

The Texas Natural Resource Conservation Commission (commission) proposes amendments to §213.3 and §213.8.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES

The commission proposes these revisions to Chapter 213 in order to implement Senate Bill 2 (SB 2), §11.03, 77th Legislature, 2001, which added to the Texas Water Code (TWC), §27.051(h). SB 2, §11.03, amended TWC, §27.051, Issuance of Permit, by adding subsection (h) to prohibit the authorization by the commission of any injection well into or through the Edwards Aquifer (EA), except for injection of groundwater withdrawn from the EA or injection of flood water, groundwater, or storm water into the EA through improved sinkholes or caves located in karst topographic areas. The applicable provisions of SB 2 became effective on September 1, 2001. Concurrent rulemaking is being done in §331.19 of this title for related changes needed to implement the legislation.

There are four classes of injection wells under the jurisdiction of the commission. Class I injection wells are used for the disposal of hazardous or nonhazardous waste into deep geological formations. Currently Class I injection wells are prohibited by §213.8 over the EA recharge or transition zones, as defined in §213.3. Class III injection wells are used for the extraction of minerals. There are no permitted Class III injection wells over the EA. Class IV injection wells are used to dispose of hazardous or radioactive waste into or above a formation that has an underground source of drinking water within 1/4-mile of the wellbore. Class IV injection wells are generally prohibited across the state except if the well is being used to inject hazardous waste-contaminated groundwater that is of acceptable quality to aid remediation and is reinjected into the same formation from which it was

drawn. Class V injection wells are those not included in any other class including, but not limited to, aquifer storage and retrieval wells, motor vehicle waste disposal wells, large capacity septic systems (designed for a flow greater than 5,000 gallons per day), air conditioning return flow wells, cooling water return flow wells, storm water drainage wells, improved sinkholes, closed loop injection wells, subsurface fluid distribution systems, and aquifer remediation wells. Subsurface fluid distribution systems include subsurface drip irrigation utilized for the disposal of treated effluent.

It should be noted that waste disposal wells in the recharge or transition zones of the EA, such as subsurface fluid distribution systems, as that term is defined in 30 TAC §331.2(87), Definitions, and large capacity septic systems are already prohibited under §213.8. Similarly, land application systems that rely on percolation for wastewater disposal are already prohibited over the EA recharge zone in accordance with 30 TAC §213.6(b), Wastewater Treatment and Disposal Systems. Section 213.8 makes applications for injection wells in the EA subject to the requirements in §331.19, Injection Into or Through the Edwards Aquifer, which is proposed in concurrent rulemaking.

Other types of Class V wells that transect or terminate in the EA may be authorized by rule or by permit, such as wells injecting groundwater withdrawn from the EA that is unaltered physically, chemically, or biologically, or wells injecting groundwater withdrawn from the EA that is treated in connection with remediation that is approved by state or federal order, authorization, or agreement and that does not exceed the maximum contaminant levels (MCLs) for drinking water. In addition, wells injecting groundwater, storm water, or flood water through improved sinkholes or caves and wells

injecting non-toxic tracer dyes into the EA for the purpose of conducting scientific studies to determine hydrologic flowpaths may be authorized by rule or permit.

This new prohibition applies to applications for authorizations by permit or rule of injection wells that transect or terminate in the EA, if submitted on or after September 1, 2001. Applications include new authorizations for injection wells or major amendments to existing authorizations. Existing injection wells authorized by the commission on or before August 31, 2001, are not subject to this prohibition. Also, applications submitted on or before August 31, 2001, are not subject to this prohibition.

Section 213.8(c) concerns regulated activities in the mapped recharge and transition zones. The proposed rule has a cross-reference to injection wells authorized under §331.19, which includes a broader regulated area. The definition of EA used in §331.19(b), which is proposed concurrently with this rulemaking, applies to the Underground Injection Control (UIC) program only and is different than the definition of EA found in Chapter 213 because the prohibition under TWC, §27.051(h) specifically refers to the definition of the EA used in TWC, §26.046. The definition of EA in Chapter 213 closely mirrors TWC, §26.046(a) in all aspects except that Travis and Williamson Counties and certain geologic formations are added to the definition, and Kendall County is not subject to Chapter 213.

