

The Texas Commission on Environmental Quality (TCEQ, agency, or commission) adopts amendments to §331.9 and §331.131.

Amended §331.9 and §331.131 are adopted *without changes* to the proposed text as published in the July 22, 2016, issue of the *Texas Register* (41 TexReg 5383) and, therefore, will not be republished.

Background and Summary of the Factual Basis for the Adopted Rules

House Bill (HB) 2230, 84th Texas Legislature, 2015, authored by Representative Lyle Larson, provides authority for the TCEQ to authorize an injection well used for oil and gas waste disposal to be used for the disposal of nonhazardous brine generated by a desalination operation or nonhazardous drinking water treatment residuals (DWTR). HB 2230 adds Texas Water Code (TWC), §27.026 that allows the TCEQ to authorize, by individual permit, general permit, or by rule, a Class V injection well for the disposal of such nonhazardous brine or nonhazardous DWTR by injection into a Class II well permitted by the Railroad Commission of Texas (RRC) under TWC, Chapter 27, Subchapter C. The adopted rules are consistent with the long-standing practice of the TCEQ's Underground Injection Control (UIC) program to authorize Class V injection wells by rule.

Section by Section Discussion

In addition to adopting amendments to implement HB 2230, the commission adopts non-substantive changes to update the rules in accordance with current *Texas Register* style

and format requirements, improve readability, and establish consistency in the rules.

These non-substantive changes are not intended to alter the existing rule requirements in any way and are not specifically discussed in this preamble. The commission also adopts other minor amendments to be consistent with current language in Chapter 331.

§331.9, Injection Authorized by Rule

The commission adopts amended §331.9(b)(2)(E) to update the reference to Chapter 331, Subchapter K to reflect the current title, "Additional Requirements for Class V Injection Wells Associated with Aquifer Storage and Recovery Projects" to be consistent with current language in Chapter 331.

The commission adopts §331.9(b)(2)(F) to state that an owner or operator of a Class V well authorized for disposal by injection of certain wastes into a Class II disposal well is prohibited from injecting into the well if the owner or operator fails to comply with §331.9(b)(3).

The commission adopts §331.9(b)(3) to provide authorization by rule of a Class V injection well for disposal of nonhazardous brine from a desalination operation or nonhazardous DWTR into a Class II disposal well permitted by the RRC whose operator has an active Form P-5 Organization Report in good standing with the RRC. The RRC requires the Form P-5 Organization Report for any entity performing operations within the jurisdiction of the RRC's Oil and Gas Division in accordance with Oil and Gas Statewide Rule 1 (16 TAC §3.1). The Form P-5 Organization Report includes provisions for

financial assurance for plugging and abandonment of a disposal well.

The commission adopts §331.9(b)(3)(A) to state that Chapter 331, Subchapter H (which references the standards for Class V wells) and §331.9(a) (which references the requirements for plugging and abandonment of a well authorized by rule prior to January 1, 1982, for Class V wells, motor vehicle waste disposal wells, large capacity septic systems, large capacity cesspools, subsurface fluid distribution systems, and dry wells) are not applicable to a Class V well authorized by rule to inject waste into a Class II well permitted by the RRC. The RRC's construction and closure standards for the Class II disposal well would be the applicable construction and closure standards for a Class V well authorized by rule for disposal by injection of nonhazardous brine from a desalination operation or nonhazardous DWTR into a Class II disposal well permitted by the RRC.

The commission adopts §331.9(b)(3)(B) to provide that the use or disposal of radioactive material under §331.9(b)(3) is subject to the applicable requirements of 30 TAC Chapter 336.

§331.131, Applicability

The commission adopts amended §331.131 to exclude Class V wells authorized by rule to dispose of nonhazardous brine from a desalination operation or nonhazardous DWTR by injection into a Class II well permitted by the RRC from the requirements of Chapter 331, Subchapter H. The RRC's Class II disposal well standards would be the applicable

standards for a Class V well authorized by rule for disposal by injection of nonhazardous brine from a desalination operation or nonhazardous DWTR into a Class II disposal well permitted by the RRC.

The commission also adopts amended §331.131 to update the term "aquifer storage wells" to "aquifer storage and recovery injection wells" and to update the reference to Chapter 331, Subchapter K to reflect the current title, "Additional Requirements for Class V Injection Wells Associated with Aquifer Storage and Recovery Projects" to be consistent with current language in Chapter 331.

