

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

§§213.1 - 213.14

Effective April 24, 2008

§213.1. Purpose.

The purpose of this chapter is to regulate activities having the potential for polluting the Edwards Aquifer and hydrologically connected surface streams in order to protect existing and potential uses of groundwater and maintain Texas Surface Water Quality Standards. The activities addressed are those that pose a threat to water quality.

(1) Consistent with Texas Water Code, §26.401, the goal of this chapter is that the existing quality of groundwater not be degraded, consistent with the protection of public health and welfare, the propagation and protection of terrestrial and aquatic life, the protection of the environment, the operation of existing industries, and the maintenance and enhancement of the long-term economic health of the state.

(2) Nothing in this chapter is intended to restrict the powers of the commission or any other governmental entity to prevent, correct, or curtail activities that result or may result in pollution of the Edwards Aquifer or hydrologically connected surface waters. In addition to the rules of the commission, an applicant may also be required to comply with local ordinances and regulations providing for the protection of water quality.

(3) The executive director shall review and act on an application subject to this chapter. The applicant or a person affected may file with the chief clerk a motion to overturn, under §50.139(a), (b), and (d) - (g) of this title (relating to Motion to Overturn Executive Director's Decision), of the executive director's final action on an Edwards Aquifer protection plan, modification to a plan, or exception.

Adopted August 10, 2005

Effective September 1, 2005

§213.2. Applicability and Person or Entity Required to Apply.

These rules specifically apply to the Edwards Aquifer and are not intended to be applied to any other aquifers in the state of Texas. Unless otherwise provided under this chapter, the owner of an existing or proposed site, such as a residential or commercial development, sewage collection system, or aboveground or underground storage tank facility for static hydrocarbons or hazardous substances, who proposes new or additional regulated activities under this chapter, must file and receive executive director approval of all appropriate applications prior to commencement of construction of new or additional regulated activities.

Adopted December 4, 1996

Effective December 27, 1996

§213.3. Definitions.

The following words and terms, when used in this chapter, have the following meanings.

(1) **Abandoned well** - A well that has not been used for six consecutive months. A well is considered to be in use in the following cases:

(A) a non-deteriorated well that contains the casing, pump, and pump column in good condition; or

(B) a non-deteriorated well that has been properly capped.

(2) **Aboveground storage tank facility** - The site, tract, or other area where one or more aboveground storage tank systems are located, including all adjoining contiguous land and associated improvements.

(3) **Aboveground storage tank system** - A non-vehicular device (including any associated piping) that is made of nonearthen materials; located on or above the ground surface, or on or above the surface of the floor of a structure below ground, such as a mineworking, basement, or vault; and designed to contain an accumulation of static hydrocarbons or hazardous substances.

(4) **Appropriate regional office** - For regulated activities covered by this chapter and located in Hays, Travis, and Williamson Counties, the appropriate regional office is Region 11, located in Austin, Texas. For regulated activities covered by this chapter and located in Kinney, Uvalde, Medina, Bexar, and Comal Counties, the appropriate regional office is Region 13, located in San Antonio, Texas.

(5) **Best management practices (BMPs)** - A schedule of activities, prohibitions, practices, maintenance procedures, and other management practices to prevent or reduce the pollution of water in the state. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs are those measures that are reasonable and necessary to protect groundwater and surface water quality, as provided in technical guidance prepared by the executive director or other BMPs that are technically justified based upon studies and other information that are generally relied upon by professionals in the environmental protection field and are supported by existing or proposed performance monitoring studies, including, but not limited to, the United States Environmental Protection Agency, American Society of Civil Engineers, and Water Environment Research Foundation guidance.

(6) **Capped well** - A well that is closed or capped with a covering capable of preventing surface pollutants from entering the well. The cap must be able to sustain a weight of at least 400 pounds. The cap must not be easily removed by hand.

(7) **Commencement of construction** - The initial disturbance of soils associated with clearing, grading, or excavating activities or other construction or regulated activities.

(8) **Edwards Aquifer** - That portion of an arcuate belt of porous, waterbearing, predominantly carbonate rocks known as the Edwards (Balcones Fault Zone) Aquifer trending from west to east to northeast in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, and Williamson Counties; and composed of the Salmon Peak Limestone, McKnight Formation, West Nueces Formation, Devil's

River Limestone, Person Formation, Kainer Formation, Edwards Group, and Georgetown Formation. 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.

(9) **Edwards Aquifer protection plan** - A general term that includes a water pollution abatement plan, organized sewage collection system plan, underground storage tank facility plan, aboveground storage tank facility plan, or a modification or exception granted by the executive director.

(10) **Edwards Aquifer protection plan holder** - The person who is responsible for compliance with an approved water pollution abatement plan, organized sewage collection system plan, underground storage tank facility plan, aboveground storage tank facility plan, or a modification or exception granted by the executive director.

(11) **Concentrated animal feeding operation** - As defined in §321.32 of this title (relating to Definitions).

(12) **Geologic or manmade features** - Features including, but not limited to, closed depressions, sinkholes, caves, faults, fractures, bedding plane surfaces, interconnected vugs, reef deposits, wells, borings, and excavations.

(13) **Geologic assessment** - A report that is prepared by a geologist describing site-specific geology.

(14) **Geologist** - A Texas licensed professional geoscientist who has training and experience in groundwater hydrology and related fields that enable that individual to make sound professional judgments regarding the identification of sensitive features located in the recharge zone or transition zone.

(15) **Groundwater conservation district** - Any groundwater district created by the legislature or the commission subject to Texas Water Code, Chapter 36, to conserve, preserve, and protect the waters of a groundwater water reservoir.

(16) **Hazardous substance** - Any substance designated as such by the administrator of the United States Environmental Protection Agency under the Comprehensive Environmental Response, Compensation, and Liability Act; regulated in accordance with Federal Water Pollution Control Act, Chapter 311; or any solid waste, or other substance that is designated to be hazardous by the commission, in accordance with Texas Water Code, §26.263 or Texas Health and Safety Code, §361.003.

(17) **Impervious cover** - Impermeable surfaces, such as pavement or rooftops, that prevent the infiltration of water into the soil. Rainwater collection systems for domestic water supplies are not considered impervious cover.

(18) **Industrial wastewater discharge** - Any category of wastewater except:

(A) those that are primarily domestic in composition; or

(B) those emanating from feedlot/concentrated animal feeding operations.

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

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

(21) **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.

(22) **Organized sewage collection system** - Any public or private sewage system for the collection and conveyance of sewage to a treatment and disposal system that is regulated in accordance with rules of the commission and provisions of 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.

(23) **Permanent best management practices** - Best management practices used to prevent and control pollution from regulated activities after construction is complete.

(24) **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.

(25) **Private sewage facilities** - On-site sewage facilities as defined under Chapter 285 of this title (relating to On-Site Sewage Facilities).

(26) **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, with the operation and maintenance as 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.

(27) **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 agency's central office and in the appropriate regional office.

(28) **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 that 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.

(29) **Sensitive feature** - A 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.

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

(31) **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.

(32) **Static hydrocarbon** - A hydrocarbon that is liquid at atmospheric pressure and 20 degrees centigrade.

(33) **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.

(34) **Temporary best management practices** - Best management practices used to prevent and control pollution from regulated activities during construction.

(35) **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.

(36) **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 agency's central office and in the appropriate regional office.

(37) **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.

(38) **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 10% or more beneath the surface of the ground.

(39) **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.

Adopted August 10, 2005

Effective September 1, 2005

§213.4. Application Processing and Approval.

(a) Approval by the executive director.