TWC, §26.046 defines the EA as "that portion of an arcuate belt of porous, waterbearing limestones composed of the Comanche Peak, Edwards, and Georgetown Formations trending from west to east to northeast through Kinney, Uvalde, Medina, Bexar, Kendall, Comal, and Hays Counties, respectively, and as defined in the most recent rules of the commission for the protection of the quality of the potable underground water in those counties." For Chapter 331, the definition of EA includes the counties and

formations listed in TWC, §26.046 and the definition of EA in §213.3(8). Although only a small tip of the historically regulated EA recharge zone enters the southern portion of Kendall County at the border of Bexar and Comal Counties, consistent with the plain language of the statute, that portion cannot be excluded from the definition of the EA under Chapter 331 for UIC purposes. Thus for Chapter 331 only, any portions of an arcuate belt of porous, waterbearing limestones composed of the Comanche Peak, Edwards, and Georgetown Formations that exist in Kendall County are included in the definition of EA.

SECTION BY SECTION DISCUSSION

The proposed amendment to §213.3, Definitions, would add the definition of an injection well, as regulated under Chapter 331. The new definition refers to the definition in Chapter 331. The rest of the definitions have been renumbered accordingly.

The proposed amendment to §213.8, Prohibited Activities, would make applications for injections wells received on or after September 1, 2001, also subject to the requirements in §331.19, which are addressed in as concurrent rulemaking. This proposed change would implement SB 2, §11.03, 77th Legislature, 2001, which added to the TWC, §27.051(h), a section relating to certain injection wells which transect or terminate in the EA.

FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENT

John Davis, Technical Specialist with Strategic Planning and Appropriations, determined that for each year of the first five-year period the proposed amendments are in effect, there will be no anticipated

fiscal implications for units of state and local government as a result of administration or enforcement of the proposed amendments.

The proposed amendments will implement certain provisions of SB 2 (an Act relating to the development and management of the water resources of the state, including the ratification of the creation of certain groundwater conservation districts; providing penalties), 77th Legislature, 2001.

The bill prohibits the commission from authorizing by rule or permit any new underground injection well that goes through or terminates in the EA. This prohibition became effective on September 1, 2001. Exceptions to this prohibition are for the authorization of the injection of groundwater withdrawn from the EA, and injection of storm water, flood water, or groundwater through improved sinkholes or caves located in karst topographic areas. The proposed amendments allow the commission to authorize injection of groundwater withdrawn from the EA that is treated in connection with remediation that is approved by state or federal order, authorization, or agreement and that does not exceed the MCLs for drinking water. The commission may also authorize injection by a federal or state agency, county, municipality, river authority, or groundwater district of non-toxic tracer dyes into the EA for the purpose of conducting scientific studies to determine hydrologic flowpaths. All other new injection wells installed into or through the EA would be prohibited. This rulemaking is intended to add updated rule language to existing commission rules to make them compliant with the provisions of SB 2.

The proposed amendments implementing SB 2 are limited to injection wells installed into or through the EA in the recharge and transition zones under Chapter 213, which are located within Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, and Williamson Counties. Authorizations for injection wells

installed into or through the EA, except as provided in §331.19, are also prohibited for applications filed on or after September 1, 2001. An underground injection well is a bored, drilled, or driven shaft whose depth is greater than the largest surface dimension, a dug hole whose depth is greater than the largest surface dimension, an improved sinkhole, or a subsurface fluid distribution system. These wells are used to inject hazardous waste, fluids from mineral extraction operations, radioactive waste, and other nonhazardous wastes and fluids. Wells into or through the EA authorized prior to September 1, 2001, or wells installed above the aquifer would not be affected by the proposed amendments.

