

SUBCHAPTER A: GENERAL PROVISIONS
§§331.1 - 331.19, 331.21
Effective December 29, 2016

§331.1. Purpose, Scope, and Applicability.

(a) The purpose of this chapter is to implement the provisions of the Injection Well Act, Texas Water Code, Chapter 27, as it applies to the commission. The implementation shall be consistent with the policy of this state to: maintain the quality of fresh water in the state to the extent consistent with the public health and welfare and the operation of existing industries, taking into consideration the economic development of the state; prevent underground injection that may pollute fresh water; and require the use of all reasonable methods to implement this policy.

(b) This chapter applies to all injection wells and activities within the commission's jurisdiction.

(c) Exemptions from the prohibition of injection of hazardous waste authorized by 40 Code of Federal Regulations Part 148 are not within the scope of the commission's jurisdiction.

Adopted August 21, 2002

Effective September 12, 2002

§331.2. Definitions.

General definitions can be found in Chapter 3 of this title (relating to Definitions). The following words and terms, when used in this chapter, have the following meanings.

(1) Abandoned well--A well which has been permanently discontinued from use or a well for which, after appropriate review and evaluation by the commission, there is no reasonable expectation of a return to service.

(2) Activity--The construction or operation of any of the following:

- (A) an injection well for disposal of waste;
- (B) an injection or production well for the recovery of minerals;
- (C) a monitor well at a Class III injection well site;
- (D) pre-injection units for processing or storage of waste; or

(E) any other class of injection well regulated by the commission.

(3) Affected person--Any person who has a personal justiciable interest related to a legal right, duty, privilege, power, or economic interest affected by the proposed injection operation for which a permit is sought.

(4) Annulus--The space in the wellbore between the injection tubing and the long string casing and/or liner.

(5) Annulus pressure differential--The difference between the annulus pressure and the injection pressure in an injection well.

(6) Aquifer--A geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.

(7) Aquifer restoration--The process used to achieve or exceed water quality levels established by the commission for a permit/production area.

(8) Aquifer storage and recovery--The injection of water into a geologic formation, group of formations, or part of a formation that is capable of underground storage of water for later retrieval and beneficial use.

(9) Aquifer storage and recovery injection well--A Class V injection well used for the injection of water into a geologic formation as part of an aquifer storage and recovery project.

(10) Aquifer storage and recovery production well--A well used for the production of water from a geologic formation as part of an aquifer storage and recovery project.

(11) Aquifer storage and recovery project--A project involving the injection of water into a geologic formation for the purpose of subsequent recovery and beneficial use by the project operator.

(12) Area of review--The area surrounding an injection well described according to the criteria set forth in §331.42 of this title (relating to Area of Review) or in the case of an area permit, the project area plus a circumscribing area the width of which is either 1/4 mile or a number calculated according to the criteria set forth in §331.42 of this title.

(13) Area permit--A permit that authorizes the construction and operation of two or more similar injection, production, or monitoring wells used in operations associated with Class III well activities within a specified area.

(14) Artificial liner--The impermeable lining of a pit, lagoon, pond, reservoir, or other impoundment, that is made of a synthetic material such as butyl rubber, chlorosulfonated polyethylene, elasticized polyolefin, polyvinyl chloride (PVC), other manmade materials, or similar materials.

(15) Baseline quality--The parameters and their concentrations that describe the local groundwater quality of an aquifer prior to the beginning of injection operations.

(16) Baseline well--A well from which groundwater is analyzed to define baseline quality in the permit area (regional baseline well) or in the production area (production area baseline well).

(17) Bedded salt--A geologic formation, group of formations, or part of a formation consisting of non-domal salt that is layered and may be interspersed with non-salt sedimentary materials such as anhydrite, shale, dolomite, and limestone. The salt layers themselves often contain significant impurities.

(18) Bedded salt cavern disposal well--A well or group of wells and connecting storage cavities which have been created by solution mining, dissolving or excavation of salt bearing deposits or other geological formations and subsequently developed for the purpose of disposal of nonhazardous drinking water treatment residuals.

(19) Blanket material or blanket pad--A fluid placed within a salt cavern that is lighter than the water in the cavern and will not dissolve the salt or any mineral impurities that may be contained within the salt. The function of the blanket is to prevent unwanted leaching of the salt cavern roof, prevent leaching of salt from around the cemented casing, and to protect the cemented casing from internal corrosion. Blanket material typically consists of crude oil, mineral oil, or some fluid possessing similar noncorrosive, nonsoluble, low density properties. The blanket material is placed between the salt cavern's outermost hanging string and innermost cemented casing.

(20) Buffer area--The area between any mine area boundary and the permit area boundary.

(21) Caprock--A geologic formation typically overlying the crest and sides of a salt stock. The caprock consists of a complex assemblage of minerals including calcite (CaCO_3), anhydrite (CaSO_4), and accessory minerals. Caprocks

often contain lost circulation zones characterized by rock layers of high porosity and permeability.

(22) Captured facility--A manufacturing or production facility that generates an industrial solid waste or hazardous waste that is routinely stored, processed, or disposed of on a shared basis in an integrated waste management unit owned, operated by, and located within a contiguous manufacturing complex.

(23) Casing--Material lining used to seal off strata at and below the earth's surface.

(24) Cement--A substance generally introduced as a slurry into a wellbore which sets up and hardens between the casing and borehole and/or between casing strings to prevent movement of fluids within or adjacent to a borehole, or a similar substance used in plugging a well.

(25) Cementing--The operation whereby cement is introduced into a wellbore and/or forced behind the casing.

(26) Cesspool--A drywell that receives untreated sanitary waste containing human excreta, and which sometimes has an open bottom and/or perforated sides.

(27) Commercial facility--A Class I permitted facility, where one or more commercial wells are operated.

(28) Commercial underground injection control (UIC) Class I well facility--Any waste management facility that accepts, for a charge, hazardous or nonhazardous industrial solid waste for disposal in a UIC Class I injection well, except a captured facility or a facility that accepts waste only from other facilities owned or effectively controlled by the same person.

(29) Commercial well--An underground injection control Class I injection well which disposes of hazardous or nonhazardous industrial solid wastes, for a charge, except for a captured facility or a facility that accepts waste only from facilities owned or effectively controlled by the same person.

(30) Conductor casing or conductor pipe--A short string of large-diameter casing used to keep the top of the wellbore open during drilling operations.

(31) Cone of influence--The potentiometric surface area around the injection well within which increased injection zone pressures caused by injection of

wastes would be sufficient to drive fluids into an underground source of drinking water or freshwater aquifer.

(32) Confining zone--A part of a formation, a formation, or group of formations between the injection zone and the lowermost underground source of drinking water or freshwater aquifer that acts as a barrier to the movement of fluids out of the injection zone.

(33) Contaminant--Any physical, biological, chemical, or radiological substance or matter in water.

(34) Control parameter--Any physical parameter or chemical constituent of groundwater monitored on a routine basis used to detect or confirm the presence of mining solutions in a designated monitor well. Monitoring includes measurement with field instrumentation or sample collection and laboratory analysis.

(35) Desalination brine--The waste stream produced by a desalination operation containing concentrated salt water, other naturally occurring impurities, and additives used in the operation and maintenance of a desalination operation.

(36) Desalination concentrate--Same as desalination brine.

(37) Desalination operation--A process which produces water of usable quality by desalination.

(38) Disposal well--A well that is used for the disposal of waste into a subsurface stratum.

