

The Texas Natural Resource Conservation Commission (commission) adopts amendments to §285.10, Delegation to Authorized Agents, §285.12, Review of Locally Administered Programs, and §285.33, Criteria for Effluent Disposal Systems. The commission also adopts new §285.13, Revocation of Authorized Agent Delegation and §285.14, Charge-back Fee. Sections 285.10, and 285.12 - 285.14 are adopted *with changes* to the proposed text as published in the March 29, 2002 issue of the *Texas Register* (27 TexReg 2403). Section and 285.33 is adopted *without change* to the proposed text and will not be republished.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE ADOPTED RULES

Charge-back fee

Texas Health and Safety Code (THSC), §366.059(b), as amended by House Bill (HB) 2912, §3.09, 77th Legislature, 2001, provides the commission with the authority to charge local governmental entities a charge-back fee if the local governmental entity repeals its order, ordinance, or resolution that established the entity as an authorized agent (AA). Section 366.059(b) also provides the commission with the authority to charge a local governmental entity a charge-back fee if its authorization as an AA is revoked by the commission. HB 2912, §3.09, mandates that the charge-back fee be reasonable and appropriate and not exceed \$500 per on-site sewage facility (OSSF) permit. Finally, HB 2912, §3.09, does not allow the commission to assess a charge-back fee to local governmental entities that, due to a material change in the commission's rules under this chapter, have repealed their order, ordinance, or resolution or have lost their delegation as an AA.

The charge-back fee will cover some of the administrative costs that are not covered by the fees collected by the executive director and that are incurred by the agency when the executive director administers the OSSF program in a local governmental entity's area of jurisdiction. Until now, the commission has not defined its authority nor specified the situations under which the agency will assess charge-back fees. The purpose of §366.059(b) is to ensure that the agency is able to recover the actual cost of implementing the program in areas that the agency does not currently manage. For communities that have not received delegation, the agency covers the cost of managing the program. Conversely, AAs must cover their own costs.

In many cases, local administration of the program is more efficient and more responsive than it is when the agency administers the program. Because local administration of the program requires less travel, it is more timely and cost-efficient. THSC, Chapter 366 provides for the delegation of the program to local governmental entities if they meet the requirements for implementing the program. This has been reinforced by legislative actions in the last several years. A legislative review of the program by the House of Representatives Committee on Natural Resources (Committee) in 1996 emphasized that the intent of the law is that the program be delegated to local governmental entities. In its Interim Report to the 75th Texas Legislature, Finding No. 2, the Committee determined that, barring significant appropriations increases, the commission does not have the ability to adequately administer the program in local areas. The Committee found that delegation of the OSSF program should not be compelled until the executive director has had an opportunity to encourage local entities to seek regional cooperative programs. In response to the recommendations, the executive director has visited 104 local governmental entities throughout the state to encourage local assumption of the

program. The commission recognizes the financial burdens that come with implementing the program. As a result, the major focus of these meetings has been to explore the possibility of local governments working together to implement the OSSF program or to participate in interlocal agreements with regional authorities to implement the program. As a result of these efforts, 15 additional counties have become AAs since 1997. The executive director continues to work with local entities to develop fiscally sound options.

Since the committee report, the legislature has continued to limit appropriations to the commission for the implementation of the program, expecting the commission to oversee local programs, instead of administering local programs from the state level. The legislature's expectation that the OSSF program will be administered on the local level was also seen in a 1997 amendment to the OSSF law. In HB 1785 of the 75th Legislative Session, 1997, the legislature amended the law to require electric utilities to provide a weekly list of new service connections in unincorporated areas to the county judge. Thus, since the local utility must be notified, it follows that the legislature intended that the OSSF program be overseen at the local level.

Language has been included in adopted §285.14 limiting the fee, which must be reasonable and appropriate, to a maximum of \$500 that may be charged to local governments for each OSSF permit issued by the executive director. This fee is intended to help cover the difference between the permit fee charged by the executive director and the executive director's actual cost of issuing a permit. This fee will provide the executive director with the ability to cover the costs incurred for issuing permits where the local governmental entities have chosen to cease to administer a local program or the

commission has revoked their delegation because of noncompliance with the rules. The rule specifies that the amount of the charge-back fee will be based on the type and number of OSSFs typically installed and inspected in the local governmental entity's jurisdiction, along with expected travel expenses for the executive director.

THSC, §366.059, provides in part that "The commission may assess a reasonable and appropriate charge-back fee, not to exceed \$500, to a local governmental entity for which the commission issues permits for administrative costs relating to the permitting function that are not covered by the permit fees collected." The executive director determined that it is necessary for the agency to recover the costs of implementing the OSSF program. Because the charge-back fee is simply a mechanism for the executive director to recover some administrative costs, there will be no additional full-time equivalents added to the OSSF program as a direct result of the charge-back fee. Therefore, the charge-back fee is not expected to have a substantial impact on the time it takes the executive director to process a permit. If the commission determines that a charge-back fee to local governmental entities is appropriate, the fee will not exceed \$500 per OSSF permit.

The billing process for these charge-back fees is provided.

Tire Chips

In 1992, the commission implemented the Waste Tire Program to address problem stockpiles of scrap tires that were creating health or safety hazards in Texas. Many of the tires that had been stockpiled were chipped or shredded tires. One of the end uses for the tire shreds or chips has been as media for

OSSF systems. In February 1997, a set of OSSF rules became effective that allowed chipped tires to be used as media in standard absorptive drainfields. While §285.33(a)(1)(B) of the 1997 rules required the size of the media used in standard absorptive drainfields to range from 0.75 inches to 2.0 inches, §285.33(b)(1)(B)(i)(II) of the 1997 rules allowed tire chips larger than two inches as measured along their greatest dimension to be used on a case-by-case basis.

In May 2001, the commission adopted a new set of OSSF rules. In this rulemaking, the use of a tire chip larger than two inches as measured along its greatest dimension was dropped from the rule. As a result, no tire chips larger than two inches as measured at their greatest dimension can be used as media in standard absorptive drainfields. Currently, there are approximately 59 million waste tire units (WTUs) stored in stockpiles in Texas. A large percentage of these WTUs are three-inch by three-inch chips which could be used as an acceptable medium in OSSF systems.

Therefore, to allow the larger tire chips to be used as media in standard absorptive drainfields, language has been included in this adopted rulemaking in §285.33(b)(1)(B) to allow use of a tire chip that does not exceed three inches as measured along its greatest dimension.

SECTION BY SECTION DISCUSSION

Section 285.10, Delegation to Authorized Agents, is adopted without changes to the proposed rule. This section adds the word “written” to subsection (b)(4)(B) to clarify that the executive director will review the draft order, ordinance, or resolution and will provide written comments to the local governmental entity within 30 days of receipt. Additionally, a new subsection (d)(5) is added to incorporate the

charge-back fee language from HB 2912, Article 3, which allows an AA to relinquish its OSSF authority due to a material change as described in Chapter 285. The existing language in subsection (e)(1) - (5) is moved to new §285.13 for better organization of Subchapter B. Further, the commission defined the acronyms for “on-site sewage facility” and “Texas Health and Safety Code” the first time they are used in this section and deleted the word “the” in front of both “Texas Health and Safety Code” and “THSC” throughout this section to bring this section into agreement with the remainder of Chapter 285. Finally, the commission made additional administrative changes in subsection (b) to bring the subsection into agreement with the remainder of Chapter 285.