There are no injection wells registered with the commission that are owned and operated by units of government and which have been installed into or through the EA. There may have been some unauthorized injection wells operating over the affected region prior to September 1, 2001. It is not known how many of these wells existed and it is believed that these wells are no longer in operation. The proposed amendments would not affect currently authorized injection wells used by units of government that have been installed stratigraphically above the EA. Therefore, the commission does not anticipate fiscal implications for units of state and local government due to implementation of the proposed amendments.

PUBLIC BENEFITS AND COSTS

Mr. Davis also determined that for each of the first five years the proposed amendments are in effect, the public benefit anticipated as a result of implementing the proposed amendments will be potentially increased environmental protection of public drinking water by prohibiting the installation of underground injection wells into or through the EA.

The proposed amendments will implement certain provisions of SB 2, which prohibits the commission from authorizing by rule or permit any underground injection well that goes through or terminates in the EA. This prohibition became effective on September 1, 2001. Exceptions to this prohibition are for the authorization of the injection of groundwater withdrawn from the EA, and injection of storm water, flood water, or groundwater through improved sinkholes or caves located in karst topographic areas. The proposed amendments allow the commission to authorize injection of groundwater withdrawn from the EA that is treated in connection with remediation that is approved by state or federal order, authorization, or agreement and that does not exceed the MCLs for drinking water. The commission may also authorize the injection by a federal or state agency, county, municipality, river authority, or groundwater district of non-toxic tracer dyes into the EA for the purpose of conducting scientific studies to determine hydrologic flowpaths. All other new injection wells installed into or through the EA would be prohibited.

There is currently one registered privately-owned injection well that has been installed into the EA; however, this well would not be affected by the proposed amendments because it was authorized prior to September 1, 2001. There may have been some unauthorized injection wells operating over the affected region prior to September 1, 2001. It is not known how many of these wells existed and it is believed that these wells are no longer in operation. The proposed amendments would not affect currently authorized injection wells that have been installed stratigraphically above the EA. Therefore, the commission does not anticipate fiscal implications for any individual, business, or industry due to implementation of the proposed amendments.

SMALL BUSINESS AND MICRO-BUSINESS ASSESSMENT

There will be no anticipated adverse economic effects to small or micro-businesses as a result of the implementation of the proposed amendments, which are intended to implement certain provisions of SB 2 and which prohibit the commission from authorizing by rule or permit any underground injection well that goes through or terminates into the EA. This prohibition became effective on September 1, 2001. Exceptions to this prohibition are for the authorization of the injection of groundwater withdrawn from the EA and injection of storm water, flood water, or groundwater through improved sinkholes or caves located in karst topographic areas. The proposed rulemaking allows the commission to authorize injection of groundwater withdrawn from the EA that is treated in connection with remediation that is approved by state or federal order, authorization, or agreement and that does not exceed the MCLs for drinking water. The commission may also authorize injection by a federal or state agency, county, municipality, river authority, or groundwater district of non-toxic tracer dyes into the EA for the purpose of conducting scientific studies to determine hydrologic flowpaths. Additionally, currently authorized wells installed into or through the EA and wells installed above the aquifer would not be affected by the proposed amendments. All other new injection wells installed into or through the EA would be prohibited.

There are no injection wells registered with the commission that are owned and operated by small or micro-businesses and which have been installed into or through the EA, and the proposed amendments would not affect currently authorized injection wells used by small or micro-businesses that have been installed stratigraphically above the EA. There may have been some unauthorized injection wells operating over the affected region prior to September 1, 2001. It is not known how many of these wells

existed and it is believed that these wells are no longer in operation. Therefore, the commission does not anticipate fiscal implications for small or micro-businesses due to implementation of the proposed amendments.