(1) No person may commence the construction of any regulated activity until an Edwards Aquifer protection plan or modifications to the plan as required by §213.5 of this title (relating to Required Edwards Aquifer Protection Plans, Notification, and Exemptions) or exception under §213.9 of this title (relating to Exceptions) has been filed with the appropriate regional office, and the application has been reviewed and approved by the executive director.

(2) The appropriate regional office shall provide copies of applications to affected incorporated cities, groundwater conservation districts, and counties in which the proposed regulated activity will be located. These copies will be distributed within five days of the application being determined to be administratively complete. Any person may file comments within 30 days of the date the application is mailed to local governmental entities. The executive director shall review all comments that are timely filed.

(3) A complete application for approval, as described in this section, must be submitted with the appropriate fee as specified in §213.12 of this title (relating to Application Fees).

(4) Projects in progress when recharge and transition zone maps are revised.

(A) For areas designated as recharge zone or transition zone on official maps prior to the effective date of this paragraph, and for which this designation did not change, all Edwards Aquifer protection plans submitted to the executive director, on or after the effective date of this paragraph, will be reviewed under all the provisions of the subchapter in effect on the date the plan is submitted.

(B) For areas that were newly designated as recharge zone or transition zone on official maps on the effective date of this paragraph, regulated activities will be considered to have commenced construction and will be regulated under the provisions of this chapter that were in effect at the time the plan was approved by the executive director if, on the effective date, all federal, state, and local approvals or permits required to begin physical construction have been obtained, and if either on-site construction directly related to the development has begun or construction commences within six months of the effective date of this paragraph.

(C) Regulated activities in areas designated as transition zone on official maps prior to the effective date of this paragraph and designated as recharge zone on the effective date of this paragraph will be regulated as transition zone activities if, on the effective date, all federal, state, and local approvals or permits required to begin physical construction have been obtained, and if either on-site construction directly related to the development has begun or construction commences within six months of the effective date of this paragraph.

(D) The effective date of this paragraph is September 1, 2005.

(5) Assumption of program by local government.

(A) A local governmental entity may assume the rights, duties, and responsibilities to review and either approve or deny Edwards Aquifer protection plan applications within its boundaries and monitor and enforce compliance with plans if the local government obtains certification from the executive director.

(B) In order to obtain certification, the local government must demonstrate that:

(i) it has a water quality protection program equal to or more stringent than the rules contained in this chapter, including, but not limited to, a program that:

(I) regulates activities covered under this chapter; and

(II) has performance standards equal to or more protective of water quality;

(ii) it has adopted ordinances or has other enforceable means sufficient to enforce the program throughout the local governmental entity's jurisdiction; and

(iii) it has adequate resources to implement and enforce the program.

(C) Upon approval of a request for certification under this section, the executive director shall enter into an agreement with the local governmental entity to provide for the terms and conditions of program assumption, including executive director oversight. Nothing in a certification or agreement shall affect the commission's ability to enforce its water quality protection rules or applicable state law.

(D) An agreement under subparagraph (C) of this paragraph shall not provide for the payment of fees required by this chapter to the local entity, and shall not provide for partial assumption of the program unless expressly authorized by the commission. Fees shall be paid to the commission for continued proper oversight and enforcement.

(E) Certification shall be for a term not to exceed five years, subject to renewal.

(F) Upon written notice, certification may be revoked or suspended by the executive director if the local entity does not meet the terms and conditions of the agreement provided

under subparagraph (D) of this paragraph, or fails to meet the criteria for certification provided under subparagraph (B) of this paragraph.

(G) A decision by the executive director under this section is not subject to appeal to the commission.

(b) Contents of application.

(1) Forms provided by the executive director. Applications for approval filed under this chapter must be made on forms provided by or approved by the executive director. Each application for approval must, at a minimum, include the following:

(A) the name of the development, subdivision, or facility for which the application is submitted;

(B) a narrative description of the location of the project or facility for which the application is submitted, presenting sufficient detail and clarity so that the project site and its boundaries can be located during a field inspection;

(C) the name, address, and telephone number of the owner or any other person signing the application; and

(D) the information needed to determine the appropriate fee under §213.14 of this title (relating to Fee Schedule) for the following plan types:

(i) for water pollution abatement plans and modifications to plans, the total acreage of the site where regulated activities will occur;

(ii) for organized sewage collection system plans and modifications to plans, the total linear footage of all collection system lines; or

(iii) for static hydrocarbon and hazardous substance storage in underground or permanent aboveground storage tank facility plans, the total number of tanks or piping systems.

(2) Additional information. Each application must also include the following information, as applicable:

(A) for water pollution abatement plans, the information required under §213.5(b) of this title;

(B) for organized sewage collection system plans, the information required under §213.5(c) of this title;

(C) for static hydrocarbon and hazardous substance storage in underground storage tank systems, the information required under §213.5(d) of this title;

(D) for static hydrocarbon and hazardous substance storage in aboveground storage tank systems, the information required under §213.5(e) of this title; and

(E) any other pertinent information related to the application that the executive director may require.

(c) Application submittal.

(1) One original and one copy of the application must be submitted for the executive director's review and additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the proposed regulated activities will be located. The copies must be submitted to the appropriate regional office.

(2) Only owners, their authorized agent(s), or those persons having the right to possess and control the property that is the subject of the Edwards Aquifer protection plan may submit the plan for review and approval by the executive director.

(d) Signatories to applications.

(1) Required signature. All applications must be signed as follows.

(A) For a corporation, a principal executive officer (president, vice-president, or a duly authorized representative) must sign the application. A representative must submit written proof of the authorization.

(B) For a partnership, a general partner must sign the application.

(C) For a political entity such as a municipality, state, federal, or other public agency, either a principal executive officer or a duly authorized representative must sign the application. A representative must submit written proof of the authorization.

(D) For an individual or sole proprietorship, the individual or sole proprietor must sign the application.

(2) Proof of authorization to sign. The executive director requires written proof of authorization for any person signing an application.

(e) Executive director review. The executive director must complete the review of an application within 90 days after determining that it is administratively complete. The executive director must declare that the application is administratively complete or deficient within 30 days of receipt by the appropriate regional office. Grounds for a deficient application include, but are not limited to, failure to pay all applicable application fees.

(f) Additional provisions. As a condition of approval, the executive director may impose additional provisions deemed necessary to protect the Edwards Aquifer from pollution. The executive

director may conditionally approve an Edwards Aquifer protection plan or impose special conditions on the approval of a plan.

(g) Deed recordation.

(1) The applicant must record in the deed records of the county in which the property is located that the property is subject to an approved Edwards Aquifer protection plan within 30 days of receiving written approval of:

- (A) a water pollution abatement plan;
- (B) an aboveground storage tank plan;
- (C) an underground storage tank plan;
- (D) modifications to any of these plans for a proposed regulated activity; or
- (E) an exception.

(2) A description of the property boundaries that is covered by the Edwards Aquifer protection plan shall be recorded in the county deed records.

(3) Within 60 days of receiving written approval of an Edwards Aquifer protection plan, the applicant must submit, to the appropriate regional office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county record.

(4) The construction of a public street or highway is exempt from all deed recordation requirements.

(h) Term of approval. The executive director's approval of an Edwards Aquifer protection plan will expire two years after the date of initial issuance, unless prior to the expiration date, substantial construction related to the approved plan has commenced. For purposes of this subsection, substantial construction means more than 10% of total construction has commenced. If a written request for an extension is filed under the provisions of this subsection, the approved plan will continue in effect until the executive director makes a determination on the request for an extension.

