

The Texas Commission on Environmental Quality (commission) proposes new §285.37 and an amendment to §285.39.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES

On June 2, 2002, the commission received a petition for rulemaking from the Texas Water Quality Association. The petitioner requested that the commission review §285.39 and consider changing this rule to allow back flush from water softeners and reverse osmosis systems to enter an on-site sewage facility (OSSF) under certain conditions. The petition was based on rules the commission adopted in May 2001. On August 24, 2002, the commission approved the Texas Water Quality Association's petition for rulemaking. Action on this petition was put on hold because Senate Bill (SB) 1633 from the 78th Legislature, 2003 involved the same issue.

Texas Health and Safety Code, §366.013, was added by SB 1633 to give owners the ability to discharge back flush from water softeners or reverse osmosis systems into an OSSF provided that certain conditions are met. Water softeners must conserve water by design, regenerate using a demand-initiated regeneration (DIR) control device, and be clearly labeled as being equipped with a DIR device. Point-of-entry reverse osmosis systems must not cause hydraulic overloading or hydraulic loading must be adequately addressed in the design of the OSSF. Section 366.013 allows point-of-use reverse osmosis systems without any conditions and allows the continued use of water softeners installed before September 1, 2003, that discharge into OSSFs unless the owner replaces the water softener or installs a new OSSF. SB 1633 requires rules to be adopted by June 1, 2004.

SECTION BY SECTION DISCUSSION

Proposed §285.37 provides a definition of water treatment equipment; requirements for installation and use of water softeners, reverse osmosis systems, and other water treatment equipment in facilities that use OSSFs for wastewater treatment and disposal; and the requirement for an airgap or airgap device between the water treatment equipment and the OSSF.

The proposed definition of water treatment equipment is consistent with 30 TAC §30.267(3).

Proposed §285.37(b) provides the requirements for use of water softeners, reverse osmosis systems, and other water treatment equipment discharging into a facility with an OSSF on or after September 1, 2003.

Proposed §285.37(b)(1)(A) adds language from SB 1633 that requires a water softener to regenerate using a demand-initiated regeneration (DIR) control device and that requires the water softener to be clearly labeled as being equipped with a DIR device. Clause (i) includes the language from SB 1633 that requires the label to be affixed to the outside of the water softener so that the label can be easily inspected and read. Clause (ii) requires that the label include the name of the company that installed the water softener. This provides the owner with a contact if there are problems with the unit.

Proposed §285.37(b)(1)(B) adds language from SB 1633 that specifies that a water softener may only be connected to an OSSF with a nonstandard or proprietary treatment system as described in §285.32(c) and (d), provided the water softener drain line is connected to specific parts of the OSSF system.

Clause (i) includes language from SB 1633 that requires that the drain line bypass the treatment system.

Clause (ii) includes language from SB 1633 that requires the drain line to connect directly to a pump tank or directly to the line between the treatment system and the disposal system. It also requires that the connection must be to the pump tank if the OSSF has a pump tank or to the pipe between the treatment system and the disposal system if no pump tank exists. This provides additional dilution to the water discharged from the water softener to prevent potential clogging of the disposal system.

Proposed §285.37(b)(1)(C) includes language from SB 1633 that allows an owner to continue to use a water softener that discharges to an OSSF and that does not meet the requirements of §285.37(b)(1)(A) if the water softener was installed before September 1, 2003. Subparagraph (C) also includes language from SB 1633 that requires an owner to replace a water softener installed before September 1, 2003, with a water softener that meets the requirements of subparagraph (A) if the specified criteria are met.

Clause (i) includes language from SB 1633 that requires an owner to use a water softener that meets the requirements of subparagraph (A) if an owner replaces the existing water softener. Clause (ii) includes language from SB 1633 that requires an owner to replace an existing water softener with a water softener that meets the requirements of subparagraph (A) if an owner or installer installs, alters, constructs, or repairs an OSSF for the building or property served by the existing water softener.

Proposed §285.37(b)(2)(A) includes language from SB 1633 that allows an owner to install and use a point-of-use (under sink unit) reverse osmosis system with an OSSF without including calculations of the increased water volume for the OSSF system in the planning materials.

