

The Texas Commission on Environmental Quality (commission) proposes amendments to §§213.1, 213.3, 213.4, 213.12, 213.20 - 213.22, 213.24, and 213.27.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES

Chapter 213 regulates certain activities having the potential for polluting the Edwards Aquifer and hydrologically connected surface streams to protect existing and potential uses of groundwater and maintain Texas Surface Water Quality Standards. The activities subject to regulation are those that pose a threat to water quality within mapped geographic areas designated as the recharge, transition, and contributing zones to the Edwards Aquifer on official maps adopted by the commission.

The recharge zone is the area where the rock units of the Edwards Aquifer occur at the surface. Water and potential pollutants of concern can move directly into the aquifer through cracks, fissures, caves, and other openings with little to no natural barriers to flow or mitigation of contaminants.

The transition zone is designated in areas where the Edwards Aquifer is in transition from water table conditions to confined (artesian) conditions. In the transition zone, faults with significant vertical movement occur near the southeastern boundary of the recharge zone, cutting through and shifting the overlying confining rock formations. These faults can conduct contaminants downward very quickly to the artesian portion of the aquifer. The artesian aquifer is highly transmissive and many public water supply wells are completed in this zone. Some of these faults are in close proximity to public water supply wells and travel times for contaminants are short.

Finally, the areas designated as contributing zone are immediately upstream of the recharge zone where storm water runoff from rainfall flows downstream to the recharge zone. Some areas within the transition zone are topographically higher than the recharge zone and storm water runoff will flow back from the transition zone onto the recharge zone. These areas are designated as contributing zone within the transition zone.

The regulatory boundaries used in the Edwards Aquifer program were established by the commission and its predecessors using the information available at the time the maps were adopted. The primary techniques were interpretation of aerial photography, utilization of existing maps of other research organizations, and limited physical inspection or ground truthing. The boundary is interpreted from information containing varying degrees of detail, and the result is not a detailed depiction of actual field conditions at a site-specific scale of significant recharge features, which may contribute to direct recharge. More detailed mapping efforts, refined geologic concepts, and hydrologic testing in recent years have enabled more accurate delineation of the recharge zone, affording better and more comprehensive water quality protection.

The boundaries of the regulatory zones for the Edwards Aquifer have undergone many changes as new information has been made available. Whole counties have been added (1985, 1990) and partially deleted (1986). The lines within counties have been modified with the transition zone being added (1986, 1990) and recharge zone being modified (1974, 1984, 1986, 1990, 1999). A buffer zone was established in 1970, deleted in 1974, and reestablished as the contributing zone in 1999.

The agency's official maps delineate regulatory zones for the surface area subject to regulation under Chapter 213, are referenced in the rules and are therefore subject to rulemaking. The proposed mapping changes are in response to both a petition received by the commission from the Barton Springs/Edwards Aquifer Conservation District (BSEACD) to redraw portions of the recharge zone boundaries in southern Travis and northern Hays Counties and to the commission's review of new geologic mapping work of the Edwards Aquifer rock units in southern Hays and Comal Counties by the United States Geological Survey (USGS) and of the New Braunfels area by the University of Texas Bureau of Economic Geology (UTBEG). Appendix A1, which appears in the Tables and Graphics section of this issue of the *Texas Register*, is a location map illustrating the counties and 7.5 Minute Quadrangles affected by this proposed rulemaking.

Barton Springs/Edwards Aquifer Conservation District Petition and Commission Response

The commission received a petition on December 13, 2002, from the BSEACD requesting that the commission revise its regulations in Chapter 213, Edwards Aquifer, to redraw portions of the recharge zone boundaries on the agency's official maps. The petitioner requested changes to the boundary that would add approximately 8.8 square miles to the existing 89.33 square miles of recharge zone for the Barton Springs segment of the Edwards Aquifer in Travis and northern Hays Counties. BSEACD requested that the commission designate approximately 4.6 square miles of the existing contributing zone area as recharge zone in total spread over five locations on the western boundary of the recharge zone. BSEACD also requested that the commission designate approximately 4.2 square miles of the existing transition zone area as recharge zone in total spread over six locations along the eastern boundary of the recharge zone. Lastly, BSEACD requested that the commission designate approximately 0.3 square miles of the existing recharge zone area as transition zone.

On February 5, 2003, the commission considered the petition and instructed the executive director to examine the issues in the petition and to initiate rulemaking based on further staff review and field verification of boundary delineations. The agency staff reviewed the petition and supporting information, and conducted field visits to evaluate the petitioner's interpretation of the geology in the areas indicated on the map materials submitted with the petition. Multiple field visits were made to cover all of the locations in the petition. Many of the visits were in the company of affected landowners and/or their representatives and consultants. On many occasions, a representative of the petitioner was also present during the field investigation phase.