(1) A written request for an extension must be received not earlier than 60 days prior to the expiration date of an approved Edwards Aquifer protection plan or a previously approved extension. Requests for extensions are subject to fees outlined in §213.13 of this title (relating to Fees Related to Requests For Extensions).

(2) An executive director's approved extension will expire six months after the original expiration date of the approved Edwards Aquifer protection plan or a previously approved extension unless prior to the expiration date, commencement of construction, repair, or replacement related to the approved plan has occurred.

(3) An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50% of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the appropriate regional office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.

(4) Any requests for extensions received by the executive director after the expiration date of an approved Edwards Aquifer protection plan or a previously approved extension will not be accepted. A new application for the purposes of this chapter must be submitted to the appropriate regional office with the appropriate fees for the review and approval by the executive director.

(5) An extension will not be granted if the proposed regulated activity or approved plan for the regulated activity(ies) under this chapter has changed from the regulated activity(ies) approved by the executive director.

(i) Legal transfer of property. Upon legal transfer of property, sewage collection systems, force mains, lift stations, underground storage tank system, or aboveground storage tank system, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.

(j) Modification of previously approved plans. The holder of any approved Edwards Aquifer protection plan must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:

(1) any physical or operational modification of any water pollution abatement structure(s), including, but not limited to, ponds, dams, berms, sewage treatment plants, and diversionary structures;

(2) any change in the nature or character of the regulated activity from that which was originally approved or a change that would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;

(3) any development of land previously identified as undeveloped in the original water pollution abatement plan;

(4) any physical modification of the approved organized sewage collection system;

(5) any physical modification of the approved underground storage tank system; or

(6) any physical modification of the approved aboveground storage tank system.

(k) Compliance. The holder of the approved or conditionally approved Edwards Aquifer protection plan is responsible for compliance with this chapter and any special conditions of the approved

plan through all phases of plan implementation. Failure to comply with any condition of the executive director's approval is a violation of this chapter and is subject to administrative rule or orders and penalties as provided under §213.10 of this title (relating to Enforcement). Such violations may also be subject to civil penalties and injunction.

Adopted August 10, 2005

Effective September 1, 2005

§213.5. Required Edwards Aquifer Protection Plans, Notification, and Exemptions.

(a) Required plans. A plan must be submitted for the following, as appropriate:

(1) a water pollution abatement plan under subsection (b) of this section to conduct regulated activities on the recharge zone not covered by subsections (c), (d), or (e) of this section;

(2) an organized sewage collection system plan under subsection (c) of this section for rehabilitation or construction related to existing or new organized sewage collection systems on the recharge zone;

(3) an underground storage tank facility plan for static hydrocarbon and hazardous substance storage under subsection (d) of this section for the construction or rehabilitation of an underground storage tank system; including tanks, piping, and related systems located on the recharge zone or transition zone; and

(4) an aboveground storage tank facility plan for static hydrocarbon and hazardous substance storage under subsection (e) of this section for the construction or rehabilitation of an aboveground storage tank system; including tanks, piping, and related systems, for the storage of hydrocarbon or hazardous substance located on the recharge zone or transition zone.

(b) Water pollution abatement plan. A water pollution abatement plan must contain the following information.

(1) Application. The information required under §213.4 of this title (relating to Application Processing and Approval) is part of the plan and must be filed with the executive director at the appropriate regional office.

(2) Site location.

(A) Location data and maps must include a legible road map with directions, including mileage, which would enable the executive director to locate the site for inspection.

(B) A general location map must include:

(i) the site location on a copy (or spliced composite of copies, if necessary) of an official recharge zone map(s) with quadrangle name(s) and recharge and transition zone boundaries clearly labeled; and

(ii) a drainage plan, shown on the recharge zone map, indicating all paths of drainage from the site.

(C) A site plan with a minimum scale of one inch to 400 feet must show:

(i) the 100-year floodplain boundaries (if applicable);

(ii) the layout of the development showing existing and finished contours as appropriate, but not greater than ten-foot contour intervals;

(iii) the location of all known wells (including, but not limited to, water wells, oil wells, and unplugged and abandoned wells);

(iv) the location of any sensitive feature on the site of the proposed regulated activity as identified in the geologic assessment under paragraph (3) of this subsection;

(v) the drainage patterns and approximate slopes anticipated after major grading activities;

(vi) areas of soil disturbance and areas which will not be disturbed;

(vii) locations of major structural and nonstructural controls identified in the technical report;

(viii) locations where stabilization practices are expected to occur;

(ix) surface waters (including wetlands); and

(x) locations where stormwater discharges to a surface water or a sensitive feature.

(3) Geologic assessment. For all regulated activities, the applicant must submit a geologic assessment report prepared by a geologist describing the site-specific geology. The report must identify all potential pathways for contaminant movement to the Edwards Aquifer. Single-family residential subdivisions constructed on less than ten acres are exempt from this requirement. The geologic assessment report must be signed, sealed, and dated by the geologist preparing the report.

(A) The geologic assessment must include a geologic map, at site-plan scale, illustrating:

(i) the outcrop of surface geologic units; and

(ii) all geologic and manmade features, specifically identifying:

(I) caves;

- (II) sinkholes;
- (III) faults;
- (IV) permeable fractures;
- (V) solution zones;
- (VI) surface streams; and
- (VII) other sensitive features.

(B) The geologic assessment must contain a stratigraphic column showing, at a minimum, formations, members, and thicknesses.

(C) The geologic assessment must contain a description and evaluation of all geologic and manmade features, on forms provided by, or approved by, the executive director. The assessment must determine which of these features are sensitive features. The assessment must include:

(i) the identification of each geologic or manmade feature, with a cross-reference to the site-plan map coordinates; and

(ii) the type of geologic or manmade feature including, but not limited to:

- (I) sinkholes;
- (II) caves;
- (III) faults;
- (IV) wells;
- (V) surface streams; or
- (VI) potentially permeable fractures and solution zones.

(D) The geologic assessment must contain a narrative assessment of site-specific geology. The assessment must detail the potential for fluid movement to the Edwards Aquifer and include a discussion of the stratigraphy, structure, and karstic characteristics of the site.

(E) The geologic assessment must contain a narrative description of soil units and a soil profile, including thickness and hydrologic characteristics.

(4) Technical report.

(A) The technical report must address the following issues.

(i) The report must describe the nature of the regulated activity (such as residential, commercial, industrial, or utility), including:

(I) the size of the site in acres;

(II) the projected population for the site;

(III) the amount and type of impervious cover expected after construction is complete, such as paved surface or roofing;

(IV) the amount of surface expected to be occupied by parking lots; and

(V) other factors that could affect surface water and groundwater quality.

(ii) The report must describe the volume and character of wastewater expected to be produced. Wastewater generated at a site should be characterized as either domestic or industrial, or if commingled, by approximate percentages of each type.

(iii) The report must describe the volume and character of stormwater runoff expected to occur. Estimates of stormwater runoff quality and quantity should be based on area and type of impervious cover, as described in clause (i) of this subparagraph. An estimate of the runoff coefficient of the site for both the pre-construction and post-construction conditions should be included in the report.

(iv) The report must describe any activities or processes which may be a potential source of contamination.

(v) The report must describe the intended sequence of major activities which disturb soils for major portions of the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation).

(vi) The report must contain estimates of the total area of the site that is expected to be disturbed by excavation, grading, or other activities.

(vii) The report must contain the name of the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project.

(B) The technical report must describe the temporary best management practices (BMPs) and measures that will be used during and after construction. The technical report must clearly describe for each major activity identified in subparagraph (A)(v) of this paragraph appropriate control measures and the general timing (or sequence) during the construction process that the measures will be implemented.