Proposed §285.37(b)(2)(B) includes language from SB 1633 that allows back flush from a point-of-entry (whole house unit) reverse osmosis system to be discharged into an OSSF if certain conditions are met. Clauses (i) and (ii) include the language from SB 1633 that requires the owner to either demonstrate that the point-of-entry reverse osmosis system does not cause hydraulic overloading of the OSSF or to address the increased water volume from the system in the wastewater usage rates in 30 TAC §285.91(3) and include the increased volume in the planning materials for the OSSF.

Proposed §285.37(b)(3) allows owners who use water treatment equipment other than water softeners or reverse osmosis systems to discharge back flush from this equipment, provided that the increased water volume is added to the OSSF wastewater usage rates in §285.91(3), and that the water volume calculation is included in the planning materials for the OSSF. Other types of water treatment equipment besides water softeners and reverse osmosis systems are currently available. These could also result in a back flush of large volumes of water into the OSSF, creating a hydraulic overload of the OSSF system. The proposed language will require that any increase in water volume from other water treatment equipment be included in the wastewater usage rates for the OSSF. This allows the OSSF to be designed for the increase in flow to help prevent system failure.

Proposed §285.37(c) requires that discharges from all water treatment equipment enter the OSSF system through an airgap or airgap device as required in the Uniform Plumbing Code (2000). This prevents sewage from the OSSF from backing up and contaminating the water supply system.

Existing §285.39(d) is proposed to be deleted. SB 1633 allows the installation and use of water softeners and reverse osmosis systems in facilities that have an OSSF, which is inconsistent with the language in this subsection.

FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENT

Jan Washburn, Analyst in the Strategic Planning and Appropriations Section, determined that for the first five years that the proposed rules will be in effect, there will be no significant fiscal impact to either the state or local governments as these rules only affect residences with OSSFs.

Ms. Washburn also determined that during the first five years the proposed rules are in effect, the public benefit anticipated is that residents whose homes have septic systems will be able to install water softeners or reverse osmosis water conditioning systems. Currently, installation of this equipment in houses with a septic system is not authorized by agency rule.

The use of water treatment equipment is not required by statute or rule. Any cost from purchasing and/or installing these systems is voluntarily incurred. However, as of September 1, 2003, for individuals with existing water softener systems that will be replaced or an OSSF, that is connected to an existing water softener, that will be replaced, there is a cost to comply with these rules. SB 1633, 78th Legislature, 2003 requires that anyone replacing an existing softener or replacing the OSSF serving the property must purchase a softener with a DIR control device. Water softeners must be routinely flushed to remove the chemicals or impurities taken out of the water. The timing of the regeneration process is controlled by either a clock timer that automatically flushes the system on a

regular timed basis, or a meter (like a DIR control device) that measures the amount of water that has been treated and flushes only after the prescribed amount of water has been treated. A DIR control device saves water as compared to timer controlled devices because it only runs when it is needed. In general, a water softener with a DIR control device costs an average of \$200 more than one controlled by a timer. Likewise, to upgrade a timer softener to a DIR controlled softener also costs approximately \$200. In these instances, there would be an increased cost of approximately \$200 per residence to comply with the proposed rulemaking.

It is not known how many residential OSSF systems exist in the state. 40,000 - 50,000 permits are issued every year by state and local authorities. It is also not known how many houses have water softeners. However, if existing water softeners are replaced, these replacements must be the more expensive DIR models. A water softener's life expectancy varies by brand and ranges from three to five years to up to 15 years. With a life expectancy of from three to five years, a significant number of water softeners many need to be upgraded during the first five years these rules are in effect. While the total dollar impact cannot be estimated, it can be estimated that each water softener that is upgraded will cost \$200 more to purchase in order to comply with these rules. Water softeners range in cost from \$600 to \$2,000.

Water softener vendors suggest that these more expensive softeners will pay for themselves, as they may use less water. Flushing the softener uses from 50 - 150 gallons of water per flush, depending on the size of the system and the hardness of the water. Flushing may occur one to three times per week.