(39) Disturbed salt zone--Zone of salt enveloping a salt dome cavern, typified by increased values of permeability or other induced anomalous conditions relative to undisturbed salt which lies more distant from the salt dome cavern, and is the result of mining activities during salt dome cavern development and which may vary in extent through all phases of a cavern including the post-closure phase.

(40) Drilling mud--A heavy suspension used in drilling an injection well, introduced down the drill pipe and through the drill bit.

(41) Drinking water treatment residuals--Materials generated, concentrated or produced as a result of treating water for human consumption.

(42) Drywell--A well, other than an improved sinkhole or subsurface fluid distribution system, completed above the water table so that its bottom and sides are typically dry except when receiving fluids.

(43) Enhanced oil recovery project (EOR)--The use of any process for the displacement of oil from the reservoir other than primary recovery and includes the use of an immiscible, miscible, chemical, thermal, or biological process. This term does not include pressure maintenance or water disposal projects.

(44) Excursion--The movement of mining solutions, as determined by analysis for control parameters, into a designated monitor well.

(45) Existing injection well--A Class I well which was authorized by an approved state or United States Environmental Protection Agency-administered program before August 25, 1988, or a well which has become a Class I well as a result of a change in the definition of the injected waste which would render the waste hazardous under §335.1 of this title (relating to Definitions).

(46) Fluid--Material or substance which flows or moves whether in a semisolid, liquid, sludge, gas, or any other form or state.

(47) Formation--A body of rock characterized by a degree of lithologic homogeneity which is prevailing, but not necessarily, tabular and is mappable on the earth's surface or traceable in the subsurface.

(48) Formation fluid--Fluid present in a formation under natural conditions.

(49) Fresh water--Water having bacteriological, physical, and chemical properties which make it suitable and feasible for beneficial use for any lawful purpose.

(A) For the purposes of this chapter, it will be presumed that water is suitable and feasible for beneficial use for any lawful purpose only if:

- (i) it is used as drinking water for human consumption; or
- (ii) the groundwater contains fewer than 10,000 milligrams per liter (mg/L) total dissolved solids; and
- (iii) it is not an exempted aquifer.

(B) This presumption may be rebutted upon a showing by the executive director or an affected person that water containing greater than or equal to 10,000 mg/L total dissolved solids can be put to a beneficial use.

(50) General permit--A permit issued under the provisions of this chapter authorizing the disposal of nonhazardous desalination concentrate and nonhazardous drinking water treatment residuals as provided by Texas Water Code, §27.023.

(51) Groundwater--Water below the land surface in a zone of saturation.

(52) Groundwater protection area--A geographic area (delineated by the state under federal Safe Drinking Water Act, 42 United States Code, §300j-13) near and/or surrounding community and non-transient, non-community water systems that use groundwater as a source of drinking water.

(53) Hazardous waste--Hazardous waste as defined in §335.1 of this title (relating to Definitions).

(54) Improved sinkhole--A naturally occurring karst depression or other natural crevice found in carbonate rocks, volcanic terrain, and other geologic settings which has been modified by man for the purpose of directing and emplacing fluids into the subsurface.

(55) Individual permit--A permit, as defined in the Texas Water Code (TWC), §27.011 and §27.021, issued by the commission or the executive director to a specific person or persons in accordance with the procedures prescribed in the TWC, Chapter 27 (other than TWC, §27.023).

(56) Injection interval--That part of the injection zone in which the well is authorized to be screened, perforated, or in which the waste is otherwise authorized to be directly emplaced.

(57) Injection operations--The subsurface emplacement of fluids occurring in connection with an injection well or wells, other than that occurring solely for construction or initial testing.

(58) Injection well--A well into which fluids are being injected. Components of an injection well annulus monitoring system are considered to be a part of the injection well.

(59) Injection zone--A formation, a group of formations, or part of a formation that receives fluid through a well.

(60) In service--The operational status when an authorized injection well is capable of injecting fluids, including times when the well is shut-in and on standby status.

(61) Intermediate casing--A string of casing with diameter intermediate between that of the surface casing and that of the smaller long-string or production casing, and which is set and cemented in a well after installation of the surface casing and prior to installation of the long-string or production casing.

(62) Large capacity cesspool--A cesspool that is designed for a flow of greater than 5,000 gallons per day.

(63) Large capacity septic system--A septic system that is designed for a flow of greater than 5,000 gallons per day.

(64) Licensed professional geoscientist--A geoscientist who maintains a current license through the Texas Board of Professional Geoscientists in accordance with its requirements for professional practice.

(65) Liner--An additional casing string typically set and cemented inside the long string casing and occasionally used to extend from base of the long string casing to or through the injection zone.

(66) Long string casing or production casing--A string of casing that is set inside the surface casing and that usually extends to or through the injection zone.

(67) Lost circulation zone--A term applicable to rotary drilling of wells to indicate a subsurface zone which is penetrated by a wellbore, and which is characterized by rock of high porosity and permeability, into which drilling fluids flow from the wellbore to the degree that the circulation of drilling fluids from the bit back to ground surface is disrupted or "lost."

(68) Mine area--The area defined by a line through the ring of designated monitor wells installed to monitor the production zone.

(69) Mine plan--A plan for operations at a mine, consisting of:

(A) a map of the permit area identifying the location and extent of existing and proposed production areas; and

(B) an estimated schedule indicating the sequence and timetable for mining and any required aquifer restoration.

(70) Monitor well--Any well used for the sampling or measurement with field instrumentation of any chemical or physical property of subsurface strata

or their contained fluids. The term "monitor well" shall have the same meaning as the term "monitoring well" as defined in Texas Water Code, §27.002.

(A) Designated monitor wells are those listed in the production area authorization for which routine water quality sampling or measurement with field instrumentation is required.

(B) Secondary monitor wells are those wells in addition to designated monitor wells, used to delineate the horizontal and vertical extent of mining solutions.

(C) Pond monitor wells are wells used in the subsurface surveillance system near ponds or other pre-injection units.

(71) Motor vehicle waste disposal well--A well used for the disposal of fluids from vehicular repair or maintenance activities including, but not limited to, repair and maintenance facilities for cars, trucks, motorcycles, boats, railroad locomotives, and airplanes.

(72) Native groundwater--Groundwater naturally occurring in a geologic formation.

(73) New injection well--Any well, or group of wells, not an existing injection well.

(74) New waste stream--A waste stream not permitted.

(75) Non-commercial facility--A Class I permitted facility which operates only non-commercial wells.

(76) Non-commercial underground injection control (UIC) Class I well facility--A UIC Class I permitted facility where only non-commercial wells are operated.

(77) Non-commercial well--An underground injection control Class I injection well which disposes of wastes that are generated on-site, at a captured facility or from other facilities owned or effectively controlled by the same person.

(78) Notice of change (NOC)--A written submittal to the executive director from a permittee authorized under a general permit providing changes to information previously provided to the agency, or any changes with respect to the nature or operations of the facility, or the characteristics of the waste to be injected.

(79) Notice of intent (NOI)--A written submittal to the executive director requesting coverage under the terms of a general permit.

(80) Off-site--Property which cannot be characterized as on-site.

(81) On-site--The same or geographically contiguous property which may be divided by public or private rights-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing, as opposed to going along, the right-of-way. Noncontiguous properties owned by the same person but connected by a right-of-way which the owner controls and to which the public does not have access, is also considered on-site property.

(82) Out of service--The operational status when a well is not authorized to inject fluids, or the well itself is incapable of injecting fluids for mechanical reasons, maintenance operations, or well workovers or when injection is prohibited due to the well's inability to comply with the in-service operating standards of this chapter.