LOCAL EMPLOYMENT IMPACT STATEMENT

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

DRAFT REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the proposed 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. The proposed rulemaking implements the prohibition of certain injection wells that transect or terminate in the EA in TWC, §27.051(h). Although the intent of the rulemaking is to protect the environment or reduce risks to human health from environmental exposure, it is not a major environmental rule because it does not adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or public health and safety of the state or a sector of the state. This, in turn, is because the proposed rules implement a statutory prohibition of new authorizations for injection wells that transect or terminate in the EA in TWC, §27.051(h).

Furthermore, the proposed rules do not meet any of the four applicability requirements listed in §2001.0225(a). The proposed rules do not exceed a standard set by federal law, because there are no comparable federal laws regarding the EA. The proposed rules do not exceed an express requirement of state law because it is consistent with the express requirements of TWC, §27.051(h). The proposed rules do not exceed requirements set out in the UIC program authorization for Texas. The rulemaking is not proposed under the general powers of the agency, and is proposed under the express requirements of SB 2 and TWC, §27.019(a), which provides that the commission shall adopt rules and procedures reasonably required for the performance of its powers, duties, and functions under TWC, Chapter 27. The commission invites public comment of the draft regulatory impact analysis determination

TAKINGS IMPACT ASSESSMENT

The commission evaluated these proposed rules and performed a preliminary assessment of whether Texas Government Code, Chapter 2007 is applicable.

The commission's preliminary assessment indicates that Chapter 2007 does not apply to these proposed rules because this is an action that is taken in response to a real and substantial threat to public health and safety; that is designed to significantly advance the health and safety purpose; and that does not impose a greater burden than is necessary to achieve the health and safety purpose. Thus, this action is exempt under Texas Government Code, §2007.003(b)(13). The specific purpose of these proposed rules is to implement a new statutory prohibition of certain injection wells that transect or terminate in the EA in TWC, §27.051(h), providing increased environmental protection of the EA from contamination caused by certain injection wells. The proposed amendments would substantially

advance this purpose by prohibiting certain injection wells that transect or terminate in the EA, an important source of drinking water in Texas. Exceptions to this prohibition are for the authorization of the injection of unaltered groundwater withdrawn from the EA and injection of storm water, flood water, or groundwater through improved sinkholes or caves located in karst topographic areas. The proposed rulemaking allows the commission to authorize injection of groundwater withdrawn from the EA that is treated in connection with remediation that is approved by state or federal order, authorization, or agreement and that does not exceed the MCLs for drinking water. The commission may also authorize injection by a federal or state agency, county, municipality, river authority, or groundwater district of non-toxic tracer dyes into the EA for the purpose of conducting scientific studies to determine hydrologic flowpaths. The benefits to society from the proposed rulemaking are the protection of water quality, health, welfare, and the environment. Because this proposed rulemaking implements a statutory prohibition of certain injection wells that transect or terminate in the EA, there is no alternative action that could accomplish this statutory mandate. The commission invites public comment on the draft takings assessment.

CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission determined that the proposed rulemaking does not relate to an action or actions subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Management Act of 1991, as amended (Texas Natural Resources Code, §§33.201 *et seq.*), and the commission's rules in 30 TAC Chapter 281, Subchapter B, concerning Consistency with the Texas Coastal Management Program. The area affected by the prohibition is not proximate to the coastal

areas of the state, and Chapter 213 is not a rule that is listed in Chapter 281, Subchapter B, as being subject to the CMP. Therefore, this proposed rulemaking is not subject to the CMP.

Interested persons may submit comments on the consistency of the proposed rules with the CMP during the public comment period.