These rules do not address upgrades to reverse osmosis systems; therefore, there is not a cost to individuals to comply with these portions of the rules. These proposed rules do specify that if a point-of-entry system is installed, the drain field must be sized to handle the increased water usage, thereby increasing the cost of the OSSF system. Point-of-entry reverse osmosis systems are expensive, \$10,000 to \$12,000, and are rarely installed. The more common reverse osmosis system is a point-of-use system, generally installed in the kitchen.

SMALL BUSINESS AND MICRO-BUSINESS ASSESSMENT

There are no anticipated costs for small and microbusinesses as a result of these proposed rules. Rather, these businesses will now be able to sell water softeners and reverse osmosis systems for residential use with an OSSF, potentially increasing their revenue base.

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 which allows back flush from water softener, reverse osmosis, and other water treatment equipment to enter an OSSF under certain conditions, and to repeal existing language which is

contradictory. 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). Section 2001.0225(a) applies to a rule adopted by an agency, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law. 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 the use of water treatment equipment with OSSFs. As a result, there are no applicable standards set by federal law that could be exceeded by these rules. Second, these proposed rules 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 Texas Health and Safety Code, 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.

TAKINGS IMPACT ASSESSMENT

The commission performed an assessment of these rules in accordance with Texas Government Code, §2007.043. The purpose of this rulemaking is to delete existing §285.39(d), which prohibits owners from allowing water softener and reverse osmosis back flush from entering into any portion of the OSSF and replace it with proposed new §285.37, which will allow back flush from water treatment equipment to enter an OSSF under certain conditions. Promulgation and enforcement of these 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.

CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission reviewed the proposed rulemaking and found that the proposal is subject to the 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 prepared a preliminary consistency determination for the proposed rules in

accordance with Coastal Coordination Act Implementation Rules, 31 TAC §505.22 and found that the proposed rulemaking is consistent with the applicable CMP goals and policies.

The generally applicable 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. This rulemaking, applicable to all areas of the state, will comply with these goals of the CMP.

The applicable CMP policy states that rules governing OSSFs require those systems to be located, designed, operated, inspected, and maintained so as to prevent a release of pollutants that may adversely affect coastal waters. Promulgation and enforcement of these proposed rules will not violate any standards identified in the applicable CMP policy because the proposed rules only allow owners of OSSFs to allow back flush from water treatment equipment to enter their OSSF under certain specified conditions that are intended to be protective.

The commission seeks public comment on the consistency of the proposed rules with applicable CMP goals and policies.

ANNOUNCEMENT OF HEARING

A public hearing on this proposal will be held in Austin on January 8, 2004, at 10:30 a.m. in Building C, Room 131E, at the Texas Commission on Environmental Quality complex, located at 12100 Park 35 Circle. Individuals may present oral or written statements when called upon in order of registration. There will be no open discussion during the hearing; however, an agency staff member will be available to discuss the proposal 30 minutes prior to the hearing and will answer questions before and after the hearing.

Persons with disabilities who have special communication or other accommodation needs, who are planning to attend the hearing, should contact the Office of Environmental Policy, Analysis, and Assessment at (512) 239-4900. Requests should be made as far in advance as possible.

SUBMITTAL OF COMMENTS

Comments may be submitted to Patricia Durón, MC 205, Office of Environmental Policy, Analysis, and Assessment, 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 2003-057-285-WT. Comments must be received by 5:00 p.m., January 12, 2004. For further information, please contact Emily Barrett, Regulation Development Section, at (512) 239-3546.

SUBCHAPTER D: PLANNING, CONSTRUCTION, AND INSTALLATION

STANDARDS FOR OSSFS

§285.37, §285.39

STATUTORY AUTHORITY

The new and amended sections are proposed under the authority granted to the commission by the Texas Legislature in Texas Health and Safety Code, §366.001 and §366.011. Specific statutory authorization derives from Texas Health and Safety Code, §366.013 as added by SB 1633, 78th Legislature, 2003. The new and amended section are also proposed under the general authority granted in Texas Water Code, §5.013, which establishes the general jurisdiction of the commission over other areas of responsibility as assigned to the commission under the Texas Water Code and other laws of the state; Texas Water Code, §5.103 and §5.105, which authorize the commission to adopt rules and policies necessary to carry out its responsibilities and duties under the Texas Water Code, §5.013(14)(b); and Texas Water Code, §7.002, which authorizes the commission to enforce provisions of the Texas Water Code and Texas Health and Safety Code.