Section 285.12, Review of Locally Administered Programs, is adopted with changes to the proposed rule. This section adds language to existing subsection (a) and adds new subsection (b) to outline the process the executive director will follow to perform a compliance review of an AA’s program. This new language provides more detail to AAs about the process they can expect the executive director to follow. Subsection (a) provides that the executive director will review the AA’s administrative, planning materials review, permitting, inspection, and complaint resolution processes; will meet with the AA at the end of the review to discuss the findings; and will prepare a report of the findings and send a copy to the AA by certified mail within 60 days after completing the review.

The commission also made an administrative change by deleting the word “the” from in front of “Texas Health and Safety Code” in subsection (a) to bring this subsection into agreement with the remainder of Chapter 285.

Subsection (b) provides that the AA will have 45 days from the date of the executive director's letter to respond to the executive director on how the AA will address all deficiencies noted during the review. The commission made grammatical changes to subsection (b) to clarify that the AA must respond in writing within 45 days after the date of the executive director's report. Additionally, the executive director will offer to assist the AA, including providing the AA an opportunity for training. Subsection (b) also provides that if the executive director finds that the AA's program is deficient because it does not consistently provide required documentation of the permitting, inspection, and complaint processes and the AA's response to the executive director's findings is not adequate or if the AA fails to respond, the executive director will continue to work with the AA until the deficiencies are resolved. The commission added language to clarify that all communication between the executive director and AAs will be made through additional letters or by telephone. If the executive director finds that the AA's response to the executive director's findings is adequate, the executive director will take no further action. Further, subsection (b) allows the executive director to begin the process of revoking an AA's delegation under §285.13 if the executive director finds that the AA's program does not consistently enforce the permitting, planning, construction, operation, and maintenance of OSSF systems and the AA's response to the executive director's findings is not adequate to correct the deficiencies or is endangering human health or safety. For clarity, the commission changed, "...after one year of the first review..." to "...one year after the first review...." Finally, subsection (b) provides that the executive director will schedule another review of the AA's program one year after the first compliance review if the executive director finds that the response to the executive director's findings is adequate to correct the deficiencies.

New §285.13, Revocation of Authorized Agent Delegation, is adopted with changes to the proposed rule. This section allows the commission to revoke an AA's delegated authority for failure to implement, administer, or enforce Chapter 285. For clarity, the commission added the words "the authorized agent's" in front of the words "failure to implement, administer, or enforce..." and deleted the word "and" at the end of §285.13(b)(1).

This section also provides the process the executive director will follow when revoking an AA's delegation. If the executive director determines that there is a reason to revoke an AA's delegation, the executive director will meet with the AA's mayor, county judge, general manager, chairman of the board, or other authorized person to discuss the executive director's findings, the AA's response, and possible revocation. The executive director will prepare a letter documenting the meeting and forward it to the AA within ten days after the meeting. The executive director will also provide the AA 60 days from the date of the letter documenting the meeting to allow other AAs to review the executive director's decision. The AA must respond to the executive director in writing within 90 days of the date of the letter documenting the meeting. To clarify that the AA must respond within 90 days after the date of the executive director's letter, the commission replaced the word "of" with the word "after." If the executive director determines that the AA will take appropriate corrective action, the executive director will respond to the AA in writing that the revocation process will be discontinued and will schedule another review of the AA's program one year after the first compliance review. To clarify that the executive director will schedule another review of the AAs program one year after the first review, the commission changed "...after one year of the first review..." to "...one year after the first review...." If the executive director determines that the AA will not take appropriate corrective

action, the executive director will file a petition with the commission seeking revocation of the AA's program and initiate the hearing process with the State Office of Administrative Hearings (SOAH).

This subsection also outlines the details the executive director will follow for a hearing. To clarify that the notice for the public hearing must be published in a regularly published newspaper of general circulation in the local governmental entity's area of jurisdiction, the commission added the words "local governmental" before the word "entity's" in subsection (e)(3).

In subsection (e)(4), the commission removed the word "its" for clarity. After the hearing, the commission may either issue an order to revoke the delegation, issue an order requiring the AA to take certain action, or take no action. If the commission revokes the AA's delegation, the commission must determine, on a case-by-case basis, if a charge-back fee will be assessed. If the commission assesses a charge-back fee, the order must include the charge-back fee amount. If the commission revokes the AA delegation, the executive director will assume responsibility for the OSSF program in the AA's jurisdiction on the date of the revocation. The commission added language to §285.13(h) to clarify that assumption of the OSSF program by the executive director will be effective on the date of the revocation. In the event that an AA consents to revocation of its delegation in writing before the hearing, the executive director may revoke the delegation without a hearing.

New §285.14, Charge-back Fee, is adopted with changes to the proposed rule. This section allows the commission to assess a reasonable and appropriate charge-back fee, not to exceed \$500 per permit, to local governmental entities that either have repealed an OSSF order, ordinance, or resolution, or have their delegation revoked by the commission according to §285.13. The charge-back fee will be

assessed for all OSSF permits issued within that entity's area of jurisdiction and will be based on the executive director's actual cost of issuing a permit in that jurisdiction and on the number and type of OSSF systems being installed and inspected, travel expenses, and time spent on the review of planning materials. For clarity, the commission added the words "local governmental" in front of the word "entity" in §285.14(a) and added an "s" to "OSSF" in §285.14(a)(1)(A). This section provides that if the local governmental entity repeals its OSSF order, ordinance, or resolution or the commission revokes a local governmental entity's delegation and the local governmental entity agrees to the amount of the charge-back fee, the executive director will recommend the commission approve the charge-back fee. Further, this section provides that if the local governmental entity repeals its OSSF order, ordinance, or resolution or the commission revokes a local governmental entity's delegation and the local governmental entity does not agree to the amount of the charge-back fee, the commission will refer the charge-back fee to SOAH for a contested case hearing. The charge-back fee will not exceed \$500 per permit. The charge-back fee is authorized under THSC, §366.059. The executive director will bill the local governmental entities for charge-back fees no more than quarterly and no less than annually. Because the commission would not be able to determine when the local governmental entity received the invoice, the commission changed the due date from "...within 30 days after the receipt of invoice..." to "...within 30 days from the invoice date." Late payments are subject to penalties and interest according to 30 TAC Chapter 12.

Section 285.33, Criteria for Effluent Disposal Systems, is adopted without changes to the proposed rule. This section adds new language to §285.33(b)(1)(B) and (B)(i)(II) that allows chipped tires that do not exceed three inches as measured along their greatest dimension to be used as media in a standard

absorptive drainfield. Additionally, grammatical changes were made in §285.33(b)(1)(B) to accommodate the new language in this section.