Final Regulatory Impact Analysis Determination

The commission reviewed the adopted rulemaking action in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the action is not subject to Texas Government Code, §2001.0225 because this rulemaking action does not meet the Texas Government Code 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 specific intent of the adopted rules is to implement the statutory requirements of TWC, §27.026, enacted by HB 2230, which provides that the commission may authorize

by individual permit, general permit, or by rule, a Class V injection well for the disposal of nonhazardous desalination brine or nonhazardous DWTR by injection into a Class II disposal well permitted by the RRC. The adopted rules substantially advance this purpose by providing an authorization by rule for a Class V injection well for the disposal of nonhazardous desalination brine or nonhazardous DWTR by injection into a Class II disposal well permitted by the RRC. The intent is not inconsistent with the first prong of the definition of "major environmental rule."

However, the adoption does not meet the second prong of the definition of "major environmental rule" because the rulemaking does not adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment or public health and safety of the state or a sector of the state or impose additional regulatory burdens that would affect the economy or a sector of the economy in a material way. The adopted rules implement the legislative directives of HB 2230 and do not impose additional regulatory burdens that affect the economy or a sector of the economy in a material way.

Furthermore, the adopted rules do not meet any of the four applicability requirements listed in Texas Government Code, §2001.0225(a). The adopted rules do not exceed a standard set by federal law, because the adopted rules are consistent with federal standards for Class V injection wells. The adopted rules do not exceed an express requirement of state law because the adopted rules are consistent with the express requirements of HB 2230 and TWC, §27.026; and with TWC, §27.019, which requires the

commission to adopt rules reasonably required for the regulation of injection wells.

Further, the adopted rules do not exceed requirements set out in the TCEQ's UIC program authorized for the state of Texas under the federal Safe Drinking Water Act. Finally, the rulemaking is not adopted under the general powers of the agency, but is adopted under the express requirements of HB 2230 and TWC, §27.026.

The commission invited public comment regarding the Draft Regulatory Impact Analysis Determination during the public comment period. No comments were received regarding the Draft Regulatory Impact Analysis Determination.

Takings Impact Assessment

The commission evaluated this adopted rulemaking action and performed a preliminary assessment of whether Texas Government Code, Chapter 2007 is applicable. The commission's preliminary assessment is that implementation of these adopted rules does not constitute a taking of real property.

The adopted action implements the statutory requirements of TWC, §27.026, enacted by HB 2230. TWC, §27.026 provides that the commission may authorize, by individual permit, general permit, or by rule, a Class V injection well for the disposal of nonhazardous desalination brine or nonhazardous DWTR by injection into a Class II disposal well permitted by the RRC. The adopted rules substantially advance their purpose by amending existing commission rules to establish an authorization by rule for an existing Class II disposal well permitted by the RRC as a Class V injection well for the

disposal of nonhazardous desalination brine or nonhazardous DWTR.

Promulgation or enforcement of these adopted rules will be neither a statutory nor a constitutional taking of private real property. The adopted rulemaking does not affect a landowner's rights in private real property because this rulemaking action does not burden (constitutionally), nor restrict or limit, the owner's right to property and reduce its value by 25% or more beyond which would otherwise exist in the absence of the regulations. The adopted rules establish an authorization by rule for an existing Class II disposal well permitted by the RRC as a Class V injection well for the disposal of nonhazardous desalination brine or nonhazardous DWTR by injection into a Class II disposal well permitted by the RRC consistent with the requirements of HB 2230. Because the adopted rules apply only to Class II disposal well operators that seek authorization to conduct the subject Class V disposal activity, the rules do not restrict or limit an owner's rights in real property or reduce its value by 25% or more beyond which would otherwise exist in the absence of the regulations. Therefore, the adopted rules do not affect real property in a manner that is different than real property would have been affected without the adopted rules.

Consistency with the Coastal Management Program

The commission reviewed the adopted rules and found that they are neither identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(b)(2) or (4), nor will they affect any action/authorization identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(a)(6). Therefore, the adopted rules are not subject to the Texas

Coastal Management Program (CMP).

The commission invited public comment regarding the consistency with the CMP during the public comment period. No comments were received regarding the consistency with the CMP.

Effect on Sites Subject to the Federal Operating Permits Program

The adopted rules will not require any revisions to federal operating permits.

Public Comment

The commission held a public hearing on August 16, 2016. The comment period closed on August 22, 2016. The commission received comments from Lotus, LLC (Lotus) and Water Remediation Technology (WRT). The commenters expressed support for the proposed rules. They also stated that the requirements of the commission's radioactive licensing rules (which are not under consideration in this rulemaking) impose costs on the disposal of DWTR that contain regulated levels of naturally occurring radioactive material (NORM).

Response to Comments

Comment

Lotus objected to dual TCEQ-RRC regulation of NORM contaminated DWTR. WRT noted that HB 2230 is silent on whether a radioactive materials license is required for disposal of DWTR.