(83) Permit area--The area owned or under lease by the permittee which may include buffer areas, mine areas, and production areas.

(84) Plugging--The act or process of stopping the flow of water, oil, or gas into or out of a formation through a borehole or well penetrating that formation.

(85) Point of injection--For a Class V well, the last accessible sampling point prior to fluids being released into the subsurface environment.

(86) Pollution--The contamination of water or the alteration of the physical, chemical, or biological quality of water:

(A) that makes it harmful, detrimental, or injurious:

(i) to humans, animal life, vegetation, or property; or

(ii) to public health, safety, or welfare; or

(B) that impairs the usefulness or the public enjoyment of the water for any lawful and reasonable purpose.

(87) Pre-injection units--The on-site above-ground appurtenances, structures, equipment, and other fixtures including the injection pumps, filters, tanks, surface impoundments, and piping for wastewater transmission between any

such facilities and the well that are or will be used for storage or processing of waste to be injected, or in conjunction with an injection operation.

(88) Production area--The area defined by a line generally through the outer perimeter of injection and recovery wells used for mining.

(89) Production area authorization--An authorization, issued under the terms of a Class III injection well area permit, approving the initiation of mining activities in a specified production area within a permit area, and setting specific conditions for production and restoration in each production area within an area permit.

(90) Production well--A well used to recover uranium through in situ solution recovery, including an injection well used to recover uranium. The term does not include a well used to inject waste.

(91) Production zone--The stratigraphic interval extending vertically from the shallowest to the deepest stratum into which mining solutions are authorized to be introduced.

(92) Project operator--A person holding an authorization by rule, individual permit, or general permit to undertake an aquifer storage and recovery project.

(93) Public water system--A system for the provision to the public of water for human consumption through pipes or other constructed conveyances as defined in §290.38 of this title (relating to Definitions).

(94) Radioactive waste--Any waste which contains radioactive material in concentrations which exceed those listed in 10 Code of Federal Regulations Part 20, Appendix B, Table II, Column 2, and as amended.

(95) Registered Well--A well registered in accordance with the requirements of §331.221 of this title (relating to Registration of Wells).

(96) Restoration demonstration--A test or tests conducted by a permittee to simulate production and restoration conditions and verify or modify the fluid handling values submitted in the permit application.

(97) Restored aquifer--An aquifer whose local groundwater quality, within a production area, has, by natural or artificial processes, returned to the restoration table values established in accordance with the requirements of §331.107 of this title (relating to Restoration).

(98) Salt cavern--A hollowed-out void space that has been purposefully constructed within a salt formation, typically by means of solution mining by circulation of water from a well or wells connected to the surface.

(99) Salt cavern disposal well--For the purposes of this chapter, regulations of the commission, and not to underground injection control (UIC) Class II or UIC Class III wells in salt caverns regulated by the Texas Railroad Commission, a salt cavern disposal well is a type of UIC Class I injection well used:

(A) to solution mine a waste storage or disposal cavern in naturally occurring salt; and/or

(B) to inject nonhazardous, industrial, or municipal waste into a salt cavern for the purpose of storage or disposal of the waste.

(100) Salt dome--A geologic structure that includes the caprock, salt stock, and deformed strata surrounding the salt stock.

(101) Salt dome cavern confining zone--A zone between the salt dome cavern injection zone and all underground sources of drinking water and freshwater aquifers, that acts as a barrier to movement of waste out of a salt dome cavern injection zone, and consists of the entirety of the salt stock excluding any portion of the salt stock designated as an underground injection control (UIC) Class I salt dome cavern injection zone or any portion of the salt stock occupied by a UIC Class II or Class III salt dome cavern or its disturbed salt zone.

(102) Salt dome cavern injection interval--That part of a salt dome cavern injection zone consisting of the void space of the salt dome cavern into which waste is stored or disposed of, or which is capable of receiving waste for storage or disposal.

(103) Salt dome cavern injection zone--The void space of a salt dome cavern that receives waste through a well, plus that portion of the salt stock enveloping the salt dome cavern, and extending from the boundaries of the cavern void outward a sufficient thickness to contain the disturbed salt zone, and an additional thickness of undisturbed salt sufficient to ensure that adequate separation exists between the outer limits of the injection zone and any other activities in the domal area.

(104) Salt stock--A geologic formation consisting of a relatively homogeneous mixture of evaporite minerals dominated by halite (NaCl) that has migrated from originally tabular beds into a vertical orientation.

(105) Sanitary waste--Liquid or solid waste originating solely from humans and human activities, such as wastes collected from toilets, showers, wash basins, sinks used for cleaning domestic areas, sinks used for food preparation, clothes washing operations, and sinks or washing machines where food and beverage serving dishes, glasses, and utensils are cleaned.

(106) Septic system--A well that is used to emplace sanitary waste below the surface, and is typically composed of a septic tank and subsurface fluid distribution system or disposal system.

(107) Stratum--A sedimentary bed or layer, regardless of thickness, that consists of generally the same kind of rock or material.

(108) Subsurface fluid distribution system--An assemblage of perforated pipes, drain tiles, or other similar mechanisms intended to distribute fluids below the surface of the ground. This definition includes subsurface area drip dispersal systems as defined in §222.5 of this title (relating to Definitions).

(109) Surface casing--The first string of casing (after the conductor casing, if any) that is set in a well.

(110) Temporary injection point--A method of Class V injection that uses push point technology (injection probes pushed into the ground) for the one-time injection of fluids into or above an underground source of drinking water.

(111) Total dissolved solids--The total dissolved (filterable) solids as determined by use of the method specified in 40 Code of Federal Regulations Part 136, as amended.

(112) Transmissive fault or fracture--A fault or fracture that has sufficient permeability and vertical extent to allow fluids to move between formations.

(113) Underground injection--The subsurface emplacement of fluids through a well.

(114) Underground injection control--The program under the federal Safe Drinking Water Act, 42 United States Code, Part C, including the approved Texas state program.

(115) Underground source of drinking water--An "aquifer" or its portions:

(A) which supplies drinking water for human consumption; or

(B) in which the groundwater contains fewer than 10,000 milligrams per liter total dissolved solids; and

(C) which is not an exempted aquifer.

(116) Upper limit--A parameter value established by the commission in a permit/production area authorization which when exceeded indicates mining solutions may be present in designated monitor wells.

(117) Verifying analysis--A second sampling and analysis or measurement with instrumentation of control parameters for the purpose of confirming a routine sample analysis or measurement which indicated an increase in any control parameter to a level exceeding the upper limit. Mining solutions are assumed to be present in a designated monitor well if a verifying analysis confirms that any control parameter in a designated monitor well is present in concentration equal to or greater than the upper limit value.

(118) Well--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 but does not include any surface pit, surface excavation, or natural depression.

(119) Well injection--The subsurface emplacement of fluids through a well.

(120) Well monitoring--The measurement by on-site instruments or laboratory methods of any chemical, physical, radiological, or biological property of the subsurface strata or their contained fluids penetrated by the wellbore.

(121) Well stimulation--Several processes used to clean the well bore, enlarge channels, and increase pore space in the injection interval, thus making it possible for fluid to move more readily into the formation including, but not limited to, surging, jetting, and acidizing.

(122) Workover--An operation in which a down-hole component of a well is repaired, the engineering design of the well is changed, or the mechanical integrity of the well is compromised. Workovers include operations such as sidetracking, the addition of perforations within the permitted injection interval, and the addition of liners or patches. For the purposes of this chapter, workovers do not include well stimulation operations.