(i) BMPs and measures must prevent pollution of surface water, groundwater, or storm water that originates upgradient from the site and flows across the site as provided under this paragraph.

(ii) BMPs and measures must prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site as provided under this paragraph.

(iii) BMPs and measures must prevent pollutants from entering surface streams, sensitive features, or the aquifer as provided under this paragraph.

(iv) To the maximum extent practicable, BMPs and measures must maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, executive director review, or during excavation, blasting, or construction.

(I) The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.

(II) A request to temporarily seal must include a justification as to why no reasonable and practicable alternative exists. The request will be evaluated by the executive director on a case-by-case basis.

(v) Temporary BMPs and measures must meet the requirements contained in subparagraph (D)(i) of this paragraph.

(vi) The report must include a plan for the inspection of temporary BMPs and measures and for their timely maintenance, repair, and, if necessary, retrofit.

(vii) Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure must be prepared by or under the direct supervision of a Texas licensed professional engineer. All construction plans and design information must be signed, sealed, and dated by the Texas licensed professional engineer.

(viii) Pilot-scale field testing (including water quality monitoring) may be required for BMPs that are not contained in technical guidance recognized by, or prepared by, the executive director.

(ix) The construction-phase BMPs for erosion and sediment controls should be designed to retain sediment on site to the extent practicable.

(x) All control measures must be properly selected, installed, and maintained in accordance with the manufacturers specifications and good engineering practices. If periodic inspections by the applicant or the executive director, or other information indicates a control has

been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.

(xi) If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).

(xii) Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%.

(xiii) Litter, construction debris, and construction chemicals exposed to storm water shall be prevented from becoming a pollutant source for storm water discharges (e.g., screening outfalls, picked up daily).

(C) The technical report must describe the permanent BMPs and measures that will be used during and after construction is completed.

(i) BMPs and measures must prevent pollution of surface water, groundwater, or storm water that originates upgradient from the site and flows across the site.

(ii) BMPs and measures must prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated storm water runoff from the site.

(iii) BMPs and measures must prevent pollutants from entering surface streams, sensitive features, or the aquifer.

(iv) To the extent practicable, BMPs and measures must maintain flow to naturally occurring sensitive features identified in either the geologic assessment, executive director review, or during excavation, blasting, or construction.

(I) The permanent sealing of, or diversion of, flow from a naturally occurring sensitive feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure should be avoided.

(II) A request to seal a naturally occurring sensitive feature must include a justification as to why no reasonable and practicable alternative exists. The request will be evaluated by the executive director on a case-by-case basis.

(v) Permanent BMPs and measures must meet the requirements contained in subparagraph (D)(ii) of this paragraph.

(vi) Construction plans and design calculations for the proposed permanent BMPs and measures must be prepared by, or under the direct supervision of, a Texas licensed professional engineer. All construction plans and design information must be signed, sealed, and dated by the Texas licensed professional engineer.

(vii) The technical report must include a plan for the inspection of the permanent BMPs and measures and for their timely inspection, maintenance, repair, and, if necessary, retrofit. The plan must be prepared and certified by the engineer designing the permanent BMPs and measures. The plan must be signed by the owner or responsible party.

(viii) Pilot-scale field testing (including water quality monitoring) may be required for BMPs that are not contained in technical guidance recognized by, or prepared by, the executive director.

(I) When pilot-scale field testing of an innovative technology (including water quality monitoring) is required, only one pilot site will be approved.

(II) No additional approvals will be granted until the pilot study is complete and the applicant demonstrates adequate protection of the Edwards Aquifer.

(III) If the innovative technology demonstrates adequate protection of the Edwards Aquifer, additional units may be approved for use as permanent pollution abatement measures on the Edwards Aquifer recharge zone.

(IV) If the innovative technology demonstrates inadequate protection of the Edwards Aquifer, a retrofit of the pollution abatement measure may be required to achieve compliance with requirements under subparagraph (D) of this paragraph and no additional units will be approved for use on the Edwards Aquifer recharge zone.

(D) Requirements for BMPs and measures.

(i) Temporary BMPs.

(I) The technical report must include a description of interim and permanent stabilization practices for the site, including a schedule of when the practices will be implemented. Stabilization practices may include, but are not limited to: establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures.

(-a-) The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur; the dates when construction activities temporarily or permanently cease on a portion of the site; and the dates when stabilization measures are initiated.

(-b-) Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Where the initiation of stabilization measures by the 14th day after construction activity temporary or permanently cease is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures

do not have to be initiated on that portion of site. In areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.

(II) The technical report must include a description of structural practices to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Structural practices may include, but are not limited to: silt fences, earth dikes, drainage swales, sediment traps, checks dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and sediment basins. Placement of structural practices in floodplains should be avoided to the degree attainable.

(-a-) For common drainage locations that serve an area with ten or more acres disturbed at one time, a sediment basin that provides storage for a calculated volume of runoff from a two-year, 24-hour storm from each disturbed acre drained, or equivalent control measures, shall be provided where attainable until final stabilization of the site. Where no such calculation has been performed, a sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent control measures, shall be provided where attainable until final stabilization of the site. When computing the number of acres draining into a common location it is not necessary to include flows from off-site areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin.

(-b-) In determining whether installing a sediment basin is attainable, the applicant may consider factors such as site soils, slope, and available area on site. For drainage locations which serve ten or more disturbed acres at one time and where a sediment basin or equivalent controls is not attainable, smaller sediment basins and/or sediment traps should be used. Where neither the sediment basin nor equivalent controls are attainable due to site limitations, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries of the construction area and for those side slope boundaries deemed appropriate as dictated by individual site conditions. The executive director encourages the use of a combination of sediment and erosion control measures in order to achieve maximum pollutant removal.

(-c-) For drainage locations serving less than ten acres, smaller sediment basins and/or sediment traps should be used. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions) of the construction area unless a sediment basin providing storage for a calculated volume of runoff from a two-year, 24-hour storm or 3,600 cubic feet of storage per acre drained is provided. The executive director encourages the use of a combination of sediment and erosion control measures in order to achieve maximum pollutant removal.

(ii) Permanent BMPs and measures.

(I) BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction. These practices and measures must be designed, constructed, operated, and maintained to insure that 80% of the incremental

increase in the annual mass loading of total suspended solids from the site caused by the regulated activity is removed. These quantities must be calculated in accordance with technical guidance prepared or accepted by the executive director.

(II) Owners of permanent BMPs and measures must insure that the BMPs and measures are constructed and function as designed. A Texas licensed professional engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the appropriate regional office within 30 days of site completion.

(III) Where a site is used for low density single-family residential development and has 20% or less impervious cover, other permanent BMPs are not required. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by §213.4(g) of this title, may no longer apply and the property owner must notify the appropriate regional office of these changes.

(IV) The executive director may waive the requirement for other permanent BMPs for multi-family residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by §213.4(g) of this title, may no longer apply and the property owner must notify the appropriate regional office of these changes.

(E) The technical report must describe measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development. The measures should address the following:

- (i) increased stream flashing;
- (ii) the creation of stronger flows and in-stream velocities; or
- (iii) other in-stream effects caused by the regulated activity which increase erosion that results in water quality degradation.

(F) The technical report must describe the method of wastewater disposal from the site.

(i) If wastewater is to be disposed of by conveyance to a sewage treatment plant for treatment and disposal, the existing or proposed treatment facility must be identified.

(ii) If wastewater is to be disposed of by an on-site sewage facility, the application must include a written statement from the appropriate authorized agent, stating that the site is suitable for the use of private sewage facilities and will meet the special requirements for on-site sewage facilities located on the Edwards Aquifer recharge zone as specified under Chapter 285 of this title (relating to On-Site Sewage Facilities), or identifying those areas that are not suitable.