FINAL REGULATORY IMPACT ANALYSIS DETERMINATION

The commission has reviewed the adopted rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and has determined that the rulemaking is not subject to §2001.0225 because it does not meet the definition of a major environmental rule. "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 major purpose of this rulemaking is to provide a mechanism for the commission to partially recover costs incurred when the commission assumes responsibility for administering a program that was previously administered by a local governmental entity. The second purpose of this rulemaking is to delineate the size of chipped tires that can be used as media in excavations. The existing rule provided that chipped tires measuring 0.75 inches to 2.0 inches could be used as media in excavations; the adopted rule provides that the tire chips can be up to three inches. Protection of the environment may be a result of this rulemaking, but it is not the specific intent.

The adopted rules clarify and incorporate charge-back fee provisions from HB 2912, §3.09, 77th Legislature, 2001, into Subchapter B. These adopted rules are not a major environmental rule and do not meet any of the four applicability requirements that apply to a major environmental rule. Under

Texas Government Code, §2001.0225, these rules do not exceed a standard set by federal law or a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program because there is no federal authorization for OSSFs. The United States Environmental Protection Agency does not have a federal program for OSSFs and does not establish any requirements for states implementing their own OSSF program.

These rules are not adopted solely under the general powers of the commission and do not exceed an express requirement of state law. The requirements that will be implemented through these rules are expressly defined under THSC, Chapter 366, which requires the commission to enact rules governing the installation of OSSFs.

TAKINGS IMPACT STATEMENT ASSESSMENT

The commission has prepared a takings impact assessment for these rules in accordance with Texas Government Code, §2007.43. The purpose of these revisions is to delineate the commission's authority to impose a charge-back fee on local governmental entities that have either repealed their order, ordinance, or resolution or to local governmental entities that have had their delegation repealed by the commission.

The specific purpose of the adopted rules is to clarify and incorporate charge-back fee provisions from HB 2912, §3.09, 77th Legislature, 2001, into Subchapter B and to allow chipped tires that do not

exceed three inches as measured along their greatest dimension to be used as media in a standard absorptive drainfield.

These rules are adopted in an effort to reasonably fulfill an obligation mandated by state law to implement the OSSF program and will substantially advance the implementation of the requirements under THSC, Chapter 366. Promulgation and enforcement of these adopted rules will not affect private real property. Therefore, the commission has determined that these adopted rules will not result in a takings.

CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission has reviewed the adopted rules and found that the rules are identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(b)(2), relating to Actions and Rules Subject to the Texas Coastal Management Program (CMP). The Coastal Coordination Act requires that applicable goals and policies of the CMP be considered during the rulemaking process. The commission has prepared a consistency determination for the adopted rules pursuant to 31 TAC §505.22 and has found that the adopted rulemaking is consistent with the applicable CMP goals and policies.

The goals of the CMP are: 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; 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; and to balance these competing interests.

The specific CMP goals applicable to these adopted rules state that rules governing OSSFs shall require those systems to be located, designed, operated, inspected, and maintained so as to prevent release of pollutants that may adversely affect coastal waters. Promulgation and enforcement of these adopted rules will not violate any standards identified in the applicable CMP goals because the adopted rules seek only to incorporate the charge-back fee provisions in HB 2912 and more clearly define the process the executive director will have to follow when reviewing and revoking an AA's delegated authority and to allow chipped tires that do not exceed three inches as measured along their greatest dimension to be used as media in a standard absorptive drainfield.

PUBLIC COMMENT

A public hearing was held in Austin on April 23, 2002 at the Texas Natural Resource Conservation Commission complex. No comments were received at the hearing. The comment period closed on Monday, April 29, 2002. The commission received written comments from the County Judges and Commissioners Association of Texas (CJCAT), the Texas Association of Counties (TAC), and the Texas Conference of Urban Counties (TCUC).

TAC generally supported, in part, certain provisions of the proposed rulemaking. CJCAT, TAC, and TCUC are generally opposed to the concept of a charge-back fee. TCUC is generally opposed to the

charge-back fee proposal. CJCAT suggested changes to the proposal as stated in the RESPONSE TO COMMENTS section of this preamble.

RESPONSE TO COMMENTS

General

CJCAT commented that the proposed rules are an improved effort to implement the requirements of HB 2912.

The commission appreciates the comment in support of the rule.

TAC commented that it appreciates the professionalism, the cooperation, and the assistance of the staff that they have worked with and “the willingness of agency staff to listen to our concerns and to draft rules that at least limit the applicability of the fee.”

The commission appreciates the comments in support of its staff.

TAC commented that it supports the new provision of the rule that directs the executive director to provide training to AAs on how to comply with the rules. Additionally, TAC supports the new provisions that allow the executive director’s findings, regarding an AA’s possible revocation, to be reviewed by other AAs.

The commission appreciates the comment in support of these provisions of the rule.

CJCAT requests that the commission establish an “Authorized Agent Review Committee to consider all proposed revocations of authorized agent status.”

The commission declines to create an “Authorized Agent Review Committee.” Section 285.13(b)(3) provides AAs with the opportunity to have other AAs review the executive director’s findings. CJCAT did not explain the concept of an AA review committee in its comment letter; therefore, the executive director determined that §285.13(b)(3) provides adequate review. This section provides that if the executive director determines that cause exists for revocation, the executive director shall provide the AA 60 days after the date of the letter described in §285.13(b)(2) to allow other AAs to review the executive director’s findings if requested by the AA. No change has been made in response to this comment.

CJCAT commented that many counties are not participating in the OSSF program because the counties do not feel that the commission’s staff will fairly and reasonably administer the AA program and that a review committee could increase confidence in the process.

The commission disagrees that the staff does not fairly and reasonably administer the AA program. Of the 254 counties in Texas, 180 counties (71%) are AAs. Additionally, there are 115 cities and 16 river authorities or water districts that are AAs. Local governmental entities that do not participate in the program have indicated to the commission that they have not become AAs for the OSSF program because of insufficient staff and financial resources. The executive director

has not received any other complaints that the commission's staff cannot fairly and reasonable administer the AA program. No change has been made in response to this comment.

TAC commented that they are "opposed to the concept and reality of a charge-back fee." TAC stated that the OSSF Program "is a state program that counties and other local governments agree to administer locally by voluntarily becoming authorized agent." TAC also commented that "{T}o introduce into this voluntary, cooperative system something coercive like a charge-back fee strikes us as being at cross-purposes to this voluntary arrangement."

Serving as an AA is voluntary; however, legislative intent is clear that the commission delegate the OSSF program to local governmental entities that meet the requirements in THSC, Chapter 366.

Delegation to local governmental entities has been reinforced by legislative actions in the last several years. A legislative review of the program by the House of Representatives Committee on Natural Resources (Committee) in 1996 emphasized that the intent of the law is that the program be delegated to local governmental entities. In its Interim Report to the 75th Texas Legislature, Finding No. 2, the Committee determined that, barring significant appropriations increases, the commission does not have the ability to adequately administer the program in local areas. Since the Committee report, the legislature has continued to limit appropriations to the commission for the implementation of the program, expecting the commission to oversee local programs, instead of implementing local programs from the state level.

The legislature's expectation that the OSSF program will be implemented on the local level was also emphasized in a 1997 amendment to the OSSF law. In HB 1785 of the 75th Legislative Session, the legislature amended the law to require electric utilities to provide a weekly list of new service connections in unincorporated areas to the county judge. This provision assumes that the program will be locally administered, so electric utilities are only required to provide the lists to the county, not to the executive director.