§331.3. Injection Prohibited.

(a) Unless excluded under subsection (b) of this section, the construction of an injection well, the conversion of a well into an injection well, and the use or operation of an injection well is prohibited unless authorized by an injection well permit, order, or rule of the commission. A RCRA permit applying the standards of Chapter 335, Subchapter F of this title (relating to Permitting Standards for Owners and Operators of Hazardous Waste Storage, Processing, or Disposal Facilities) will constitute an underground injection control (UIC) permit for hazardous waste injection wells for which the technical standards of this chapter are not generally appropriate.

(b) The following activities are not within the scope of subsection (a) of this section:

(1) injection of waste into subsurface strata via a single family residential cesspool or other device that receives waste, which has an open bottom or perforated sides;

(2) injection of waste into subsurface strata via a septic system well used for single family residential waste disposal.

(c) This rule does not limit the authority of the commission to abate and prevent pollution of fresh water resulting from any injection activity by requiring a permit, by instituting appropriate enforcement action, or by other appropriate action.

Adopted November 1, 2000

Effective November 23, 2000

§331.4. Mechanical Integrity Required.

Injection is prohibited for Class I and III wells which lack mechanical integrity, the result of which may pollute an underground source of drinking water. Except where excluded in the case of authorization by rule, mechanical integrity under §331.43 of this title (relating to Mechanical Integrity Standards) must be demonstrated to the satisfaction of the executive director before operation begins. Injection may be prohibited for Class V wells which lack mechanical integrity. The executive director may require a demonstration of mechanical integrity at any time if there is reason to believe mechanical integrity is lacking. When the executive director determines that a Class I or III well lacks mechanical integrity, the executive director shall give written notice of this determination to the owner or operator. Unless the executive director requires immediate cessation, the owner or operator shall cease injection into the well within 48 hours of receipt of the

executive director's determination. The executive director may allow plugging of the well or require the permittee to perform additional construction, operation, monitoring, reporting, and corrective actions which are necessary to prevent the movement of fluid into or between underground sources of drinking water caused by the lack of mechanical integrity. The owner or operator may resume injection upon written notification from the executive director that the owner or operator has demonstrated mechanical integrity.

Adopted November 1, 2000

Effective November 23, 2000

§331.5. Prevention of Pollution.

(a) No permit or authorization by rule shall be allowed where an injection well causes or allows the movement of fluid that would result in the pollution of an underground source of drinking water. A permit or authorization by rule shall include terms and conditions reasonably necessary to protect fresh water from pollution.

(b) Persons authorized to conduct underground injection activities under this chapter shall address unauthorized discharges of chemicals of concern (COCs) from associated tankage and equipment according to the requirements of Chapter 350 of this title (relating to the Texas Risk Reduction Program).

(c) Pre-injection units which are required to be authorized by permit or registration under §331.7(d) of this title (relating to Permit Required), must be designed, constructed, operated, maintained, monitored, and closed so as not to cause:

(1) the discharge or imminent threat of discharge of waste into or adjacent to the waters in the state without obtaining specific authorization for such a discharge from the commission;

(2) the creation or maintenance of a nuisance; or

(3) the endangerment of the public health and welfare.

Adopted December 18, 2002

Effective January 9, 2003

§331.6. Prohibition of Class IV Well Injection.

The injection of hazardous fluids or radioactive wastes into or above a formation which within one quarter mile of the well contains an underground source of drinking water is prohibited. Wells used to inject hazardous waste-contaminated ground water that is of acceptable quality to aid remediation and is being reinjected

into the same formation from which it was drawn are not prohibited by this section if such injection is approved by the commission pursuant to provisions for cleanup of releases consistent with federal regulations under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 United States Code (U.S.C) 9601-9657, or pursuant to provisions for cleanup of releases consistent with federal regulations under the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6901 through 6987.

Adopted May 22, 1996

Effective June 13, 1996

§331.7. Permit Required.

(a) Except as provided in §331.9 of this title (relating to Injection Authorized by Rule) and by subsections (d) - (f) of this section, all injection wells and activities must be authorized by an individual permit.

(b) For Class III in situ uranium solution mining wells, Frasch sulfur wells, and other Class III operations under commission jurisdiction, an area permit authorizing more than one well may be issued for a defined permit area in which wells of similar design and operation are proposed. The wells must be operated by a single owner or operator. Before commencing operation of those wells, the permittee may be required to obtain a production area authorization for separate production or mining areas within the permit area.

(c) The owner or operator of a large capacity septic system, a septic system which accepts industrial waste, or a subsurface area drip dispersal system, as defined in §222.5 of this title (relating to Definitions) must obtain a wastewater discharge permit in accordance with Texas Water Code, Chapter 26 or Chapters 26 and 32, and Chapter 305 of this title (relating to Consolidated Permits), and must submit the inventory information required under §331.10 of this title (relating to Inventory of Wells Authorized by Rule).

(d) Pre-injection units for Class I nonhazardous, noncommercial injection wells and Class V injection wells permitted for the disposal of nonhazardous waste must be either authorized by a permit issued by the commission or registered in accordance with §331.17 of this title (relating to Pre-Injection Units Registration). The option of registration provided by this subsection shall not apply to pre-injection units for Class I injection wells used for the disposal of byproduct material, as that term is defined in Chapter 336 of this title (relating to Radioactive Substance Rules). Pre-injection units for Class I wells authorized to inject only nonhazardous desalination concentrate or nonhazardous drinking water treatment residuals are not subject to authorization by registration but are subject to authorization by an individual permit or under the general permit issued under Subchapter L of this chapter (relating to General Permit Authorizing Use of a Class I

Injection Well to Inject Nonhazardous Desalination Concentrate or Nonhazardous Drinking Water Treatment Residuals).

(e) The commission may issue a general permit under Subchapter L of this chapter. The commission may determine that an injection well and the injection activities are more appropriately regulated under an individual permit than under a general permit based on findings that the general permit will not protect ground and surface fresh water from pollution due to site-specific conditions.

(f) Notwithstanding subsection (a) of this section, an injection well authorized by the Railroad Commission of Texas to use nonhazardous desalination concentrate or nonhazardous drinking water treatment residuals as an injection fluid for enhanced recovery purposes does not require a permit from the commission. The use or disposal of radioactive material under this subsection is subject to the applicable requirements of Chapter 336 of this title.

(g) Permits issued before September 1, 2007 for Class III wells for uranium mining will expire on September 1, 2012 unless the permit holder submits an application for permit renewal under §305.65 of this title (relating to Renewal) before September 1, 2012. Any holders of permits for Class III wells for uranium mining issued before September 1, 2007 who allow those permits to expire by not submitting a permit renewal application by September 1, 2012 are not relieved from the obligations under the expired permit or applicable rules, including obligations to restore groundwater and to plug and abandon wells in accordance with the requirements of the permit and applicable rules.

(h) Class V injection wells associated with an aquifer storage and recovery (ASR) project may be authorized by individual permit, general permit, or by rule. The executive director will notify a groundwater conservation district of an ASR project proposed to be authorized by rule that is located within the jurisdictional boundary of that groundwater conservation district.

Adopted April 27, 2016

Effective May 19, 2016

§331.8. Prohibition of Motor Vehicle Waste Disposal Wells and Large Capacity Cesspools.

(a) The construction of new motor vehicle waste disposal wells and large capacity cesspools is prohibited.