(G) The technical report must describe the measures that will be used to contain any spill of hydrocarbons or hazardous substances such as on a roadway or from a pipeline or from temporary aboveground storage of 250 gallons or more.

(i) Temporary storage facilities are those used on site for less than one year.

(ii) Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.

(5) Responsibility for maintenance of permanent BMPs and measures after construction is complete.

(A) The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred.

(B) A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days of the transfer.

(C) This paragraph applies to:

(i) multiple single-family residential developments, multi-family residential; and

(ii) non-residential developments such as commercial, industrial, institutional, schools, and other sites where regulated activities occur.

(c) Organized sewage collection systems.

(1) No person may commence rehabilitation or construction related to an existing or new organized sewage collection system on the recharge zone, until final design plans, specifications, and an engineering report, as specified in Chapter 317 of this title (relating to Design Criteria for Sewerage Systems) and appropriate special requirements of this section, have been filed with and approved by the executive director.

(2) General design of sewage collection systems. Design of new sewage collection systems on the recharge zone must comply with Chapter 317 of this title.

(3) Special requirements for sewage collection systems. In addition to the requirements in paragraph (2) of this subsection, sewage collection systems on the recharge zone must meet the following special requirements.

(A) Manhole rehabilitation or construction. All manholes rehabilitated or constructed after March 21, 1990, must be watertight, with watertight rings and covers and must be constructed and tested to meet the requirements of §317.2(c)(5)(H) of this title (relating to Sewage Collection System).

(B) Piping for gravity and pressurized collection systems. Compliance with the following is required, unless local regulations dictate more stringent standards:

(i) for gravity collection systems, all PVC pipe must have a Standard Dimension Ratio (SDR) of 35 or less and meet the requirements of §317.2(a) - (c)(4) of this title; and

(ii) for all pressurized sewer systems, all PVC pipe must have a minimum working pressure rating of 150 pounds per square inch and meet the requirements of §317.2(d)(2) - (4) and §317.3(d)(5) - (7) of this title (relating to Sewage Collection System and Lift Stations).

(C) Lift station design. Lift stations must be designed and constructed to ensure that bypassing of any sewage does not occur. All lift stations must be designed to meet the requirements of §317.2(d) and §317.3 of this title. A lift station application must include final construction plans and a design report prepared by or under the direct supervision of a Texas licensed professional engineer. All design information must be signed, sealed, and dated by a Texas licensed professional engineer.

(D) Certification of new sewage collection system lines by a Texas licensed professional engineer. Owners of sewage collection systems must insure that all new gravity sewer system lines having a diameter greater than or equal to six inches and all new force mains are tested for leakage following construction. Such lines must be certified by a Texas licensed professional engineer to meet the appropriate requirements of §317.2 of this title. The engineer must retain copies of all test results which must be made available to the executive director upon request. The engineer must certify in writing that all wastewater lines have passed all required testing to the appropriate regional office within 30 days of test completion and prior to use of the new collection system. Following the completion of the new sewer lines and manholes, they must be tested every five years thereafter in accordance with subparagraph (E) of this paragraph.

(E) Testing of existing sewer lines. Owners of sewage collection systems must insure that all existing sewer lines having a diameter greater than or equal to six inches, including private service laterals, manholes, and connections, are tested to determine types and locations of structural damage and defects such as offsets, open joints, or cracked or crushed lines that would allow exfiltration to occur. Existing manholes and lift station wet wells must be tested using methods for new structures which are approved by the executive director.

(i) Testing of all sewage collection systems must be conducted every five years after being put into use. Any sewage collection system in place as of March 21, 1990 must

have commenced and completed the first round of five-year testing. Every five years, existing sewage collection systems must be tested to determine types and locations of structural damage and defects such as offsets, open joints, or cracked or crushed lines that would allow exfiltration to occur. These test results must be certified by a Texas licensed professional engineer. The test results must be retained by the plan holder for five years and made available to the executive director upon request. The use of one of the following methods will satisfy the requirements for the five-year testing of existing sewer lines.

(I) In-place deflection testing must meet the requirements of §317.2(a)(4)(C) of this title. No pipe shall exceed a deflection rate of 5.0%.

(II) Internal line inspections, using a color television camera to verify that the lines are free of structural damage such as offsets, open joints, or cracked or crushed lines, that would allow exfiltration to occur, are acceptable. The use of black and white television equipment may be used following demonstration to the executive director that an acceptable inspection can be performed as provided in subclause (IV) of this clause.

(III) In-line smoke testing is acceptable only for the testing of private service laterals.

(IV) Testing methods other than those listed in this subsection must be approved by the executive director prior to initiating the sewer line testing.

(ii) Except as otherwise provided in an enforcement order of the commission, as soon as possible, but at least within one year of detecting defects, repairs to the sewage collection system must be completed by the system's owner. However, all leakage must be immediately contained to prevent any discharge to water in the state or pollution of the Edwards Aquifer whether necessary repairs have been completed or not. Leakage is a violation of Texas Water Code, §26.121 and these rules are not intended to excuse such unlawful discharge of waste into or adjacent to water in the state. All repairs must be certified by a Texas licensed professional engineer. Repairs must be tested within 45 days of completion using the methods described in clause (i) of this subparagraph. Results must be submitted to the appropriate regional office within 30 days of testing.

(F) Blasting for sewer line excavation. Blasting for sewer line excavation must be done in accordance with appropriate criteria established by the National Fire Protection Association. Should such blasting result in damage to an existing or newly completed sewer line or any of its appurtenances, the owner of the sewer system and appurtenances must repair and retest the damaged sewer line and its appurtenances immediately. The use of sand for pipe embedment or backfill in blasted rock is prohibited.

(G) Sewer line stub outs. New collection system lines must be constructed with stub outs for the connection of anticipated extensions. The location of such stub outs must be marked on the ground such that their location can be easily determined at the time of connection of the proposed extensions. All stub outs must be sealed with a manufactured cap to prevent leakage. Extensions that were not anticipated at the time of original construction or that are to be connected to an existing sewer line not furnished with stub outs must be connected using a manufactured saddle in accordance with accepted plumbing techniques.

(i) Main line stub outs. Manholes must be placed at the end of all sewer lines that will be extended at a future date, as specified in §317.2(c)(5) of this title. If the main line is to be extended within one year, a variance to allow the use of a stub out until the line is extended will be considered on a case-by-case basis. At the time of original construction, new stub outs must be constructed sufficiently to extend beyond the end of the street pavement. Stub outs that were not anticipated at the time of original construction must enter the manhole using a bored or drilled hole. Chiseling or hammering to enter a manhole is prohibited.

(ii) Private service lateral stub outs. Such stub outs must be manufactured using wyes or tees that are compatible in size and material with both the sewer line and the extension. Private service lateral stub outs that were not anticipated at the time of original construction must be connected using a manufactured saddle in accordance with accepted plumbing techniques.

(H) Locating sewer lines within a five-year floodplain. Sewer lines may not be located within the five-year floodplain of a drainageway, unless an exemption is granted by the executive director. If the applicant demonstrates to the executive director that such location is unavoidable, and the area is subject to inundation and stream velocities which could cause erosion and scouring of backfill, the trench must be capped with concrete to prevent scouring of backfill, or the sewer lines must be encased in concrete. All concrete must have a minimum thickness of six inches.

(I) Inspection of private service lateral connections. After installing and prior to covering and connecting a private service lateral to an organized sewage collection system, a Texas licensed professional engineer, Texas registered sanitarian, or appropriate city inspector must inspect the private service lateral and the connection to the collection system and certify that construction conforms with the applicable provisions of this subsection and local plumbing codes. Private service laterals may only be connected to approved sewage collection systems.