ANNOUNCEMENT OF HEARINGS

The commission will hold two public hearings on this proposal. The first will be held on August 19, 2002, at 10:00 a.m. in Building F, Room 2210, Texas Natural Resource Conservation Commission Complex, located at 12100 Park 35 Circle, Austin, Texas. The second will be held on August 22, 2002, at 11:00 a.m. in the Conference Center, Edwards Aquifer Authority, located at 1615 N. St. Mary's Street, San Antonio, Texas. Each hearing will be structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. There will be no open discussion during each hearing; however, an agency staff member will be available to discuss the proposal 30 minutes prior to each hearing and will answer questions before and after each 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, Office of Environmental Policy, Analysis, and Assessment, MC 205, P.O. Box 13087, Austin, Texas 78711-3087 or faxed to (512) 239-4808. All comments should reference Rule Log Number 2001-093-331-WS. Comments must be submitted by 5:00 p.m. on August 26, 2002. For further information, please contact Joseph Thomas, Office of Environmental Policy, Analysis, and Assessment, (512) 239-4580.

**SUBCHAPTER A: EDWARDS AQUIFER IN MEDINA, BEXAR, COMAL, KINNEY,
UVALDE, HAYS, TRAVIS, AND WILLIAMSON COUNTIES**

§213.3, §213.8

STATUTORY AUTHORITY

The amendments are proposed under 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; §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; §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; and §27.019, which requires the commission to adopt rules reasonably required for the regulation of injection wells.

The amendments implement SB 2, §11.03, 77th Legislature, 2001, and TWC, §27.051(h), which prohibits the commission's authorization of an injection well that transects or terminates in the EA.

§213.3. Definitions.

The definitions in Texas Water Code, §§26.001, 26.263, and 26.342 are applicable to this chapter. When used in this chapter, those definitions have the same meaning as the following definitions, unless the context in which they are used clearly indicates otherwise, or those definitions are inconsistent with the definitions listed in this section.

(1) - (18) (No change.)

(19) **Injection well** -- An injection well as defined under Chapter 331 of this title (relating to Underground Injection Control).

(20) [(19)] **Land application system** -- A wastewater disposal system designed not to discharge wastewater into a surface drainage way.

(21) [(20)] **Organized sewage collection system** -- Any public or private sewerage system for the collection and conveyance of sewage to a treatment and disposal system that is regulated in accordance with [pursuant to] rules of the commission and provisions of [the] Texas Water Code, Chapter 26. A system may include lift stations, force mains, gravity lines, and any other appurtenance necessary for conveying wastewater from a generating facility to a treatment plant.

(22) [(21)] **Permanent BMPs** -- Best management practices used to prevent and control pollution from regulated activities after construction is complete.

(23) [(22)] **Pollution** -- The alteration of the physical, thermal, chemical, or biological quality of, or the contamination of any water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property, or to public health, safety or welfare, or impairs the usefulness of the public enjoyment of the waters for any lawful or reasonable purpose.

(24) [(23)] **Private sewage facilities** -- On-site sewage facilities as defined under Chapter 285 of this title (relating to On-site Sewage Facilities).

(25) [(24)] **Private service lateral** -- A wastewater line extending from the building drain to an existing private or public sewage collection system or other place of disposal that provides service to one single-family residence or building and whose operation and maintenance are the sole responsibility of the tenant or owner of the building. A wastewater line extending from the convergence of private service laterals from more than one single-family residence or building is considered a sewage collection system.

(26) [(25)] **Recharge zone** -- Generally, that area where the stratigraphic units constituting the Edwards Aquifer crop out, including the outcrops of other geologic formations in proximity to the Edwards Aquifer, where caves, sinkholes, faults, fractures, or other permeable features would create a potential for recharge of surface waters into the Edwards Aquifer. The recharge zone is identified as that area designated as such on official maps located in the appropriate regional office and groundwater conservation districts.

(27) [(26)] **Regulated activity** --

(A) Any construction-related or post-construction activity on the recharge zone of the Edwards Aquifer having the potential for polluting the Edwards Aquifer and hydrologically connected surface streams. These activities include, but are not limited to:

(i) construction of buildings, utility stations, utility lines, roads, highways, or railroads;

(ii) clearing, excavation or any other activities that alter or disturb the topographic, geologic, or existing recharge characteristics of a site;

(iii) any installation of aboveground or underground storage tank facilities on the recharge or transition zone of the Edwards Aquifer; or

(iv) any other activities that may pose a potential for contaminating the Edwards Aquifer and hydrologically connected surface streams.