(b) The owner or operator of a motor vehicle waste disposal well in a groundwater protection area must close the well within one year after designation of the groundwater protection area, or by January 1, 2005, whichever occurs

earlier, or apply for a Class V underground injection control (UIC) permit prior to the closure date.

(1) The owner or operator of a motor vehicle waste disposal well located in a groundwater protection area may be granted an extension to the closure deadline by the executive director for up to one year if the most efficient compliance option for the well is connection to a sanitary sewer or installation of new treatment technology.

(2) To continue operating during the extension period, the owner or operator must ensure that the injectate meets primary maximum contaminant levels for drinking water and other health-based standards at the point of injection.

(c) The owner or operator of a motor vehicle waste disposal well in any area of the state other than a groundwater protection area, must close the well by January 1, 2007; apply for a Class V UIC permit from the executive director under §331.137 of this title (relating to Class V Well Permit), prior to the closure date; or convert the well in accordance with §331.12 of this title (relating to Conversion of Wells) so that it is not receiving motor vehicle waste.

(d) The owner or operator of an existing motor vehicle waste disposal well must close the well in accordance with closure standards specified in §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).

(e) All existing large capacity cesspools must be closed. The owner or operator of an existing large capacity cesspool must close the well in accordance with closure standards in §331.136 of this title.

Adopted June 20, 2001

Effective July 12, 2001

§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.

Adopted December 7, 2016

Effective December 29, 2016

§331.10. Inventory of Wells Authorized by Rule.

(a) The owner or operator of an injection well facility, except for those wells listed under subsection (b) of this section, must submit to the executive director prior to construction (or within one year after January 1, 1982 if the well existed on that date), an inventory for each facility containing:

- (1) the name of the facility;
- (2) the name and address of legal contact;
- (3) the ownership of the facility;
- (4) the nature, type and operating status of the injection well(s); and
- (5) the location, depth, and construction of each well.

(b) Drillers of closed loop and air conditioning return flow injection wells authorized by rule shall inventory wells after construction by submitting the form provided by the executive director as required under §331.132(b)(3) of this title (relating to Construction Standards).

(c) Failure to comply with this section shall constitute grounds for termination of authorization by rule.

(d) Owners or operators of all Class V wells, with the exception of closed loop and air conditioning return flow wells, shall submit the inventory information required under subsection (a) of this section for review, modification, and approval by the executive director. The owner or operator of a Class V well must obtain approval from the executive director prior to construction, conversion, or operation of the well.

(e) Owners and operators of subsurface fluid distribution systems and improved sinkholes in existence on the effective date of this rule must submit the inventory information for these Class V wells to the executive director within one year of the effective date of these rules. Owners and operators of new subsurface fluid distribution systems and improved sinkholes must submit inventory information as required under subsection (d) of this section.

Adopted June 20, 2001

Effective July 12, 2001

§331.11. Classification of Injection Wells.

(a) Injection wells within the jurisdiction of the commission are classified as follows.

(1) Class I:

(A) wells used by generators of hazardous wastes or owners or operators of hazardous waste management facilities to inject hazardous waste, other than Class IV wells;

(B) other industrial and municipal waste disposal wells which inject fluids beneath the lower-most formation which within 1/4 mile of the wellbore contains an underground source of drinking water (USDW); and

(C) radioactive waste disposal wells which inject fluids below the lower-most formation containing a USDW within 1/4 mile of the wellbore.

(2) Class III. Wells which are used for the extraction of minerals, including:

(A) mining of sulfur by the Frasch process; and

(B) solution mining of minerals which includes sodium sulfate, sulfur, potash, phosphate, copper, uranium and any other minerals which can be mined by this process.

(3) Class IV. Wells used by generators of hazardous wastes or of radioactive wastes, by owners or operators of hazardous waste management facilities, or by owners or operators of radioactive waste disposal sites to dispose of hazardous wastes or radioactive wastes into or above a formation which within 1/4 mile of the wellbore contains a USDW.

(4) Class V. Class V wells are injection wells not included in Classes I, II, III, or IV. Generally, wells covered by this paragraph inject nonhazardous fluids into or above formations that contain USDWs. Except for Class V wells within the jurisdiction of the Railroad Commission of Texas, all Class V injection wells are within the jurisdiction of the commission and include, but are not limited to:

(A) air conditioning return flow wells used to return to the supply aquifer the water used for heating or cooling in a heat pump;

(B) closed loop injection wells which are closed system geothermal wells used to circulate fluids including water, water with additives, or other fluids or gases through the earth as a heat source or heat sink;

(C) large capacity cesspools or other devices that receive greater than 5,000 gallons of waste per day, which have an open bottom and sometimes have perforated sides;

(D) cooling water return flow wells used to inject water previously used for cooling;

(E) drainage wells used to drain surface fluid, primarily storm runoff, into a subsurface formation;

(F) drywells used for the injection of wastes into a subsurface formation;

(G) recharge wells used to replenish the water in an aquifer;

(H) salt water intrusion barrier wells used to inject water into a freshwater aquifer to prevent the intrusion of salt water into the fresh water;

(I) sand backfill wells used to inject a mixture of water and sand, mill tailings, or other solids into mined out portions of subsurface mines;

(J) septic systems designed to inject greater than 5,000 gallons per day of waste or effluent;

(K) subsidence control wells (not used for the purpose of oil or natural gas production) used to inject fluids into a non-oil or gas producing zone to reduce or eliminate subsidence associated with the overdraft of fresh water;

(L) wells used for the injection of water for storage and subsequent retrieval for beneficial use as part of an aquifer storage and recovery project;

(M) motor vehicle waste disposal wells which are used or have been used for the disposal of fluids from vehicular repair or maintenance activities, such as an automotive repair shop, auto body shop, car dealership, boat, motorcycle or airplane dealership, or repair facility;

(N) improved sinkholes;

(O) aquifer remediation wells, temporary injection points, and subsurface fluid distribution systems used to inject nonhazardous fluids into the subsurface to aid in the remediation of soil and groundwater; and

(P) subsurface fluid distribution systems.

(b) Class II wells and Class III wells used for brine mining fall within the jurisdiction of the Railroad Commission of Texas.

(c) Baseline wells and monitor wells associated with Class III injection wells within the jurisdiction of the commission are also subject to the rules specified in this chapter.

(d) The commission has jurisdiction over the injection of carbon dioxide produced by a clean coal project into a zone that is below the base of usable quality water and that is not productive of oil, gas, or geothermal resources.

Adopted April 27, 2016

Effective May 19, 2016

§331.12. Conversion of Wells.

(a) Persons utilizing wells authorized by permit, rule, or otherwise, who wish to convert the well from its authorized purpose to a new or additional purpose must first obtain the appropriate approval described in paragraphs (1) - (4) of this section.

(1) Persons utilizing injection wells authorized by permit must obtain either a permit amendment pursuant to §305.62 of this title (relating to Amendment), or if appropriate, a permit revocation pursuant to §305.66 of this title

(relating to Permit Denial, Suspension, and Revocation) or §305.67 of this title (relating to Revocation and Suspension Upon Request or Consent).

(2) Persons utilizing injection wells authorized by rule that are to be converted to a purpose that requires authorization by permit must obtain a permit.

(3) Persons utilizing injection wells authorized by rule that are to be converted to a purpose that does not require authorization by permit must obtain the written approval of the executive director.

(4) Prior to converting a Class V motor vehicle waste disposal well, the owner or operator must inventory the well with the executive director under §331.10 of this title (relating to Inventory of Wells Authorized by Rule) and comply with the conversion requirements under subsection (c) of this section.