Finally, in 2001 during the 77th Legislative Session, the legislature again considered delegation to local governmental entities by looking specifically at the charge-back fee. HB 2912, §3.09, modified the existing statutory provisions relating to the charge-back fee but did not remove them from the statute. No changes have been made in response to these comments.

TAC commented that the charge-back fee adds to the financial burden of counties.

The commission recognizes that there are financial burdens that come with a charge-back fee. Unless the commission makes a material change to the rules, the commission will only assess a charge-back fee to local governmental entities that either relinquish the OSSF program or have the program revoked. No change has been made in response to this comment.

TCUC commented that they are opposed to a charge-back fee and believe that a charge-back fee is “counter-productive and hostile to any concept of mutual interest or partnership.”

The commission responds that the legislature provided the charge-back fee as a mechanism for the commission to recover its actual costs for implementing the OSSF program in jurisdictions where the executive director implements the program. The charge-back fee will be an incentive to local governmental entities that received delegation to continue to run the program according to the rules. Further, the commission does not agree that a charge-back fee is hostile to any concept of mutual interest or partnership.

These rules will encourage cooperation between the executive director's staff and the AAs because these rules included provisions that require the commission and the local governmental entities to work together before the commission reaches the revocation stage. If the executive director finds that the AA's program is deficient, the executive director is required by §285.12(b) to offer assistance, including additional training, to the AA. Specifically, §285.12(b)(1) requires the executive director to work with the AA until deficiencies relating to required documentation of the permitting, inspection, and compliance investigation processes are resolved. Section 285.13(b)(1) requires the executive director to meet with the AA's county judge, mayor, general manager, or chairman of the board, or other authorized individual to discuss the executive director's findings, the AA's response to the findings, and the possible revocation.

Thus, §285.12 and §285.13 provide numerous opportunities for the AA and the executive director to work together to resolve any deficiencies the executive director may have found relating to the AA's program. No change has been made in response to this comment.

§285.10, Delegation to Authorized Agents

CJCAT commented that the proposed rule does not address the loss of AA status by commission action as a result of a material change in the rules.

The commission will not initiate revocation of an AA's delegation of the OSSF program until the executive director and the AA have worked through the processes outlined in §285.12, Review of Locally Administered Programs and §285.13, Revocation of Authorized Agent Delegation. The processes in these sections provide ample opportunity for an AA to notify the executive director that the reason the AA cannot comply with Chapter 285 is because the commission made a material change to Chapter 285. No change has been made in response to this comment.

TCUC commented that the proposed rule exceeds statutory authority because it limits the ability of a local government to avoid a charge back fee by relinquishing the program due to a material change in the program. CJCAT requests that the commission withdraw the definition of "Material change" in §285.10(d)(5) and substitute the language in THSC, §366.059(d). CJCAT commented that the definition of "Material change" in the rule is limited and not supported by the statute. TCUC stated that the definition of "Material change" is not found in the statute. CJCAT commented that the definition of "Material change" would deny counties the ability to withdraw, without penalty, from the program if the commission completely revised the OSSF program.

The commission disagrees that the rule exceeds statutory authority. THSC, §366.05(d) limits the commission's authority to assess a charge-back fee to local governmental entities that have

repealed their order, ordinance, or resolution or that have lost their designation as an AA due to a material change in the commission’s rules under THSC, Chapter 366. The commission included these limits in §285.10(d)(5). The commission, however, removed the definition of “Material change” in response to the comments, to continue to foster a cooperative relationship with AAs.

TCUC commented that the “statute limits the commission’s authority to assess fees against a local entity that decides to drop the program for any material change in Chapter 285, TAC. The statute contemplates a material change that may or may not directly impact local agent financial or human resources, and may simply be a change in policy by the commission.”

A review of the legislative history does not indicate what the legislature intended by the term, “material change.” Additionally, §366.059(d) states, “...lost its designation as an authorized agent due to a material change in the commissions rules...” *Emphasis added.* Thus, the commission may not charge a charge-back fee based on a change in its policy that does not result in a corresponding rule change.

SUBCHAPTER B: LOCAL ADMINISTRATION OF THE OSSF PROGRAM

§§285.10, 285.12 - 285.14

STATUTORY AUTHORITY

The amendments and new sections are adopted under the authority granted to the commission by the Texas Legislature in THSC, §366.011. The new and amended sections implement THSC, §366.012(a)(1), which requires the commission to adopt rules consistent with the policy defined in THSC, §366.001. The commission has authority to adopt rules to implement the requirements of THSC, §366.053(b), which requires the adoption of rules for permitting; THSC, §366.059, which requires adoption of rules addressing permit fees; and THSC, §366.072, which provides for the adoption of rules for registration.

The amendments and new sections are also adopted under the general authority granted in Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under TWC and other laws of the state; 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(15); TWC, §7.002, which authorizes the commission to enforce provisions of TWC and THSC; and TWC, §5.311, which authorizes the commission to delegate its hearing responsibilities to SOAH.

§285.10. Delegation to Authorized Agents.

(a) Responsibility of the authorized agent. An authorized agent is responsible for the proper implementation of this chapter in its area of jurisdiction.

(1) An authorized agent shall administer its on-site sewage facility (OSSF) program according to the OSSF order, ordinance, or resolution approved by the executive director.

(2) An authorized agent shall enforce this chapter and Texas Health and Safety Code (THSC), Chapter 366.

(b) Requirements and procedures.

(1) Upon request from a local governmental entity, the executive director shall forward a description of the delegation process and provide a copy of the executive director's model order, ordinance, or resolution.

(2) If the OSSF program is delegated to a municipality, the jurisdiction of the authorized agent will be limited to the municipality's incorporated area.

(3) To receive delegation as an authorized agent, a local governmental entity shall draft an order, ordinance, or resolution that meets the requirements of this chapter and THSC, §366.032.

The local governmental entity shall use the model order, ordinance, or resolution as a guide for developing its order, ordinance, or resolution.

(4) If the local governmental entity proposes more stringent standards than those in this chapter, the local governmental entity shall submit the proposed order, ordinance, or resolution to the executive director for review and comment before publishing notice.

(A) Each more stringent requirement shall be justified based on greater public health and safety protection. The written justification shall be submitted to the executive director with the draft order, ordinance, or resolution.

(B) The executive director shall review the draft order, ordinance, or resolution and provide written comments to the local governmental entity within 30 days of receipt.

(C) If the local governmental entity's draft order, ordinance, or resolution meets the requirements of this chapter, the executive director will notify the local governmental entity in writing to continue the process outlined in this subsection.

(D) If the local governmental entity's draft order, ordinance, or resolution does not meet the requirements of this chapter, the executive director will not continue the review process until all requirements have been met. The executive director will notify the local governmental entity in writing of all deficiencies.

(5) If the local governmental entity proposes using the model order, ordinance, or resolution without more stringent standards, or if the executive director has approved the draft order, ordinance, or resolution with more stringent standards, the local governmental entity shall hold a public meeting to discuss the proposed order, ordinance, or resolution.

(A) The local governmental entity shall publish notice of a public meeting that will be held to discuss the adoption of the proposed order, ordinance, or resolution. The notice must be published in a regularly published newspaper of general circulation in the entity's area of jurisdiction.