(J) Embedment materials. Embedment materials must meet the specification for bedding contained in §317.2(a)(5) of this title.

(K) Sewer lines bridging caverns or other sensitive features. Sewer lines that bridge caverns or sensitive features must be constructed in a manner that will maintain the structural integrity of the line. When such geologic features are encountered during construction, the location and extent of those features must be assessed by a geologist and must be reported to the appropriate regional office in writing within two working days of discovery. Notification and inspection must comply with the requirements under subsection (f) of this section.

(L) Erosion and sedimentation control. A temporary erosion and sedimentation control plan must be included with all construction plans. All temporary erosion and sedimentation controls must be installed prior to construction, must be maintained during construction, and must be removed when sufficient vegetation is established to control the erosion and sedimentation and the construction area is stabilized.

(M) Alternative sewage collection systems. The executive director may approve an alternative procedure which is technically justified; signed, sealed, and dated by a Texas licensed

professional engineer indicating equivalent environmental protection; and which complies with the requirements of §317.2(d) of this title.

(N) Required corrective action. Notwithstanding compliance with the requirements of subparagraphs (A) - (M) of this paragraph, sewage collection systems must operate in a manner that will not cause pollution of the Edwards Aquifer. Any failure must be corrected in a manner satisfactory to the executive director.

(4) Contents of organized sewage collection system plan.

(A) Application. For organized sewage collection systems, the information required under §213.4 of this title must be filed with the executive director at the appropriate regional office.

(B) Narrative description of proposed organized sewage collection system. A narrative report must include, at a minimum, a geographic description and anticipated type of development within the sewage collection system service area.

(C) Geologic assessment. A geologic assessment, as described in subsection (b)(3) of this section, must be performed by a geologist along the path of the proposed sewer line(s), plus 50 feet on each side of the proposed sewer line(s). The geologic assessment report must be signed, sealed, and dated by the geologist preparing the report.

(D) Technical report. For an organized sewage collection system, a technical report must be submitted on forms provided by, or approved by, the executive director. The technical report must contain the information requested in the following subsections of this section: (b)(4)(A)(ii) and (iv), (B), (D)(i), (F)(i), and (G). A technical report for a water pollution abatement plan submitted under subsection (b) of this section satisfies this requirement, provided it properly addresses the proposed sewage collection system.

(E) Plans and specifications. Plans and specifications addressing all the requirements in paragraphs (2) and (3) of this subsection, must include at a minimum:

(i) a map showing the location of the organized sewage collection system layout in relation to recharge zone boundaries;

(ii) a map showing the location of the organized sewage collection system layout overlaid by topographic contour lines, using a contour interval of not greater than ten feet, and showing the area within both the five-year floodplain and the 100-year floodplain of any drainage way;

(iii) construction documents prepared by, or under the supervision of, a Texas licensed professional engineer, which have also been signed, sealed, and dated by that Texas licensed professional engineer, at a minimum, must include:

(I) plan and profile views of the collection system;

- (II) construction details of collection system components;
- (III) specifications for all collection system components; and
- (IV) proposed pollution abatement measures for sensitive features identified along the path of the proposed sewer line.

(d) Static hydrocarbon and hazardous substance storage in underground storage tanks system.

(1) Standards for underground storage tank systems. New or replacement systems for the underground storage of static hydrocarbons or hazardous substances must be of double-walled or an equivalent method approved by the executive director. Methods for detecting leaks in the inside wall of a double-walled system must be included in the facility's design and construction. The leak detection system must provide continuous monitoring of the system and must be capable of immediately alerting the system's owner of possible leakages.

(A) Installation. All underground hydrocarbon and hazardous substance storage tank systems must be installed by a person possessing a valid certificate of registration in accordance with the requirements of Chapter 334, Subchapter I of this title (relating to Underground Storage Tank On-Site Supervisor Licensing and Contractor Registration).

(B) Siting. Any new underground hydrocarbon and hazardous substance storage tank system that does not incorporate a method for tertiary containment must be located a minimum horizontal distance of 150 feet from any domestic, industrial, or irrigation well, or other sensitive feature as determined under the geologic assessment at the time of construction or replacement under paragraph (2)(C) of this subsection or the tankhold inspection under subsection (f)(2)(B) of this section. This method of tertiary containment also applies to the placement of a tank system within 150 feet of a public water supply well without a sanitary control easement of 150 feet as defined in §290.41(c)(1)(F) of this title (relating to Water Sources).

(2) Contents of an underground storage tank facility plan. An underground storage tank facility plan must, at a minimum, contain the following information.

(A) Application. The information required under §213.4 of this title must be filed with the executive director at the appropriate regional office.

(B) Site location map. A site location map as specified in subsection (b)(2) of this section including a legible road map, a general location map, and a site plan, must be submitted as part of the plan.

(C) Geologic assessment. For all facilities located on either the recharge zone or transition zone, a geologic assessment prepared by a geologist, as described in subsection (b)(3) of this section, must be submitted for the site. The geologic assessment report must be signed, sealed, and dated by the geologist preparing the report.

(D) Technical report. For all facilities, located on either the recharge zone or transition zone, a technical report must be submitted on forms provided by, or approved by, the executive director. The technical report must contain the information requested in subsection (b)(4)(B) and (C) and (5) of this section. A technical report for a water pollution abatement plan submitted under subsection (b) of this section satisfies this requirement, provided it properly addresses the proposed underground storage tank facility.

(e) Static hydrocarbon and hazardous substance storage in an aboveground storage tank facility.

(1) Design standards. Systems used for the temporary and permanent aboveground storage of static hydrocarbon and hazardous substance must be constructed within controlled drainage areas that are sized to capture one and one-half (1-1/2) times the storage capacity of the system. The controlled drainage area must be constructed of, and in a material impervious to, the substance(s) being stored, and must direct spills to a convenient point for collections and recovery. Any spills from storage tank facilities must be removed from the controlled drainage area for disposal within 24 hours of the spill.

(2) Contents of an aboveground storage tank facility plan. A permanent aboveground storage tank facility plan must contain, at a minimum, the following information.

(A) Application. For an aboveground storage tank facility, the information required under §213.4 of this title must be filed with the executive director at the appropriate regional office.

(B) Site location map. A site location map as specified in subsection (b)(2) of this section, including a legible road map, a general location map, and a site plan, must be submitted as part of the plan for a permanent facility.

(C) Geologic assessment. For all facilities located on either the recharge zone or transition zone, a geologic assessment prepared by a geologist, as described in subsection (b)(3) of this section, must be submitted for the area containing the aboveground storage tank system. The geologic assessment report must be signed, sealed, and dated by the geologist preparing the report.

(D) Technical report. For all facilities located on either the recharge zone or transition zone, a technical report must be submitted on forms provided by, or approved by, the executive director. The technical report must contain the information requested in subsection (b)(4)(B) and (C) and (5) of this section. A technical report for a water pollution abatement plan submitted under subsection (b) of this section satisfies this requirement, provided it properly addresses the proposed aboveground storage tank facility.

(3) A description of measures that will be used to contain any spill of hydrocarbons or hazardous substances from temporary storage of 250 gallons or more must be included with the plan unless described under subsection (b)(4)(G) of this section. Any new temporary aboveground hydrocarbon and hazardous substance storage tank system must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.

(4) Exemptions from this section.

(A) Equipment used to transmit electricity that utilizes oil for insulation or cooling purposes, including transformers and oil circuit breakers, are exempt from this subsection. Construction of supporting structures is a regulated activity for which a water pollution abatement plan under subsection (a)(1) of this section is required.