(B) "Regulated activity" does not include:

(i) clearing of vegetation without soil disturbance;

(ii) agricultural activities, except feedlots/concentrated animal feeding operations which are regulated under Chapter 321 of this title (relating to Control of Certain Activities by Rule);

(iii) activities associated with the exploration, development, and production of oil, gas, or geothermal resources under the jurisdiction of the Railroad Commission of Texas;

(iv) routine maintenance of existing structures that does not involve additional site disturbance, such as but not limited to:

(I) the resurfacing of existing paved roads, parking lots, sidewalks, or other development-related impervious surfaces, and

(II) the building of fences, or other similar activities in which:

(-a-) there is little or no potential for contaminating groundwater, or

(-b-) there is little or no change to the topographic, geologic, or existing sensitive features; or

(v) construction of single-family residences on lots that are larger than five acres, where no more than one single-family residence is located on each lot.

(28) [(27)] **Sensitive feature** -- Permeable geologic or manmade feature located on the recharge zone or transition zone where:

(A) a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer exists, and

(B) rapid infiltration to the subsurface may occur.

(29) [(28)] **Sewage holding tank** -- A tank or other containment structure used to receive and store sewage until its ultimate disposal in an approved treatment facility.

(30) [(29)] **Site** - The entire area included within the legal boundaries of the property described in the application. Regulated activities on a site that is located partially on the recharge zone and transition zone, where the natural drainage in the transition zone flows back to the recharge zone, will be treated as if the entire site is located on the recharge zone.

(31) [(30)] **Static hydrocarbon** -- A hydrocarbon which is liquid at atmospheric pressure and 20 degrees centigrade.

(32) [(31)] **Stub out** -- A wye, tee, or other manufactured appurtenance placed in a sewage collection system providing a location for a future extension of the collection system.

(33) [(32)] **Temporary BMPs** -- Best management practices used to prevent and control pollution from regulated activities during construction.

(34) [(33)] **Tertiary containment** -- A containment method by which an additional wall or barrier is installed outside of the secondary storage vessel (e.g., tank or piping) or other secondary barrier in a manner designed to prevent a release from migrating beyond the tertiary wall or barrier before the release can be detected. Tertiary containment systems include, but are not limited to, impervious liners and vaults surrounding a secondary tank and/or piping system, or equivalent triple wall tank or piping system as approved by the executive director.

(35) [(34)] **Transition zone** -- That area where geologic formations crop out in proximity to and south and southeast of the recharge zone and where faults, fractures, and other geologic features present a possible avenue for recharge of surface water to the Edwards Aquifer, including portions of the Del Rio Clay, Buda Limestone, Eagle Ford Group, Austin Chalk, Pecan Gap Chalk, and Anacacho Limestone. The transition zone is identified as that area designated as such on official maps located in the appropriate regional office and groundwater conservation districts.

(36) [(35)] **Underground storage tank facility** -- The site, tract, or other defined area where one or more underground storage tank systems are located, including all contiguous land and associated improvements.

(37) [(36)] **Underground storage tank system** -- Any one or combination of underground tanks and any connecting underground pipes used to contain an accumulation of regulated substances, the volume of which, including the volume of the connecting underground pipes, is ten percent or more beneath the surface of the ground.

(38) [(37)] **Well** -- A bored, drilled or driven shaft, or an artificial opening in the ground made by digging, jetting or some other method, where the depth of the well is greater than its largest surface dimension. A well is not a surface pit, surface excavation, or natural depression.

§213.8. Prohibited Activities.

(a) - (b) (No change.)

(c) Additional prohibitions. For applications submitted on or after September 1, 2001, injection wells that transect or terminate in the Edwards Aquifer, as defined in §331.19 of this title (relating to Injection Into or Through the Edwards Aquifer), are prohibited except as provided by §331.19 of this title.