(B) The public notice shall include the time, date, and location of the public meeting.

(C) The public notice shall be published at least 72 hours before the public meeting, but not more than 30 days before the meeting.

(6) The local governmental entity shall provide the executive director with the following:

(A) a copy of the public notice as it appeared in the newspaper;

(B) a publisher's affidavit from the newspaper in which the public notice was published;

(C) a certified copy of the minutes of the meeting when the order, ordinance, or resolution was adopted; and

(D) a certified copy of the order, ordinance, or resolution that was passed by the entity.

(7) Upon receiving the information listed in paragraph (6) of this subsection, the executive director shall have 30 days to review the materials to ensure the local governmental entity has complied with the requirements of this chapter and THSC, Chapter 366.

(A) After the review has been completed and all the requirements have been met, the executive director shall sign the order approving delegation and notify the local governmental entity by mail.

(B) If the executive director determines during the review that the materials do not comply with the requirements of this section, the executive director will issue a letter to the local governmental entity detailing the deficiencies.

(8) The local governmental entity's order, ordinance, or resolution shall be effective on the date the order approving delegation is signed by the executive director.

(9) Any appeal of the executive director's decision shall be done according to §50.39 of this title (relating to Motion for Reconsideration).

(c) Amendments to existing orders, ordinances, or resolutions.

(1) To ensure that the authorized agent's program is consistent with current commission rules, the executive director may require periodic amendments of OSSF orders, ordinances, or resolutions.

(2) An authorized agent may initiate an amendment. The authorized agent shall use the procedures in subsection (b) of this section.

(3) The amendment shall be effective on the date the amendment is approved by the executive director.

(d) Relinquishment of delegated authority by authorized agent.

(1) When an authorized agent decides to relinquish authority to regulate OSSFs, the following shall occur:

(A) the authorized agent shall inform the executive director by certified mail at least 30 days before publishing notice of intent to relinquish authority;

(B) the authorized agent shall hold a public meeting to discuss its intent to relinquish the delegated authority;

(i) the authorized agent shall publish notice of a public meeting that will be held to discuss its intent to relinquish the delegated authority. The notice must be published in a regularly published newspaper of general circulation in the entity's area of jurisdiction;

(ii) the public notice shall include the time, date, and location of the public meeting;

(iii) the public notice shall be published at least 72 hours before the public meeting, but not more than 30 days before the meeting;

(C) the authorized agent must, either at the meeting discussed in subparagraph (B) of this paragraph, or at another meeting held within 30 days after the first meeting, formally decide whether to repeal the order, ordinance, or resolution; and

(D) the authorized agent shall forward to the executive director copies of the public notice, a publisher's affidavit of public notice, and a certified copy of the minutes of the meeting in which the authorized agent formally acted.

(2) Before the executive director will process a relinquishment order, the authorized agent and the executive director shall determine the exact date the authorized agent shall surrender its delegated authority. Until that date, the authorized agent will retain all authority and responsibility for the delegated program.

(3) The executive director shall process the request for relinquishment within 30 days of receipt of the copies of documentation required in paragraph (1)(D) of this subsection. After processing the request for relinquishment, the executive director will issue an order and shall assume responsibility for the OSSF program.

(4) On or after the date determined by the authorized agent and the executive director, the authorized agent shall repeal it's order, ordinance, or resolution. Within ten days after the authorized agent repeals it's order, ordinance, or resolution, the authorized agent shall forward a certified copy of the repeal to the executive director.

(5) Authorized agents who relinquish their OSSF authority may be subject to fees according to §285.14 of this title (relating to Charge-back Fee) after the date that delegation has been relinquished, unless the authorized agent has relinquished its OSSF authority due to a material change in this chapter.

§285.12. Review of Locally Administered Programs.

(a) Not more than once a year, the executive director shall review an authorized agent's program for compliance with requirements established by Texas Health and Safety Code, Chapter 366; this chapter; and the order, ordinance, or resolution adopted by the authorized agent.

(1) During the review the executive director shall:

(A) evaluate the authorized agent's:

(i) administrative processes;

(ii) planning material review processes;

(iii) permitting processes;

(iv) inspection processes; and

(v) complaint resolution processes;

(B) conduct an interview with the authorized agent's representative, to present the results of the executive director's review.

(2) After the executive director completes the review, the executive director shall:

(A) prepare a written report of the executive director's findings; and

(B) forward a copy of the report to the authorized agent by certified mail

within 60 days after completing the review.

(b) If as a result of the executive director's review the executive director determines that the authorized agent's program is deficient, the authorized agent must respond in writing to the executive director within 45 days after the date of the executive director's report with a plan to address all deficiencies noted during the review. The executive director shall offer assistance to the authorized agent including providing training to the authorized agent's designated representative. Additionally, if the authorized agent's program is:

(1) deficient because it does not consistently provide required documentation of the permitting, inspection, and compliance investigation processes the executive director shall review the authorized agent's response and determine if the response is adequate. If the response is adequate, the executive director shall not take further action. If the authorized agent's response is not adequate, or the authorized agent fails to respond, the executive director shall continue to work with the authorized agent until the deficiencies are resolved by making contact with the authorized agent through additional letters or by telephone;

(2) deficient because it does not consistently enforce the permitting, planning, construction, operation, and maintenance of on-site sewage facility systems, the executive director shall

review the authorized agent's response and determine if adequate measures will be taken to correct the deficiencies. If the response is adequate, the executive director will schedule another review of the authorized agent's program one year after the first review to verify that the deficiencies have been corrected. If the authorized agent's response is not adequate, the authorized agent fails to respond, or the executive director's next annual review determines that the authorized agent's program has the same deficiencies as noted during the previous review, the executive director will begin the process of revoking the authorized agent's delegated authority under §285.13 of this title (relating to Revocation of Authorized Agent Delegation); or

(3) endangering human health or safety, the executive director will begin the process of revoking the authorized agent's delegated authority under §285.13 of this title.

§285.13. Revocation of Authorized Agent Delegation.

(a) An authorized agent's on-site sewage facility (OSSF) order, ordinance, or resolution may be revoked by order of the commission, after notice and an opportunity for a hearing, for the authorized agent's failure to implement, administer, or enforce Texas Health and Safety Code, this chapter, or its order, ordinance, or resolution.

(b) If the executive director determines that cause exists for revocation, the executive director shall:

(1) meet with the authorized agent's county judge, mayor, general manager, or chairman of the board, or other authorized individual, to discuss the report of the executive director's findings, the authorized agent's response to the findings, and the possible revocation;

(2) prepare a letter documenting the meeting in paragraph (1) of this subsection and forward it to the authorized agent within ten days after the meeting; and

(3) provide the authorized agent 60 days after the date of the letter in paragraph (2) of this subsection to allow other authorized agents to review the executive director's findings if requested by the authorized agent.

(c) The authorized agent shall respond to the executive director's letter in subsection (b)(2) of this section in writing within 90 days after the date of the executive director's letter.

(d) If the executive director determines from the authorized agent's response that sufficient action will be taken to consistently enforce the OSSF program, the executive director will:

(1) respond to the authorized agent that the revocation process will be discontinued;
and

(2) schedule another review of the authorized agent's program one year after the first review to verify that the authorized agent is consistently enforcing the OSSF program.

