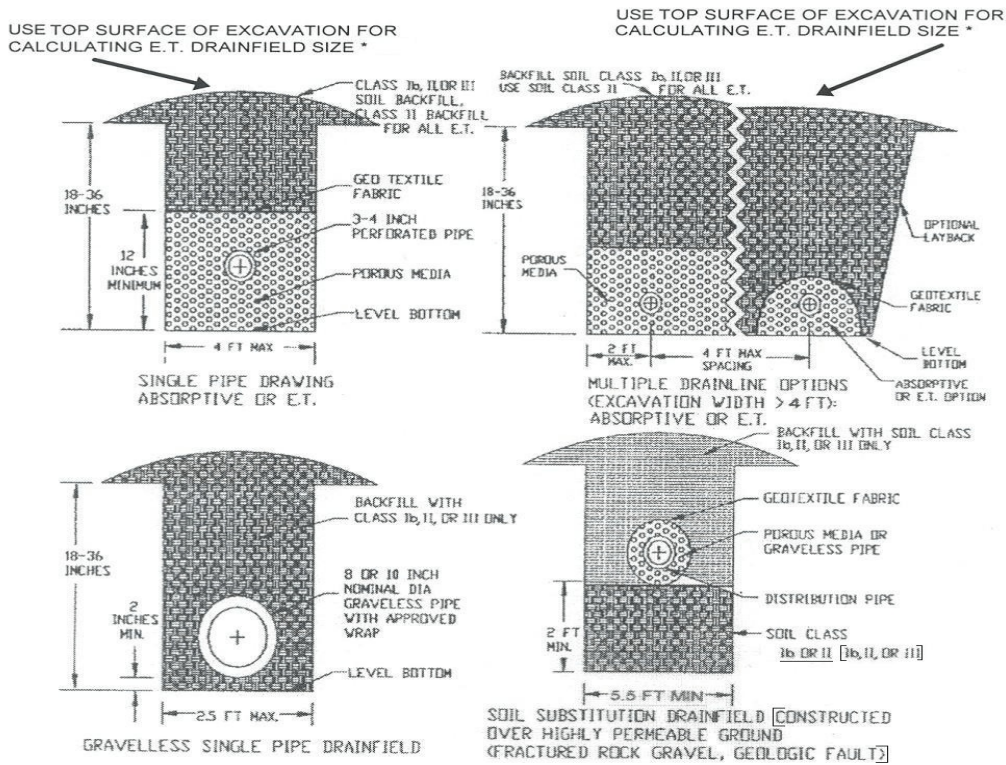
5. Date(s) responded to owner complaints during reporting period (attach copy of complaint and findings):

6. General comments or recommendations: _____

(4) Figure 4. Typical Drainfields - Sectional View.

Figure: 30 TAC §285.90(4)

Figure 4. Typical Drainfields - Sectional View.



* Credit for top surface area shall be limited to 2 feet past outside drainline.

(5) - (9) (No change.)