(b) Conversions of wells that remain exclusively within the jurisdiction of the Railroad Commission are not affected by this rule. For example, a conversion from a Class II disposal well to a water supply well regulated by the Railroad Commission would neither enter nor exit the jurisdiction of this agency and thus would not be subject to this rule.

(c) In limited cases, the executive director may authorize the conversion of a motor vehicle waste disposal well to another type of Class V well.

(1) The use of a semi-permanent plug as the means to segregate waste is not sufficient to convert a motor vehicle waste disposal well to another type of Class V well.

(2) The executive director may approve the conversion only if:

(A) the well is inventoried with the executive director under §331.10 of this title;

(B) all motor vehicle fluids are segregated by physical barriers and are not allowed to enter the well; and

(C) injection of motor vehicle waste is unlikely based on a facility's compliance history and records showing proper waste disposal.

Adopted June 20, 2001

Effective July 12, 2001

§331.13. Exempted Aquifer.

(a) An exempted aquifer is an aquifer or a portion of an aquifer which meets the criteria for fresh water but which has been designated an exempted aquifer by the commission after notice and opportunity for public hearing. Those aquifers or portions of aquifers which were designated for exemption by the Texas Department of Water Resources in its original application for program approval submitted to the United States Environmental Protection Agency shall be considered to be exempted aquifers.

(b) Except for injection authorized by rule, the commission may require a permit for injection into an exempted aquifer to protect fresh water outside the exempted aquifer which may be subject to pollution caused by the injection.

(c) An aquifer or portion of an aquifer may be designated as an exempted aquifer if the following criteria are met:

(1) It does not currently serve as a source of drinking water for human consumption; and

(2) Until exempt status is removed according to procedures in subsection (f) of this section, it will not in the future serve as a source of drinking water for human consumption because:

(A) It is mineral, hydrocarbon or geothermal energy bearing with production capability;

(B) It is situated at a depth or location which makes recovery of water for drinking water purposes economically or technologically impractical;

(C) It is so contaminated that it would be economically or technologically impractical to render that water fit for human consumption; or,

(D) It is located above a Class III well mining area subject to subsidence or catastrophic collapse.

(d) No designation of an exempted aquifer submitted as part of a UIC Program shall be final until approved by the EPA as part of the delegated UIC program.

(e) Subsequent to program approval or promulgation, the commission may, after notice and opportunity for a public hearing, identify additional exempted aquifers. The commission delegates to the executive director the authority to designate an exempt aquifer under this section if no request for a public hearing is received within the designated comment period provided in the public notice.

(f) After notice and opportunity for public hearing, the designation of exempted aquifer may be removed by the commission thereby eliminating the exempt status, provided restoration has been accomplished if required.

Adopted February 11, 2009

Effective March 12, 2009

§331.14. Prohibition of Disposal of Certain Wastes into Certain Geological Formations.

(a) Notwithstanding any provision to the contrary in this chapter, Chapter 335 of this title (relating to Industrial Solid Waste and Municipal Hazardous Waste), or any other chapter of this title, the storage, processing, or disposal of hazardous waste in a solution-mined salt dome cavern, bedded salt cavern, or a sulphur mine is prohibited.

(b) Waste streams other than nonhazardous drinking water treatment residuals are prohibited from injection into a Class I salt cavern disposal well located in horizontally bedded or non-domal salt and its associated salt cavern.

Adopted July 25, 2012

Effective August 16, 2012

§331.15. Financial Assurance Required.

Injection is prohibited for Class I and III wells which lack financial assurance, as required by this chapter.

Adopted December 20, 1994

Effective January 2, 1995

§331.16. Memorandum of Understanding Between the Texas Department of Health and the Texas Natural Resource Conservation Commission Regarding Radiation Control Functions.

The Memorandum of Understanding between the Texas Department of Health and the Texas Natural Resource Conservation Commission Regarding Radiation Control Functions, effective November 30, 1998, is adopted by reference in §7.118 of this title (relating to Memorandum of Understanding between the Texas Department of Health and the Texas Natural Resource Conservation Commission Regarding Radiation Control Functions). However, the full text of the memorandum of understanding can be found only in Texas Department of Health rule 25 TAC §289.101 (relating to Memorandum of Understanding between the Texas Department of Health and the Texas Natural Resource Conservation Commission Regarding Radiation Control Functions). If a copy of this document is required and cannot be obtained from the Internet, a copy can be requested from the Texas

Natural Resource Conservation Commission, Chief Clerk's Office, P.O. Box 13087,
Austin, Texas 78711-3087, (512) 239-3300.

Adopted November 1, 2000

Effective November 23, 2000

§331.17. Pre-injection Units Registration.

(a) Pre-injection units not otherwise authorized under this chapter, except for those pre-injection units used in conjunction with a Class I well authorized to inject only nonhazardous desalination concentrate or nonhazardous drinking water treatment residuals, must be registered in accordance with the requirements of this section. Pre-injection units used in conjunction with a Class I well authorized to inject only nonhazardous desalination concentrate or nonhazardous drinking water treatment residuals are not subject to authorization by registration but are subject to authorization by an individual permit or under the general permit issued under Subchapter L of this chapter (relating to General Permit Authorizing Use of a Class I Injection Well to Inject Nonhazardous Desalination Concentrate or Nonhazardous Drinking Water Treatment Residuals).

(b) No registration shall be approved, and registrations may be denied or revoked, if the executive director determines that:

(1) a pre-injection unit causes or allows the release of fluid that would result in the pollution of underground sources of drinking water, fresh water, or surface water; or

(2) a pre-injection unit poses an immediate threat to public health or safety.

(c) Registration procedures for pre-injection units not otherwise authorized under this chapter must include the following.

(1) The owner or operator shall submit an application for registration to the executive director, in accordance with the applicable requirements of this subchapter;

(A) for any proposed pre-injection unit, obtain approval of the registration before operating the pre-injection unit; or

(B) for any existing unauthorized pre-injection unit, submit the application on or before the date the injection well permit renewal application is submitted.

(2) The owner or operator shall cease operation of any pre-injection unit if:

(A) the registration application for an existing pre-injection unit has not been submitted before approval of the injection well permit renewal;

(B) renewal of the registration is denied by the executive director;

(C) the term of the registration expires, however, if registration renewal procedures have been initiated before the permit expiration date, the existing registration will remain in full force and effect and will not expire until commission action on the application for renewal of the registration is final;

(D) the registration is denied or revoked by the executive director; or

(E) the executive director determines that the unit poses an immediate threat to public health or safety.

(d) Design criteria are as follows:

(1) pre-injection units shall be designed in such a manner as to protect underground sources of drinking water, fresh water, and surface water from pollution;

(2) pre-injection units shall be designed in such a manner as to enable the authorized injection well to meet all permit conditions and applicable rules and law;

(3) pre-injection units shall meet the design standards contained in Chapter 217 of this title (relating to Design Criteria for Domestic Wastewater Systems) which apply to the type of unit being proposed; and

(4) all ponds shall be lined according to the requirements of §331.47 of this title (relating to Pond Lining).

Adopted July 25, 2012

Effective August 16, 2012

§331.18. Registration Application, Processing, Notice, Comment, Motion to Overturn.

(a) Applicability. This section sets forth the requirements for applications and the manner in which action will be taken on applications filed for a registration for pre-injection units.