Response

To ensure that these rules are consistent with HB 2230, all comments were carefully reviewed. The adopted rules are consistent with the provisions of HB 2230. The commission respectfully points out that licensing requirements for NORM and oil and gas NORM are contained in Texas Health and Safety Code (THSC), §§401.412 - 401.415 and not in TWC, Chapter 27, which was amended by HB 2230. The commission has regulatory jurisdiction for NORM while RRC has exclusive regulatory jurisdiction for oil and gas NORM. No changes have been made in response to these comments.

Comment

Lotus requested the commission exempt desalination brine and DWTR from the requirements of Chapter 336 and clarify the exemption in a new Memorandum of Understanding (MOU) between TCEQ and RRC or amend the existing MOU. Lotus further stated that instead of amending or entering into a new MOU between the RRC and the commission to implement the Class II-Class V disposal option as required by TWC, §27.026 and HB 2230, the commission consider including DWTR waste in an MOU between the Texas Department of State Health Services (TDSHS) and RRC.

Response

There is no statutory basis to exempt desalination brine and DWTR wastes containing NORM above exempted levels from the licensing requirements of Chapter 336. Chapter 336 was amended effective July 21, 2005 to add Subchapter K which provides

for the licensing of the commercial disposal of NORM waste from public water systems in Class I injection wells. Licensing is a statutory requirement under THSC, §401.101 which prohibits a person from receiving, processing or disposing of NORM unless the person has a license, registration or exemption from TDSHS or the commission. HB 2230 did not revise any requirements in the THSC. HB 2230 specifically requires the commission to enter or amend an MOU with RRC. No changes have been made in response to these comments.

Comment

Lotus and WRT pointed out the significant cost of disposal of DWTR containing NORM, but also noted that radionuclide water treatment is not a big industry and a finite number of cities have this issue. Lotus stated that the requirement to obtain a radioactive materials license for the disposal of DWTR containing NORM, in addition to Lotus' existing radioactive materials license, would increase the cost of disposal for Lotus and for municipalities, causing operators to pass these costs to generators that use the disposal facility. In summary, the commenters estimated the additional cost to municipalities would be \$3,500 per year for monitoring and testing and approximately \$5,000 per load for waste preparation. The commenters estimated that the additional cost to operators would be an initial expense of approximately \$500,000 for facility upgrades and licensing, approximately \$150,000 annually for TCEQ licensing fees and monitoring, and \$5,000 per load for waste preparation including hazardous materials personnel.

Response

The commission's exclusive jurisdiction over solid waste, from which oil and gas waste is excluded, is established in THSC, Chapter 361. The commission's exclusive jurisdiction over NORM, from which oil and gas NORM is excluded, is established in THSC, Chapter 401. The RRC's jurisdiction over oil and gas waste is established in THSC, Chapter 361 and in Texas Natural Resources Code, Chapter 91. THSC, Chapter 401 establishes that RRC and TDSHS each have jurisdiction over certain aspects of oil and gas NORM.

HB 2230 and the adopted rules authorize disposal of desalination brine and DWTR that are nonhazardous and contain exempt levels of NORM. These wastes must be characterized to determine if they are nonhazardous and contain non-exempt levels of NORM. Lotus' estimates include costs related to making these determinations as well as cost estimates which appear to address radioactive materials license requirements. No changes have been made in response to these comments.

Comment

The majority of comments provided by Lotus and WRT relate to waste streams that could not, by statute or rule, be permitted under the provisions of HB 2230. These comments range from the occurrence of radionuclides in ground water, health effects and risks of exposure to radionuclides in drinking water, water treatment for NORM and hazardous constituents, environmental risks related to NORM disposal, and technical permitting and licensing requirements.

Response

The comments on these topics do not apply to HB 2230 and are outside the scope of this rulemaking. No changes have been made in response to these comments.

SUBCHAPTER A: GENERAL PROVISIONS
§331.9

Statutory Authority

The amendment is adopted under the authority of the Texas Water Code (TWC), §5.103, which provides the commission the authority to adopt any rules necessary to carry out its powers and duties under this code and other laws of this state; TWC, §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; TWC, §5.120, which authorizes the commission to administer the law so as to promote the judicious use and maximum conservation and protection of the environment and natural resources of the state; TWC, §27.019, which requires the commission to adopt rules reasonably required for the regulation of injection wells; and TWC, §27.026, which allows the commission to authorize by individual permit, general permit, or by rule, a Class V injection well for the disposal by injection of nonhazardous desalination brine or nonhazardous drinking water treatment residuals (DWTR) into a Class II disposal well permitted by the Railroad Commission of Texas under TWC, Chapter 27, Subchapter C.

The adopted amendment implements House Bill 2230, 84th Texas Legislature, 2015, which allows the commission to authorize by individual permit, general permit, or by rule, a Class V injection well for the disposal by injection of nonhazardous desalination brine or nonhazardous DWTR into a Class II disposal well permitted by the Railroad Commission of Texas under TWC, Chapter 27, Subchapter C.