(e) If the executive director determines from the authorized agent's response that insufficient action will be taken, the executive director will:

(1) file a petition with the commission according to Chapter 70 of this title (relating to Enforcement) seeking revocation;

(2) initiate the hearing process with SOAH according to Chapter 80 of this title (relating to Contested Case Hearings);

(3) publish notice of a public hearing that will be held to review the commission's possible revocation of the delegated authority. The notice must be published in a regularly published newspaper of general circulation in the local governmental entity's area of jurisdiction and shall:

(A) include the time, date, and location of the public hearing; and

(B) be published at least 20 days before the public hearing; and

(4) hold a public hearing to review possible revocation of the delegated authority.

(f) An authorized agent may consent to the revocation of its OSSF delegation in writing before the public hearing. If the authorized agent consents to the revocation, the commission may revoke the authorized agent's delegated authority without a public hearing.

(g) After an opportunity for a hearing, the commission may:

(1) issue an order revoking the authorized agent's delegation, which may include a charge-back fee;

(2) issue an order requiring the authorized agent to take certain action or actions in order to retain delegation; or

(3) take no action.

(h) If the authorized agent's delegation is revoked, the executive director shall assume responsibility for the OSSF program in the former authorized agent's jurisdiction. The executive director shall implement the program on the date of the revocation.

(i) An authorized agent that has had its OSSF authority revoked may be subject to charge-back fees according to §285.14 of this title (relating to Charge-back Fee).

§285.14. Charge-back Fee.

(a) Under Texas Health and Safety Code, §366.059, the commission may assess a reasonable and appropriate charge-back fee, not to exceed \$500 per permit, to local governmental entities that either have repealed an on-site sewage facility (OSSF) order, ordinance, or resolution, or have had their

delegation revoked by the commission according to §285.13 of this title (relating to Revocation of Authorized Agent Delegation). The charge-back fee will be assessed for each OSSF permit issued within that local governmental entity's area of jurisdiction. The amount of the charge-back fee will be based on the executive director's actual cost of issuing an OSSF permit in that jurisdiction. The executive director's actual cost will be based on the type and number of OSSFs typically installed and inspected in the local governmental entity's jurisdiction, along with expected travel expenses for the executive director.

(1) If a local governmental entity repeals its OSSF order, ordinance, or resolution or the commission revokes a local governmental entity's delegation and the local governmental entity agrees to the amount of the charge-back fee, the executive director will recommend the commission approve the charge-back fee. In order to have legal effect as an order of the commission, the charge-back fee must be approved and ordered by the commission. The commission order must include:

(A) the type of OSSFs typically installed and inspected in the local governmental entity's jurisdiction;

(B) the number of OSSFs installed in the local governmental entity's jurisdiction over the preceding five years;

(C) the distance the county courthouse or city hall is from the nearest agency regional office;

(D) the current mileage rate set by the Comptroller of the State of Texas; and

(E) the amount of the charge-back fee.

(2) If a local governmental entity repeals its OSSF order, ordinance, or resolution or the commission revokes a local governmental entity's delegation and the local governmental entity does not agree to the amount of the charge-back fee, the commission will refer the matter to SOAH for a contested case hearing to determine the charge-back fee, according to Chapter 80 of this title (relating to Contested Case Hearings).

(b) The executive director will bill the local governmental entities for charge-back fees no more frequently than quarterly and no less than annually. Payment of charge-back fees is due within 30 days from the invoice date. Late payments are subject to penalties and interest according to Chapter 12 of this title (relating to Payment of Fees).

**SUBCHAPTER D: PLANNING, CONSTRUCTION, AND
INSTALLATION STANDARDS FOR OSSFS**

§285.33

STATUTORY AUTHORITY

The amendment is adopted under the authority granted to the commission by the Texas Legislature in THSC, §366.011. The amendment implements THSC, §366.012(a)(1), which requires the commission to adopt rules consistent with the policy defined in THSC, §366.001. The commission has authority to adopt rules to implement the requirements of THSC, §366.053(b), which requires the adoption of rules for permitting.

The amendment is also adopted under the general authority granted in Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under TWC and other laws of the state; 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(15); and TWC, §7.002, which authorizes the commission to enforce provisions of TWC and THSC.

§285.33. Criteria for Effluent Disposal Systems.

- (a) General requirements.

(1) All disposal systems in this section shall have an approved treatment system as specified in §285.32(b) - (d) of this title (relating to Criteria for Sewage Treatment Systems).

(2) All criteria in this section shall be met before the permitting authority issues an authorization to construct.

(3) The pipe between all treatment tanks and the pipe from the final treatment tank to a gravity disposal system shall be a minimum of three inches in diameter and be American Society for Testing and Materials (ASTM) 3034, Standard dimension ratio (SDR) 35 polyvinyl chloride (PVC) pipe or a pipe with an equivalent or stronger pipe stiffness at a 5% deflection. The pipe must maintain a continuous fall to the disposal system.

(4) The pipe from the final treatment tank to a gravity disposal system shall be a minimum of five feet in length.

(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 General Criteria for Treatment and Disposal Systems).

(i) The excavation shall be at least 18 inches deep but shall not exceed a depth of either three feet or six inches below the soil freeze depth, whichever is deeper. Single excavations shall not exceed 150 feet.

(ii) In areas of the state where annual precipitation is less than 26 inches per year (as identified in the Climatic Atlas of Texas, (1983) published by the Texas Department of Water Resources or other standards approved by the executive director), and suitable soils (Class Ib, II, or III) lie below unsuitable soil caps, the maximum permissible excavation depth shall be five feet.

(iii) Multiple excavations must be separated horizontally by at least three feet of undisturbed soil. The sidewalls and bottom of the excavation must be scarified as needed. When there are multiple excavations, it is recommended that the ends be looped together.

(iv) The bottom of the excavation shall be not less than 18 inches in width.

(v) The bottom of the excavation shall be level to within one inch over each 25 feet of excavation or within three inches over the entire excavation, whichever is less.

(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) The depth of the excavation shall comply with clause (i) of this subparagraph.

(II) The rock horizon shall be at least six inches above the bottom of the excavation.

(III) Surface runoff shall be prevented from flowing over the disposal area.

(IV) Subsurface flow along the top of the rock horizon shall be prevented from flowing into the excavation.

(V) The sidewall area will not be counted toward the required absorptive area.

(VI) The formulas in clause (vii)(I) - (III) of this subparagraph shall be adjusted so that no credit is given for sidewall area.

(VII) No single pipe drainfields on sloping ground as shown in §285.90(5) of this title 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.)

A = absorptive area

Q = average daily sewage flow in gallons per day

Ra = soil application rate in gallons per square foot per day

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

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

$$\text{Absorptive Area} = (L \times W) + 2(L+W) \times 1.0 \text{ ft}$$

Where: L = excavation length

W = excavation width

(II) The length of the excavation may be determined as follows when the area and width are known.

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

$$L = (A-2W)/(W+2)$$

A = absorptive area

W = excavation width

(III) For excavations three feet wide or less, use the following formula, or §285.91(8) of this title to determine L.