(B) Permanent storage facilities with a cumulative storage capacity of less than 500 gallons are exempt from this section.

(f) Notification and inspection.

(1) The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation. Notification must be given to the appropriate regional office no later than 48 hours prior to commencement of the regulated activity.

(A) Written notification must include:

- (i) the date on which the regulated activity will commence;
- (ii) the name of the approved plan for the regulated activity; and
- (iii) the name of the prime contractor and the name and telephone number of the contact person.

(B) The executive director will use the notification to determine if the applicant is eligible for an extension of an approved plan. Construction will not be considered to have commenced until written notification is received by the appropriate regional office.

(2) If any sensitive feature is discovered during construction, replacement, or rehabilitation, all regulated activities near the sensitive feature must be suspended immediately.

(A) The holder of an approved Edwards Aquifer protection plan must immediately notify the appropriate regional office of any sensitive features encountered during construction. This notice must be given before continuing construction.

(B) Regulated activities near the sensitive feature may not proceed until the executive director has reviewed a geologic assessment report prepared by a geologist that consists of information required under subsection (b)(3)(C) and (D) of this section for the sensitive feature and has reviewed and approved the methods proposed to protect the sensitive feature and the Edwards Aquifer from potentially adverse impacts to water quality. The geologic assessment report must be signed, sealed, and dated by the geologist preparing the report.

(C) The holder of an approved sewage collection system plan, must meet the following.

(i) Upon completion of any lift station excavation, a geologist must certify that the excavation has been inspected for the presence of sensitive features. The certification must be signed, sealed, and dated by the geologist preparing the certification. Certification that the excavation has been inspected must be submitted to the appropriate regional office.

(I) Further activities may not proceed until the executive director has reviewed and approved the methods proposed to protect any sensitive feature and the Edwards Aquifer from potentially adverse impacts to water quality from the lift station.

(II) Construction may continue if the geologist certifies that no sensitive feature or features were present.

(ii) The applicant must submit a plan for ensuring the structural integrity of the sewer line or for modifying the proposed collection system alignment around the feature. The plan must be certified by a Texas licensed professional engineer. These plans must be submitted to the appropriate regional office for review and approval.

(D) For an approved underground storage tank facility plan, a geologist must certify that a completed tankhold excavation has been inspected for the presence of sensitive features. The certification must be signed, sealed, and dated by the geologist preparing the certification.

(i) Certification that the tankhold excavation has been inspected must be submitted to the appropriate regional office.

(ii) If a sensitive feature is discovered, the applicant must propose methods to protect the feature and the Edwards Aquifer from potentially adverse impacts to water quality from the underground storage tank system. Installation activities may not proceed until the executive director has reviewed and approved the proposed methods. The protection methods must be consistent with subsection (d)(1)(B) of this section.

(iii) Construction may continue if the geologist certifies that no sensitive feature or features were present.

(3) The executive director must review methods or plans proposed to protect sensitive features and the Edwards Aquifer from potentially adverse impacts to water quality. This review will be completed within one week of receiving a method or plan. Regulated activities near the sensitive feature may not continue until the executive director has approved the proposed methods or plans.

(g) On-site sewerage systems. On-site sewerage systems located on the recharge zone are subject to §285.40 of this title (relating to OSSFs on the Recharge Zone of the Edwards Aquifer) and other applicable provisions contained in Chapter 285 of this title. Systems must be designed, installed, maintained, repaired, and replaced in accordance with Chapter 285 of this title.

(h) Exemption.

(1) Regulated activities exempt from the Edwards Aquifer protection plan application requirements under this section are:

(A) the installation of natural gas lines;

(B) the installation of telephone lines;

(C) the installation of electric lines;

(D) the installation of water lines;

(E) the installation of other utility lines which are not designed to carry and will not carry the following:

(i) pollutants;

(ii) storm water runoff;

(iii) sewage effluent; or

(iv) treated effluent from a wastewater treatment facility.

(2) An individual land owner who seeks to construct his/her own single-family residence or associated residential structures on the site is exempt from the Edwards Aquifer protection plan application requirements under this section, provided that he/she does not exceed 20% impervious cover on the site.

(3) Temporary erosion and sedimentation controls are required to be installed and maintained for exempted activities on the recharge zone.

(4) All temporary erosion and sedimentation controls:

(A) must meet the requirements contained in subsection (b)(4)(D)(i) of this section;

(B) must be installed prior to construction;

(C) must be maintained during construction; and

(D) may be removed only when vegetation is established and the construction area is stabilized.

(5) The executive director may monitor storm water discharges from these projects to evaluate the adequacy of the temporary erosion and sedimentation control measures. Additional protection will be required if the executive director determines that these controls are inadequate to protect water quality.

Adopted July 23, 2003

Effective September 1, 2003

§213.6. Wastewater Treatment and Disposal Systems.

(a) General.

(1) New industrial and municipal wastewater discharges into or adjacent to water in the state that would create additional pollutant loading are prohibited on the recharge zone.

(2) Increases in existing discharges into or adjacent to water in the state that would increase or add new pollutant loading are prohibited on the recharge zone.

(3) Existing permits may be renewed for the same discharge volumes and with the same conditions and authorizations specified in the permit. Permits will not be renewed if the facility becomes non-compliant, as defined in Chapter 70 of this title (relating to Enforcement).

(4) New land application wastewater treatment plants located on the recharge zone must be designed, constructed, and operated such that there are no bypasses of the treatment facilities or any discharges of untreated or partially treated wastewater.

(5) Design of wastewater treatment plants must be in accordance with Chapter 317 of this title (relating to Design Criteria for Sewerage Systems).

(b) Land application systems.

(1) Except for licensed private sewage facilities, land application systems that rely on percolation for wastewater disposal are prohibited on the recharge zone.

(2) Wastewater disposal systems for disposal of wastewater on the recharge zone utilizing land application methods, such as evaporation or irrigation, will be considered on a case-by-case basis. At a minimum, those systems must attain secondary treatment as defined in Chapter 309 of this title (relating to Effluent Limitations).

(3) Existing permits may be renewed for the same discharge volumes and with the same conditions and authorizations specified in the permit unless the facility becomes non-compliant, as defined in Chapter 70 of this title (relating to Enforcement).

(c) Discharge upstream from the recharge zone.

(1) All new or increased discharges of treated wastewater into or adjacent to water in the state, other than industrial wastewater discharges, within zero to five (0 to 5) miles upstream from the recharge zone, at a minimum, shall achieve the following level of effluent treatment:

(A) five milligrams per liter of carbonaceous biochemical oxygen demand, based on a 30-day average;

(B) five milligrams per liter of total suspended solids, based on a 30-day average;

(C) two milligrams per liter of ammonia nitrogen, based on a 30-day average;
and

(D) one milligram per liter of phosphorus, based on a 30-day average.

(2) All new or increased discharges into or adjacent to water in the state, other than industrial wastewater discharges, more than five miles but within ten miles upstream from the recharge zone and any other discharges that the agency determines may affect the Edwards Aquifer, at a minimum, must achieve the level of effluent treatment for 2N based on a 30-day average as set out in Table 1 of Chapter 309 of this title. More stringent treatment or more frequent monitoring may be required on a case-by-case basis.

(3) All discharges, other than industrial wastewater discharges, more than five (5) miles upstream from the recharge zone which enter the main stem or a tributary of Segment 1428 of the Colorado River, or Segment 1427, main stem Onion Creek, or a tributary of Onion Creek must comply with §311.43 of this title (relating to Effluent Requirements for All Tributaries of Segment 1428 of the Colorado River and Segment 1427, Onion Creek, and Its Tributaries, of the Colorado River Basin), and to §311.44 of this title (relating to Disinfection). More stringent treatment or more frequent monitoring may be required on a case-by-case basis.