§331.9. Injection Authorized by Rule.

(a) Plugging and abandonment of a well authorized by rule at any time after January 1, 1982, shall be accomplished in accordance with the standards of §331.46 of this title (relating to Closure Standards). Class V wells shall be closed according to standards under §331.133 of this title (relating to Closure Standards for Injection Wells). Motor vehicle waste disposal wells, large capacity septic systems, large capacity cesspools, subsurface fluid distribution systems, and drywells shall be closed according to standards under §331.136 of this title (relating to Closure Standards for Motor Vehicle Waste Disposal Wells, Large Capacity Septic Systems, Large Capacity Cesspools, Subsurface Fluid Distribution Systems, and Drywells).

(b) Injection into Class V wells, unless otherwise provided in subsection (c) of this section, §331.7 of this title (relating to Permit Required), or §331.137 of this title (relating to Permit for Motor Vehicle Waste Disposal Wells), is authorized under this rule.

(1) Well authorization under this section expires upon the effective date of a permit issued under §331.7 of this title.

(2) An owner or operator of a Class V well is prohibited from injecting into the well:

(A) upon the effective date of permit denial;

(B) upon failure to submit a permit application in a timely manner under subsection (c) of this section;

(C) upon failure to submit inventory information in a timely manner under §331.10 of this title (relating to Inventory of Wells Authorized by Rule);

(D) upon failure to comply with a request for information from the executive director in a timely manner;

(E) upon failure to comply with provisions contained in Subchapter H of this chapter (relating to Standards for Class V Wells) and, if applicable, Subchapter K of this chapter (relating to Additional Requirements for Class V Injection Wells Associated with Aquifer Storage and Recovery Projects); or

(F) upon failure of the owner or operator to comply with provisions contained in paragraph (3) of this subsection for a Class V well that is authorized to inject certain wastes into a Class II disposal well permitted by the Railroad Commission of Texas.

(3) Unless otherwise provided in subsection (c) of this section, a disposal well authorized by an active Class II permit issued by the Railroad Commission of Texas whose operator has an active Form P-5 Organization Report in good standing with the

Railroad Commission of Texas may be authorized by rule of the commission as a Class V injection well for the disposal by injection of nonhazardous brine from a desalination operation or nonhazardous drinking water treatment residuals.

(A) Subchapter H of this chapter and subsection (a) of this section are not applicable to a Class V well authorized by rule under this paragraph.

(B) The use or disposal of radioactive material under this paragraph is subject to the applicable requirements of Chapter 336 of this title (relating to Radioactive Substance Rules).

(c) The executive director may require the owner or operator of an injection well authorized by rule to apply for and obtain an injection well permit. The owner or operator shall submit a complete application within 90 days after the receipt of a letter from the executive director requesting that the owner or operator of an injection well submit an application for permit. Cases for which a permit may be required include, but are not limited to, wells not in compliance with the standards required by this section.

(d) Class IV wells injecting hazardous waste-contaminated groundwater that is of acceptable quality to aid remediation and that is being reinjected into the same formation from which it was drawn, as authorized by §331.6 of this title (relating to Prohibition of Class IV Well Injection), shall be authorized by rule.

SUBCHAPTER H: STANDARDS FOR CLASS V WELLS
§331.131

Statutory Authority

The amendment is adopted under the authority of the Texas Water Code (TWC), §5.103, which provides the commission the authority to adopt any rules necessary to carry out its powers and duties under this code and other laws of this state; TWC, §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; TWC, §5.120, which authorizes the commission to administer the law so as to promote the judicious use and maximum conservation and protection of the environment and natural resources of the state; TWC, §27.019, which requires the commission to adopt rules reasonably required for the regulation of injection wells; and TWC, §27.026, which allows the commission to authorize by individual permit, general permit, or by rule, a Class V injection well for the disposal by injection of nonhazardous desalination brine or nonhazardous drinking water treatment residuals (DWTR) into a Class II disposal well permitted by the Railroad Commission of Texas under TWC, Chapter 27, Subchapter C.

The adopted amendment implements House Bill 2230, 84th Texas Legislature, 2015, which allows the commission to authorize by individual permit, general permit, or by rule, a Class V injection well for the disposal by injection of nonhazardous desalination brine or nonhazardous DWTR into a Class II disposal well permitted by the Railroad Commission of Texas under TWC, Chapter 27, Subchapter C.

§331.131. Applicability.

This subchapter applies to all Class V injection wells under the jurisdiction of the commission except those Class V wells authorized by rule under §331.9(b)(3) of this title (relating to Injection Authorized by Rule). Aquifer storage and recovery injection wells must also comply with Subchapter K of this chapter (relating to Additional Requirements for Class V Injection Wells Associated with Aquifer Storage and Recovery Projects) in addition to this subchapter.