(b) Contents of application. Registration applications for pre-injection units must include:

(1) complete application form(s), signed and notarized, and required number of copies provided;

(2) the verified legal status of the applicant(s) as applicable;

(3) the signature of the applicant(s), in accordance with the requirements of §305.44 of this title (relating to Signatories to Applications);

(4) a notarized affidavit from the applicant(s) verifying land ownership or landowner agreement to the proposed activity. Pre-injection unit registration information on file with the commission shall be confirmed or updated, in writing, no later than 30 days after:

(A) the mailing address and/or telephone number of the owner or operator is changed; or

(B) requested by the commission or executive director;

(5) maps showing:

(A) the name and address of persons who own the property on which the existing or proposed pre-injection unit is or will be located, if different from the applicant; and

(B) the name and address of landowners adjacent to the property on which the pre-injection unit is located or is proposed to be located;

(6) plans and specifications of the pre-injection units which have the seal of a professional engineer licensed in the State of Texas. The engineer shall certify that the submission meets the applicable technical requirements of Chapter 217 of this title (relating to Design Criteria for Domestic Wastewater Systems);

(7) the attachment of technical reports and supporting data required by the application; and

(8) any other information the executive director or the commission may reasonably require.

(c) Administrative completeness. Upon receipt of an application for a registration, the executive director or his designee shall assign the application a number for identification purposes. Applications for registrations shall be reviewed by the staff for administrative completeness within the period specified by §281.3(a) of this title (relating to Initial Review).

(d) Technical completeness. When the application is declared to be technically complete, the executive director or his designee shall prepare a statement of the receipt of the application and declaration of technical completeness which is suitable for mailing and shall forward that statement to the chief clerk. The chief clerk shall notify every person entitled to notification as stated in subsection (e) of this section. The notice of receipt of an application for registration and declaration of technical completeness shall contain the following information:

- (1) the location of the pre-injection unit;
- (2) the identifying number given the application by the executive director;
- (3) the type of registration sought under the application;
- (4) the name, address, and telephone number of the applicant and the name and address of the agency and the telephone number of an agency contact from whom interested persons may obtain further information about the application to register the unit;
- (5) the date on which the application was submitted;
- (6) a brief summary of the information included in the application;
- (7) a statement that the registration application has been provided to the county judge and that it is available for review by interested parties;
- (8) a brief description of public comment procedures; and
- (9) the deadline to file public comment. The deadline shall be not less than 30 days after the date notice is mailed.

(e) Notice requirements.

(1) The public notice requirements of this subsection apply to new applications for a registration, and to applications for major amendment or renewal of a registration for pre-injection units.

(2) The chief clerk of the commission shall mail Notice of Receipt of Application and Technical Completeness, along with a copy of the registration application, to the county judge in the county where the pre-injection unit is located or proposed to be located.

(3) The chief clerk of the commission shall mail Notice of Receipt of Application and Technical Completeness to the adjacent landowners named on the application map or supplemental map, or the sheet attached to the application map or supplemental map.

(f) Application processing procedures. Any person who is required to obtain approval of a registration, or who requests an amendment, modification, or renewal of a registration for pre-injection units is subject to the application processing procedures and requirements found in Chapter 281 of this title (relating to Application Processing).

(g) Major amendment. A major amendment is an amendment that changes a substantive term, provision, requirement, or a limiting parameter of a registration. Notice requirements of subsection (e) of this section are applicable to major amendments.

(h) Minor amendment. A minor amendment is an amendment to improve or maintain the quality or method of management of waste, and includes any other change to a registration issued under this chapter that will not cause or relax a standard or criterion which may result in a potential deterioration of quality of waters in the state. Notice requirements of subsection (e) of this section are not applicable to minor amendments.

(i) Public comment on registrations. A person may provide the commission with written comments on any new, major amendment, or renewal applications to register pre-injection units. The executive director shall review any written comments received within the public comment period. The written information received shall be utilized by the executive director in determining what action to take on the application for registration, in accordance with §331.17 of this title (relating to Pre-injection Units Registration). After the deadline for submitting public comment, the executive director may take final action on the application.

(j) Delegation, effective date of registration, term. The commission delegates to the executive director the authority to approve pre-injection unit registrations. The effective date for the registration of a site at which pre-injection units are

located is the date that the executive director by letter, approves the application. The term for registration shall not exceed ten years and shall be synchronized with the term of the injection well permit.

(k) Motion to overturn. The applicant or a person affected may file with the chief clerk a motion to overturn the executive director's final approval of an application, under §50.139(b) - (f) of this title (relating to Motion to Overturn Executive Director's Decision).

Adopted July 25, 2012

Effective August 16, 2012

§331.19. Injection Into or Through the Edwards Aquifer.

(a) Except as authorized in subsection (c) of this section, for applications submitted on or after September 1, 2001, injection wells that transect or terminate in the Edwards Aquifer may be authorized by rule under §331.9 of this title (relating to Injection Authorized by Rule) or by permit only as follows:

(1) wells that inject groundwater withdrawn from the Edwards Aquifer may be authorized only if:

(A) the groundwater is unaltered physically, chemically, or biologically; or

(B) the groundwater is treated in connection with remediation that is approved by state or federal order, authorization, or agreement and does not exceed the maximum contaminant levels for drinking water contained in §290.104 of this title (relating to Summary of Maximum Contaminant Levels, Maximum Residual Disinfectant Levels, Treatment Techniques, and Action Levels);

(2) wells that inject non-toxic tracer dyes into the Edwards Aquifer for the purpose of conducting scientific studies to determine hydrologic flowpaths may be authorized if the owner or operator is a federal or state agency, county, municipality, river authority, or groundwater district; or

(3) improved sinkholes or caves located in karst topographic areas that inject storm water, flood water, or groundwater may be authorized.