(4) Any existing permitted industrial wastewater discharges within zero to ten (0 to 10) miles upstream of the recharge zone must, at all times, discharge effluent in accordance with permitted limits. Any application for new industrial wastewater discharge permits for facilities zero to ten (0 to 10) miles upstream of the recharge zone will be considered on a case-by-case basis, in accordance with appropriate discharge limits applicable to that industrial activity and with consideration of its proximity to the recharge zone.

Adopted September 23, 1998

Effective June 1, 1999

§213.7. Plugging of Abandoned Wells and Borings.

(a) All identified abandoned water wells, including injection, dewatering, and monitoring wells must be plugged pursuant to requirements of the Texas Department of Licensing and Regulation under 16 TAC Chapter 76 (relating to Licensing and Regulation of Water Well Drillers and Water Well Pump Installers) and all other locally applicable rules, as appropriate.

(b) Abandoned injection wells must be closed under the requirements of Chapter 331 of this title (relating to Underground Injection Control).

(c) All borings with depths greater than or equal to 20 feet must be plugged with a non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring or gravel. All borings less than 20 feet must be backfilled

with cuttings from the boring or gravel. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation. Voids may be filled with gravel.

Adopted September 23, 1998

Effective June 1, 1999

§213.8. Prohibited Activities.

(a) Recharge zone. The following activities are prohibited on the recharge zone:

(1) waste disposal wells regulated under Chapter 331 of this title (relating to Underground Injection Control);

(2) new feedlot/concentrated animal feeding operations regulated under Chapter 321 of this title (relating to Control of Certain Activities by Rule);

(3) land disposal of Class I wastes, as defined in §335.1 of this title (relating to Definitions);

(4) the use of a sewage holding tank as part of an organized sewage collection systems (lift stations approved by the executive director are not prohibited);

(5) new municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities); and

(6) new municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.

(b) Transition zone. The following activities are prohibited on the transition zone:

(1) waste disposal wells regulated under Chapter 331 of this title;

(2) land disposal of Class I wastes, as defined in §335.1 of this title; and

(3) new municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title.

(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.

Adopted October 10, 2002

Effective November 3, 2002

§213.9. Exceptions.

(a) Granting of exceptions. Exceptions to any substantive provision of this chapter related to the protection of water quality may be granted by the executive director if the requestor can demonstrate equivalent water quality protection for the Edwards Aquifer. No exception will be granted for a prohibited activity. Prior approval under this section must be obtained from the executive director for the exception to be authorized.

(b) Procedure for requesting an exception. A person requesting an exception to the provisions of this chapter relating to the protection of water quality must file an original and three copies of a written request with the executive director at the appropriate regional office stating in detail:

- (1) the name, address, and telephone numbers of the requestor;
- (2) site and project name and location;
- (3) the nature of the exception requested;
- (4) the justification for granting the exception as described in subsection (a) of this section; and
- (5) any other pertinent information that the executive director requests.

(c) Fees related to requests for exceptions. A person submitting an application for an exception, as described in this section, must pay \$500 for each exception request. The fee is due and payable at the time the exception request is filed, and should be submitted as described in §213.12 of this title (relating to Application Fees). If the exception request fee is not submitted in the correct amount, the executive director is not required to consider the exception request until the correct fee is submitted.

Adopted April 2, 2008

Effective April 24, 2008

§213.10. Enforcement.

Liability for penalties may result and may subject a noncompliant person to enforcement proceedings initiated by the executive director if there is failure to comply with:

- (1) any provision of this chapter,
- (2) an approved or conditionally approved Edwards Aquifer protection plan, or
- (3) any applicable regulation or order of the commission issued pursuant to this chapter and in accordance with Chapter 26 and other relevant provisions of the Texas Water Code or Texas Health and Safety Code.

Adopted September 23, 1998

Effective June 1, 1999

§213.11. Groundwater Conservation Districts.

The commission recognizes the authorities, powers, and duties of special-purpose districts, created by the Texas Legislature or by the commission under Chapter 36 of the Texas Water Code, as groundwater conservation districts to conserve, prevent waste, and protect the quality of ground water. In order to foster cooperation with local governments, the commission encourages districts to assist it in the administration of this chapter by carrying out the following functions within the areal extent of their geographic jurisdiction which includes the recharge zone or transition zone:

- (1) cooperating with licensing authorities in carrying out the provisions of this chapter,
- (2) conducting such geologic investigations as are necessary to provide updated information to the executive director regarding the official maps of the recharge zone and transition zone,
- (3) monitoring the quality of water in the Edwards Aquifer, and
- (4) maintaining maps of regulated activities on the recharge or transition zone.

Adopted December 4, 1996

Effective December 27, 1996

§213.12. Application Fees.

The person submitting an application for approval or modification of any plan under this chapter must pay an application fee in the amount set forth in §213.14 of this title (relating to Fee Schedule). The fee is due and payable at the time the application is filed. The fee must be sent to the appropriate regional office or the cashier in the agency headquarters located in Austin, accompanied by an Edwards Aquifer Fee Application Form, provided by the executive director. Application fees must be paid by check or money order, payable to the "Texas Commission on Environmental Quality ." If the application fee is not submitted in the correct amount, the executive director is not required to consider the application until the correct fee is submitted.

Adopted August 10, 2005

Effective September 1, 2005

§213.13. Fees Related to Requests for Extensions.

The person submitting an application for an extension of an approval of any plan under this chapter must pay \$150 for each extension request. The fee is due and payable at the time the extension request is filed, and should be submitted as described in §213.12 of this title (relating to Application Fees). If the extension fee is not submitted in the correct amount, the executive director is not required to consider the extension request until the correct fee is submitted. The extension request must be submitted to the appropriate regional office and must include a copy of the Edwards Aquifer protection plan and approval letter that is the subject of the extension request.

Adopted April 2, 2008

Effective April 24, 2008

§213.14. Fee Schedule.

(a) **Water Pollution Abatement Plans.** For water pollution abatement plans and modifications to those plans, the application fee shall be based on the classification and total acreage of the site where regulated activities will occur as specified in Table 1 of this subsection.

Figure 30 TAC §213.14(a)

Table 1

CLASSIFICATION/NUMBER OF ACRES	FEE
One single-family residential dwelling on less than 5 acres	\$650
Multiple single-family residential dwellings and parks	
Less than 5 acres	\$1,500
5 acres to less than 10 acres	\$3,000
10 acres to less than 40 acres	\$4,000
40 acres to less than 100 acres	\$6,500
100 acres to less than 500 acres	\$8,000
500 acres or more	\$10,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	
Less than 1 acre	\$3,000
1 acre to less than 5 acres	\$4,000
5 acres to less than 10 acres	\$5,000
10 acres to less than 40 acres	\$6,500
40 acres to less than 100 acres	\$8,000
100 acres or more	\$10,000

(b) Organized sewage collection systems. For sewage collection system plans and modifications, the application fee shall be based on the total number of linear feet of all lines for which approval is sought. The fee shall be \$.50 per linear foot, with a minimum fee of \$650 and a maximum fee of \$6,500.

(c) Underground and aboveground storage tank facilities. For underground or permanent aboveground storage tank system facility plans and modifications, the application fee shall be based on the number of tanks or piping systems for which approval is sought. The fee shall be \$650 per tank or piping system, with a minimum fee of \$650 and a maximum fee of \$6,500.