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

$$L = A/(W+2)$$

A = absorptive area

W = excavation width

(B) Media. The media shall consist of clean, washed and graded gravel, broken concrete, rock, crushed stone, chipped tires, or similar aggregate that is generally one uniform

size and approved by the executive director. The size of the media must range from 0.75 - 2.0 inches as measured along its greatest dimension except as noted in clause (i) of this subparagraph.

(i) If chipped tires are used:

(I) a geotextile fabric heavier than specified in subparagraph (E) of this paragraph must be used; and

(II) the size of the chipped tires must not exceed three inches as measured along their greatest dimension.

(ii) Soft media such as oyster shell and soft limestone shall not be used.

(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 diameter PVC pipe with an SDR of 35 or stronger;

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

- (iii) three or four inch diameter polyethylene smoothwall, ASTM F810;
- (iv) three or four inch diameter PVC ASTM D2729 pipe;
- (v) three or four inch diameter polyethylene ASTM F892 corrugated pipe with a smoothwall interior and fittings; or
- (vi) any other pipe approved by the executive director.

(D) Drainline 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.)

Minimum values	
Weight oz/sq yd (ASTM D3776)	0.70
Grab Strength lbs (ASTM D4632)	11
Air Permeability cfm/sq ft (ASTM D737)	500
Water Flow Rate gpm/sq ft @ 3" head (ASTM D4491)	33
Trapezoidal Tear Strength Lbs (ASTM D4533)	6

(F) Backfilling. Only Class Ib, II, or III soils as described in §285.30 of this title (relating to Site Evaluation) shall be used for backfill. Class Ia and IV soils are specifically prohibited for use as a backfill material. The backfill material shall be mounded over the excavated area so that the center of the backfilled area slopes down to the outer perimeter of the excavated area to allow for settling. Surface runoff impacting the disposal area is not permitted and the diversion method shall be addressed during development of the planning materials.

(G) Drainfields on irregular terrain. Where the ground slope is greater than 15% but less than 30%, a multiple line drainfield may be constructed along descending contours as shown in §285.90(5) of this title. An overflow line shall be provided from the upper excavations to the

lower excavations. The overflow line shall be constructed from solid pipe with an SDR of 35 or stronger, and the excavation carrying the overflow pipe shall be backfilled with soil only.

(H) Drainfield plans. A number of sketches, specifications, and details for drainfield construction are provided in §285.90(4) and (5) of this title.

(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} cm/sec or less, as tested by a certified soil laboratory.

(B) ET system sizing. The following formula shall be used to calculate the top surface area of an ET system.

Figure: 30 TAC §285.33(b)(2)(B) (No change.)

$$A = 1.6 Q/Ret$$

Where: A = total top surface area of the excavations.

Q = estimated daily water usage in gallons/day in §§285.91(3) of this title (relating to Tables).

Ret = net local evaporation rate in §§285.91(7) of this title.

The owner of the ET system shall be advised by the person preparing the planning materials of the limits placed on the system by the Q selected. If the Q is less than required by §285.91(3) of this title, the flow rate shall be included as a condition to the permit, and stated in an affidavit properly filed and recorded in the deed records of the county as specified in §285.3(b)(3) of this title (relating to General Requirements).

(C) Backfill material. Backfill material shall consist of Class II soil as described in §285.30 of this title. All drainlines must be surrounded by a minimum of one foot of media. Backfill shall be used to fill the excavation between the media to allow the backfill material to contact the bottom of the excavation.

(D) Vegetative cover for transpiration. The final grade shall be covered with vegetation fully capable of taking maximum advantage of transpiration. Evergreen bushes with shallow root systems may be planted in the disposal area to assist in water uptake. Grasses with dormant periods shall be overseeded to provide year-round transpiration.

(E) ET systems. ET systems shall be divided into two or more equal excavations connected by flow control valves. One excavation may be removed from service for an extended period of time to allow it to dry out and decompose biological material which might plug the excavation. If one of the excavations is removed from service, the daily water usage must be reduced to prevent overloading of the excavation(s) still in operation. Normally, an excavation must be removed from service for two to three dry months for biological breakdown to occur.

(F) ET system plans. A number of sketches for ET system construction are provided in §285.90(4) and (5) of this title.

(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) Applicability. If the slope of the site is greater than 2.0%, pumped effluent drainfields shall not be used. Pumped effluent drainfields may only be used by single family dwellings.

(B) Length of distribution pipe. There shall be at least 1,000 linear feet of perforated pipe for a two bedroom single family dwelling. For each additional bedroom, there shall be an additional 400 linear feet of perforated pipe. No individual distribution line shall exceed 70 feet in length from the header.

(C) Excavation width and horizontal separation. The excavated area shall be at least six inches wide. There shall be at least three feet of separation between trenches.

(D) Lateral depth and vertical separation. All drainfield laterals shall be between 18 inches and 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 6 inches of media (pea gravel or media up to two inches measured along its greatest dimension).

(F) Pipe and hole size. The distribution (dosing) and manifold (header) pipe shall be 1.25 - 1.5 inches in diameter. The manifold may have a diameter larger than the distribution pipe, but shall not exceed 1.5 inches in diameter. Distribution (dosing) pipe holes shall be 3/16 - 1/4 inch in diameter and shall be spaced five feet apart.

(G) Pump size. Pumped effluent drainfields shall use at least a 1/2 horsepower pump.

(H) Backfilling. Only Class Ib, II, or III soils as described in §285.30(b)(1)(A) of this title shall be used for backfill.

(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) Planning parameters. Gravel-less drainfield pipe may be substituted for drainline pipe in both absorptive and ET systems. When gravel-less pipe is substituted, media will not be required. ET systems shall be backfilled with Class II soils only. All other planning parameters for absorptive or ET systems apply to drainfields using gravel-less pipe.

(B) Installation. The connection from the solid line leaving the treatment tank to the gravel-less line shall be made by using an eight or ten-inch offset connector. The gravel-less line shall be laid level, the continuous stripe shall be up, and the lines shall be joined together with couplings. A filter cloth must be pulled over the joint to eliminate soil infiltration. The gravel-less pipe must be held in place during initial backfilling to prevent movement of the pipe. The end of each gravel-less line shall have an end cap and an inspection port. The inspection port shall allow for easy monitoring of the amount of sludge or suspended solids in the line, and allow the distribution lines to be back-flushed.

(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 10-inch gravel-less pipe.

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

$$L = A/(W+2)$$

A = absorptive area as calculated in subsection (b)(1)(A)(vii)

of this section

W = excavation width

(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) - (ii) of this paragraph for excavations wider than the chambers, the chambers shall be placed edge to edge.

(A) The following formulas shall be used to determine the length of an excavation using leaching chambers.

(i) The following formula is used for leaching chambers without water saving devices.

Figure: 30 TAC §285.33(c)(2)(A)(i) (No change.)

$$L = 0.6A/(W+2)$$

Where: A = minimum absorptive area calculated with no flow reduction; and

W = leaching chamber panel width

(ii) The following formula is used for leaching chambers with water saving devices.