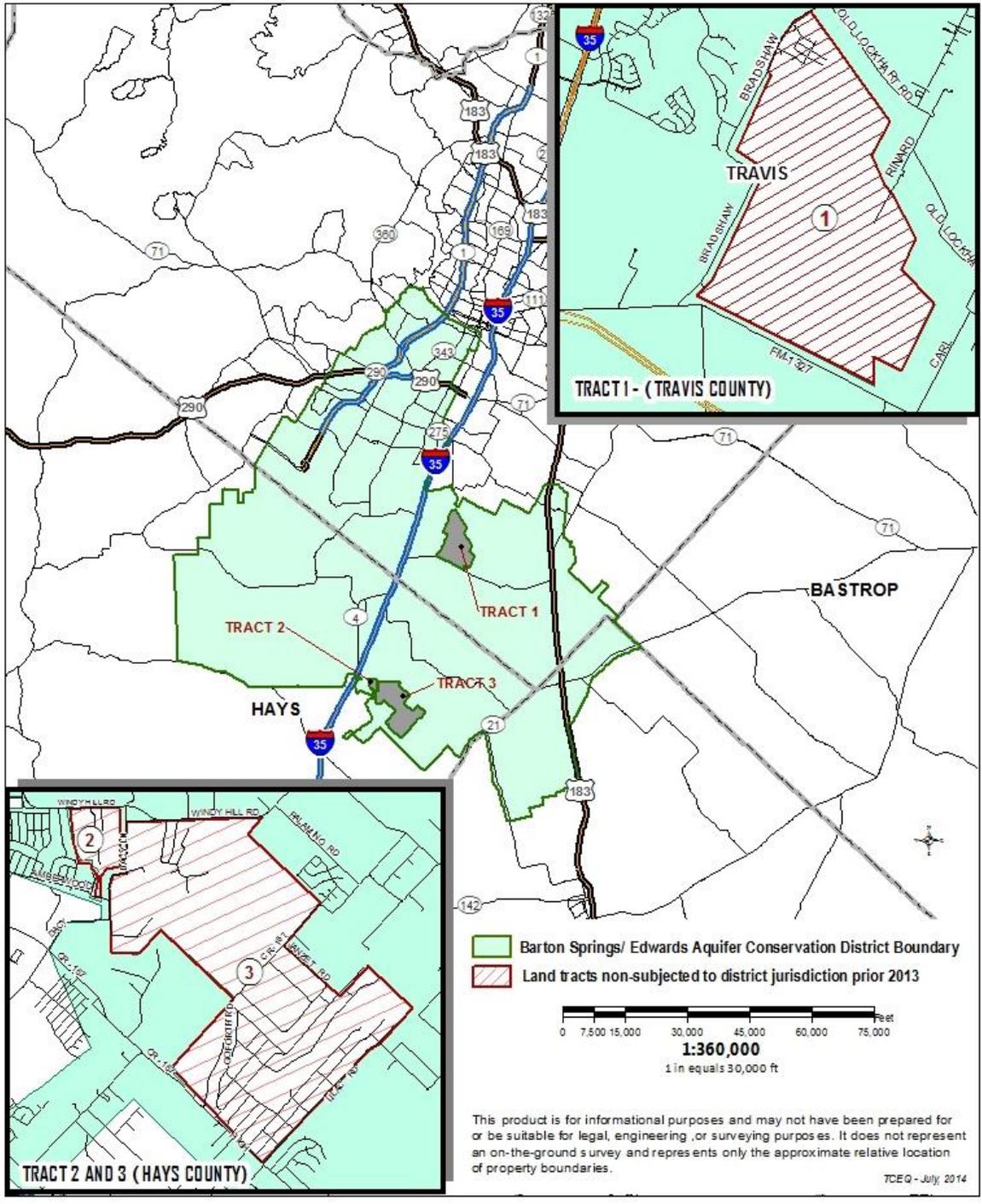
(b) For the purposes of this section, Edwards Aquifer means that portion of an arcuate belt of porous, water-bearing limestones composed of the Edwards Formation, Georgetown Formation, Comanche Peak Formation, Salmon Peak Limestone, McKnight Formation, West Nueces Formation, Devil's River Limestone, Person Formation, Kainer Formation, and Edwards Group trending from west to east to northeast through Kinney, Uvalde, Medina, Bexar, Kendall, Comal, Hays,

Travis, and Williamson Counties. The permeable aquifer units generally overlie the less-permeable Glen Rose Formation to the south, overlie the less-permeable Comanche Peak and Walnut Formations north of the Colorado River, and underlie the less-permeable Del Rio Clay regionally.

(c) This subsection applies only to the portion of the Edwards Aquifer that is within the geographic area circumscribed by the external boundaries of the Barton Springs-Edwards Aquifer Conservation District (BSEACD) but is not in that district's territory or the territory of the Edwards Aquifer Authority. The jurisdictional boundaries of the BSEACD are delineated in orders of the commission dated November 19, 1986 and April 18, 1988; in two subsequent orders of the BSEACD dated August 13, 1987; three orders of the BSEACD dated January 24, 2002; an order of the BSEACD canvassing the returns and declaring the results of a special election, dated November 12, 2002; and in a resolution of the BSEACD adopted June 23, 2011. A general depiction of the geographic area affected by this subsection is shown in the figure in this subsection. Unless authorized by rule as provided in paragraph (2) of this subsection or authorized by a general permit issued by the commission as provided in paragraph (3) of this subsection, all injection wells within the geographic area described in this subsection are prohibited.

Figure: 30 TAC §331.19(c)

**Area Affected by SB 1532 within Barton Springs - Edwards Aquifer Conservation District
 Travis and Hays Counties**



(1) Definitions. For the purposes of this subsection:

(A) Engineered aquifer storage and recovery facility--A facility with one or more wells that is located, designed, constructed, and operated for the purpose of injecting fresh water into a subsurface permeable stratum and storing the water for subsequent withdrawal and use for a beneficial purpose.

(B) Fresh water--Surface water or groundwater, without regard to whether the water has been physically, chemically, or biologically altered, that:

(i) contains a total dissolved solids concentration of not more than 1,000 milligrams per liter; and

(ii) is otherwise suitable as a source of drinking water supply.

(C) Saline portion of the Edwards Aquifer--The portion of the Edwards Aquifer that contains groundwater with a total dissolved solids concentration of more than 1,000 milligrams per liter.

(2) Injection wells authorized by rule. Injection wells within the geographic area described within this subsection may be authorized by rule under §331.9 of this title for:

(A) the injection of fresh water withdrawn from the Edwards Aquifer into a well that transects or terminates in the Edwards Aquifer for the purpose of providing additional recharge; or

(B) the injection of rainwater, storm water, flood water, or groundwater into the Edwards Aquifer by means of an improved natural recharge feature such as a sinkhole or cave located in a karst topographic area for the purpose of providing additional recharge.

(3) Injection wells authorized by general permit. Injection wells within the geographic area described in this subsection may be authorized under a general permit issued by the commission. A general permit under this paragraph may authorize:

(A) an activity described under paragraph (2) of this subsection;

(B) an injection well that transects and isolates the saline portion of the Edwards Aquifer and terminates in a lower aquifer for the purpose of injecting:

(i) concentrate from a desalination facility; or
(ii) fresh water as part of an engineered aquifer storage and recovery facility;

(C) an injection well that terminates in that part of the saline portion of the Edwards Aquifer that has a total dissolved solids concentration of more than 10,000 milligrams per liter for the purpose of injecting into the saline portion of the Edwards Aquifer:

(i) concentrate from a desalination facility, provided that the injection well must be at least three miles from the closest outlet of Barton Springs; or

(ii) fresh water as part of an engineered aquifer and storage recovery facility, provided each well used for injection or withdrawal from the facility must be at least three miles from the closest outlet of Barton Springs; or

(D) an injection well that transects or terminates in the Edwards Aquifer for:

(i) aquifer remediation;
(ii) the injection of a nontoxic tracer dye as part of a hydrologic study; or
(iii) another beneficial activity that is designed and undertaken for the purpose of increasing protection of an underground source of drinking water from pollution or other deleterious effects.

(4) The commission must hold a public meeting before issuing a general permit under this section.

(5) Special requirements for all injection wells subject to this subsection.

(A) Monitoring wells. An injection well subject to this subsection must be monitored by means of:

(i) a monitoring well operated by the injection well owner if the executive director determines that there is an underground source of drinking water in the area of review that is potentially affected by the injection well; or

(ii) if clause (i) of this subparagraph does not apply, a monitoring well operated by a party other than the injection well owner, provided that all results of monitoring are promptly made available to the injection well owner.

(iii) A monitoring well described under this subparagraph, if properly sited and completed, may also be used for monitoring a saline water production well.

(B) An injection well subject to this subsection:

(i) must not result in the waste or pollution of fresh water; and

(ii) may be authorized for a term not to exceed ten years, and the authorization for the injection well may be renewed.

Adopted June 3, 2015

Effective June 25, 2015

§331.21. Required Submission of Geoscientific Information.

All geoscientific information submitted to the agency under this chapter shall be prepared by, or under the supervision of, a licensed professional geoscientist or a licensed professional engineer and shall be signed, sealed, and dated by the licensed professional geoscientist or licensed professional engineer in accordance with the Texas Geoscience Practice Act and the Texas Engineering Practice Act.

Adopted September 10, 2003

Effective October 2, 2003