The new and amended sections implement Texas Health and Safety Code, §366.012(a)(1), which requires the commission to adopt rules consistent with the policy defined in Texas Health and Safety Code, §366.001; and §366.013, relating to Installation and Use of Water Softeners and Reverse Osmosis Systems.

§285.37. On-Site Sewage Facilities and Water Treatment Equipment and Appliances.

(a) Water treatment equipment is defined as an appliance, which includes water softeners and reverse osmosis systems, used to:

- (1) alter the mineral content of water;
- (2) alter the microbiological content of water;
- (3) alter other substances found in water; or
- (4) purify water.

(b) Back flush or discharge from water treatment equipment installed on or after September 1, 2003, may be discharged into an on-site sewage facility (OSSF) as provided in this subsection.

- (1) Water softener.

(A) The water softener must regenerate using a demand-initiated regeneration (DIR) control device. The water softener must be clearly labeled as being equipped with a DIR control device as follows:

(i) the label shall be affixed to the outside of the water softener so the label can be easily inspected and read; and

(ii) the label shall provide the name of the company that installed the water softener.

(B) A water softener may only be connected to an OSSF with a non-standard or proprietary treatment system as described in §285.32(c) and (d) of this title (relating to Criteria for Sewage Treatment Systems) if the water softener drain line:

(i) bypasses the treatment system; and

(ii) connects directly to a pump tank if the OSSF has a pump tank or directly to the pipe between the treatment system and the disposal system if no pump tank exists.

(C) An owner may continue to use a water softener that discharges to an OSSF and does not meet the requirements of subparagraph (A) of this paragraph if the water softener was installed before September 1, 2003. An owner must replace any water softener installed before September 1, 2003, with a water softener that meets the requirements of subparagraphs (A) and (B) of this paragraph at such time as:

(i) an owner replaces the existing water softener; or

(ii) an owner or installer installs, alters, constructs, or repairs an OSSF for the structure or property served by the existing water softener.

(2) Reverse osmosis system.

(A) Point-of-use (under sink unit) reverse osmosis systems. The back flush from a point-of-use reverse osmosis system may be discharged into an OSSF without including calculations of the back flush water volume in the OSSF planning materials.

(B) Point-of-entry (whole house unit) reverse osmosis systems. The back flush from a point-of-entry reverse osmosis system may be discharged into an OSSF if:

(i) the owner can demonstrate that the point-of-entry reverse osmosis system does not cause hydraulic overloading of the OSSF; or

(ii) the water volume from the point-of-entry reverse osmosis system is accounted for (added to the usage rate in §285.91(3) of this title (relating to Tables)) by providing calculations of the increase in wastewater volume with the OSSF planning materials.

(3) Water treatment equipment other than water softeners and reverse osmosis systems. If an owner uses water treatment equipment other than water softeners or reverse osmosis systems, the back flush from the water treatment equipment may be discharged into an OSSF if the water volume is added

to the OSSF usage rate in §285.91(3) of this title. This water volume calculation must be provided with the OSSF planning materials.

(c) Discharges from all water treatment equipment shall enter the OSSF system through an airgap or an airgap device as required in the Uniform Plumbing Code (2000).

§285.39. On-Site Sewage Facilities [OSSF] Maintenance and Management Practices.

(a) An installer shall provide the owner of an on-site sewage facility (OSSF) [OSSF] with written information regarding maintenance and management practices and water conservation measures related to the OSSF installed, repaired, or maintained[,] by the installer.

(b) Owners shall have the treatment tanks pumped on a regular basis[,] in order to prevent sludge accumulation from spilling over to the next tank or the outlet device. Owners of treatment tanks shall engage only persons registered with the executive director to transport the treatment tank contents.

(c) Owners shall not allow driveways, storage buildings, or other structures to be constructed over the treatment or disposal systems.

[(d) Owners shall not allow water softener and reverse osmosis back flush to enter into any portion of the OSSF.]