Figure: 30 TAC §285.33(c)(2)(A)(ii) (No change.)

$$L = 0.75A/(W+2)$$

Where: A = minimum absorptive area calculated with flow reduction; and

W = leaching chamber panel width

(B) Leaching chambers shall not be used for absorptive drainfields in Class Ia or IV soils. Leaching chambers may be used instead of media in ET systems, low-pressure dosed drainfields, and soil substitution drainfields; however, the size of the drainfield shall not be reduced from the required area.

(C) Backfill covering leaching chambers shall be Class Ib, II, or III soil.

(3) Drip 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) Drainfield layout. The drainfield shall consist of a matrix of small-diameter pressurized lines, buried at least six inches deep, and pressure reducing emitters spaced at a maximum of 30-inch intervals. The pressure reducing emitter shall restrict the flow of effluent to a flow rate low enough to ensure equal distribution of effluent throughout the drainfield.

(B) Effluent quality. The treatment preceding a drip irrigation system shall treat the wastewater to secondary treatment as described in §285.32(e) of this title unless the drip irrigation system has been approved by the executive director as a proprietary disposal system without the use of secondary treatment.

(C) System flushing. Systems must be equipped to flush the contents of the lines back to the pretreatment unit when intermittent flushing is used. If continuous flushing is used during the pumping cycle, the contents of the lines must be returned to the pump tank.

(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) Vertical separation distance. There shall be a minimum of one foot of soil between the pressure reducing emitter and groundwater and six inches between the pressure reducing emitter and solid rock, or fractured rock. For proprietary disposal systems that do not pretreat to secondary treatment, there shall be two feet of soil between the groundwater and pressure reducing emitter and one foot of soil between solid rock or fractured rock and the pressure reducing emitter.

(F) Labeling or listing. All drip irrigation system devices shall either be labeled by the manufacturer as suitable for use with domestic sewage, or be on the list of approved devices maintained by the executive director according to §285.32(c)(4) of this title.

(4) Approval of proprietary disposal systems. All proprietary disposal systems, other than those described in this section, shall be approved by the executive director before they may be used. Proprietary disposal systems shall be approved by the executive director using the procedures established in §285.32(c)(4)(B) of this title.

(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. 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) The effluent pump in the pump tank must be capable of an operating range that will assure that effluent is delivered to the most distant point of the perforated piping network, yet not be excessive to the point that blowouts occur.

(B) A start/stop switch or timer must be included in the system to control the dosing pump. An audible and visible high water alarm, on an electric circuit separate from the pump, must be provided.

(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 (R_a) 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) If the media in the excavation is at least one foot deep, the length of the excavation is $L = A/(w+2)$ where:

(-a-) w = the width of the excavation for excavations one foot wide or greater; or

(-b-) $w = 1$ for all excavations less than one foot wide.

(II) If the media in the excavation is less than one foot deep, the length of the excavation is $L = A/(w + 2H)$, where H = the depth of the media in feet and:

(-a-) w = the width of the excavation for excavations one foot wide or greater; or

(-b-) $w = 1$ for all excavations less than one foot wide.

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

(iii) Geotextile fabric meeting the criteria in subsection (b)(1)(E) of this section shall be placed over the media. The excavation shall be backfilled with Class Ib, II, or III soil.

(iv) There shall be a minimum of one foot of soil between the bottom of the excavation and solid or fractured rock. There shall be a minimum of two feet of soil between the bottom of the excavation and groundwater.

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

(A) Acceptable surface application areas. Land acceptable for surface application shall have a flat terrain (with less than or equal to 15% slope) and shall be covered with grasses, evergreen shrubs, bushes, trees, or landscaped beds containing mixed vegetation. There shall be nothing in the surface application area within ten feet of the sprinkler which would interfere with the uniform application of the effluent. Sloped land (with greater than 15%) may be acceptable if it is properly landscaped and terraced to minimize runoff.

(B) Unacceptable surface application areas. Land that is used for growing food, gardens, orchards, or crops that may be used for human consumption, as well as unseeded bare ground, shall not be used for surface application.

(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 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) Effluent disinfection. Treated effluent must be disinfected before surface application. Approved disinfection methods shall include chlorination, ozonation, ultraviolet radiation, or other method approved by the executive director. Tablet or other dry chlorinators shall use calcium hypochlorite properly labeled for wastewater disinfection. The effectiveness of the disinfection procedure will be established by monitoring either the fecal coliform count or total chlorine residual from representative effluent grab samples as directed in the testing and reporting schedule. The frequency of testing, the type of tests, and the required results are shown in §285.91(4) of this title.

(E) Minimum required application area. The minimum surface application area required shall be determined by dividing the daily usage rate (Q), established in §285.91(3) of this title, by the allowable surface application rate (R_i = effective loading rate in gallons per square foot per day) found in §285.90(1) of this title or as approved by the permitting authority.

(F) Landscaping plan. Applications for surface application disposal systems shall include a landscape plan. The landscape plan shall describe, in detail, the type of vegetation to be maintained in the disposal area. Surface application systems may apply treated and disinfected effluent upon areas with existing vegetation. If any ground within the proposed surface application area does not have vegetation, that bare area shall be seeded or covered with sod before system start-up. The vegetation shall be capable of growth, before system start-up.

(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) Sprinkler criteria. The maximum inlet pressure for sprinklers shall be 40 pounds per square inch. Low angle nozzles (15 degrees or less in trajectory) shall be used in the sprinklers to keep the spray stream low and reduce aerosols. If the separation distance between the property line and the edge of the surface application area is less than 20 feet, sprinkler operation shall be controlled by commercial irrigation timers set to spray between midnight and 5:00 a.m.

(ii) Planning 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) Effluent storage and pumping requirements.

(I) For systems controlled by a commercial irrigation timer and required to spray between midnight and 5:00 a.m., there shall be at least one day of storage between the alarm-on level and the pump-on level, and a storage volume of one-third the daily flow between the alarm-on level and the inlet to the pump tank.

(II) For systems not controlled by a commercial irrigation timer, the minimum dosing volume shall be at least one-half the daily flow, and a storage volume of one-third the daily flow between the alarm-on level and the inlet to the pump tank.

(III) Pump tank construction and installation shall be according to §285.34(b) of this title.

(iv) Distribution piping. Distribution piping shall be installed below the ground surface and hose bibs shall not be connected to the distribution piping outside the pump tank. An unthreaded sampling port shall be provided in the treated effluent line in the pump tank.

(v) Color coding of distribution system. Effective 365 days after the effective date of these rules, all new distribution piping, fittings, valve box covers, and sprinkler tops shall be permanently colored purple to identify the system as a reclaimed water system according to Chapter 210 of this title (relating to Use of Reclaimed 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 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) Drainfield sizing.

(i) If the unsuitable feature is Class Ia soil, the disposal area sizing shall be based on the application rate for Class Ib soil. Some form of pressure distribution shall be used for effluent disposal.

(ii) If the unsuitable feature is fractured or fissured rock, the system sizing should be based on the application rate for Class III soil. Some form of pressure distribution system shall be used for effluent disposal.

(B) Effluent disinfection. Treated effluent must be disinfected as indicated in §285.32(e) of this title before discharging into the drainfield.

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

(6) All other non-standard disposal systems. The planning materials for all non-standard disposal systems not described in paragraphs (1) - (5) of this subsection shall be submitted to the executive director for review according to §285.5(b)(2) of this title before the systems can be installed.