The petitioner requested that the commission change the designation of areas on the western boundary of the recharge zone from contributing zone to recharge zone based on the inclusion of the Walnut Formation as part of the Edwards Group. This unit was mapped by the USGS in the San Antonio area as the Basal Nodular Member of the Kainer Formation, and isolated examples of groundwater flow through solution features have been documented in this rock unit. The Basal Nodular Member is characterized by the USGS as a low permeability unit except in surface occurrences where the unit has been modified by karst processes. In the geological literature, there is a difference of opinion regarding the southern extent of the Walnut Formation mapped in northern Travis and Williamson Counties, the northern extent of the Basal Nodular Member mapped in the San Antonio area, and the transitional nature of the relationships of the units. The commission, after review of the literature and field investigations, believes the transition of these units occurs near the Hays-Comal County line. In Hays and Travis Counties, the lower boundary of the Edwards rock units comprising the recharge zone is considered to be the contact between the Edwards Group and the Walnut Formation. In Comal County,

the lower boundary of the Edwards rock units comprising the recharge zone is considered to be the contact between the Basal Nodular Member of the Kainer Formation and the Glen Rose Formation.

In the petition area, the contact between the Edwards Group and the Walnut Formation is distinct. Agency staff observed no evidence of solution features in the Walnut Formation, and concluded that the Walnut Formation serves as an aquaclude sealing the base of the overlying isolated outcrops of Edwards limestone throughout the western portion of the petition area. This sealing effect results in water seeping out from the overlying Edwards rock units and discharging to nearby streams rather than recharging the main body of the Edwards Aquifer. Consequently, this proposal does not change the designations of these areas from contributing zone to recharge zone.

Along the eastern portion of the recharge zone, the petitioner requested that the commission change the designation of six areas from transition zone to recharge zone. The request to change five of the areas was based on recent mapping work by the USGS that identified previously unmapped outcrops of the Georgetown Limestone in the petition area. Agency staff confirmed the presence of Georgetown Limestone in four of these areas, and the commission is proposing changes from transition zone to either recharge zone or contributing zone within the transition zone for these areas. One area mapped as an outcrop of Georgetown Limestone lies below the outflow of Barton Springs, and the proposal does not change the designation of this area.

In the sixth area, the petitioner requested a change from transition zone to recharge zone because local surface water drainage patterns suggest that storm water runoff flows back onto the recharge zone. Agency staff determined that the area is highly developed and drainage patterns have been drastically

altered. At present, the drainage is captured by large runoff control structures constructed by the Texas Department of Transportation and directed away from the recharge zone. The commission does not propose to change the designation of this area.

The petitioner also requested a small area on the eastern boundary be re-designated from recharge zone to transition zone where the outcrop of Georgetown Limestone is hydraulically below a modified recharge feature known as Antioch Cave in Onion Creek. The petitioner contends that no significant recharge is taking place below Antioch Cave. The commission agrees and is proposing this change based on the lack of observable recharge features occurring downstream of Antioch Cave.

In response to the petitioner, the proposed rulemaking changes the designation of portions of four areas in northern Hays and southern Travis Counties, totaling 4.29 square miles. A change is proposed of 2.89 square miles, from transition zone to contributing zone within the transition zone. In those same four areas, the proposed rulemaking changes the designation of 1.08 square miles from transition zone to recharge zone. The commission further proposes to change the designation of 0.32 square miles from recharge zone to transition zone. Proposed changes to regulatory zone boundaries and proposed changes to the Edwards Aquifer recharge zone maps incorporating the changes are illustrated in the Tables and Graphics section of this issue of the *Texas Register* for the Oak Hill 7.5 Minute Quadrangle, Appendix A2 and A3, respectively; for the Mountain City 7.5 Minute Quadrangle, Appendix A6 and A7, respectively; and for the Buda 7.5 Minute Quadrangle, Appendix A8 and A9, respectively. The proposed Edwards Aquifer recharge zone maps depicted on full-size 7.5 Minute Quadrangles incorporating the changes may be viewed on the agency's Web site at www.tceq.state.tx.us or at the

commission headquarters in Austin located at 12100 Park 35 Circle; at the San Antonio Regional Office, 14250 Judson Road; and the Austin Regional Office, 1921 Cedar Bend Drive, Suite 150.

Examination of Other Areas in Hays and Comal Counties

More detailed geologic mapping of Edwards Aquifer rock units has become available in recent years. The USGS published maps showing hydrogeologic subdivisions of the Edwards Aquifer outcrop for Comal County in 1994, for Hays County in 1994, for Bexar County in 1995, and for Northeastern Hays and Southwestern Travis Counties in 1996. The UTBEG published a geologic map of the New Braunfels, Texas, 30 X 60 Minute Quadrangle in 2000. For the areas in southern Hays and Comal Counties outside the petition area, agency staff reviewed new geologic mapping, previous mapping work, and geologic literature concerning the area and conducted field visits to evaluate the geology to determine if the official maps should be revised based on new information and to provide for regulatory consistency.

Five areas along the eastern boundary of the recharge zone in southern Hays and Comal Counties were reviewed in the vicinity of the Blanco River, on the San Marcos North and Mountain City 7.5 Minute Quadrangles; the City of San Marcos, on the San Marcos North 7.5 Minute Quadrangle; the community of Hunter, on the Hunter and San Marcos South 7.5 Minute Quadrangles; the City of New Braunfels, on the Hunter 7.5 Minute Quadrangle; and the community of Garden Ridge, on the Bat Cave 7.5 Minute Quadrangle. The USGS and UTBEG maps indicated extensive faulting in the areas that was confirmed by agency staff's field investigation. Map review and field investigation in these areas identified outcrops of the Georgetown Limestone, previously undifferentiated or mapped as other rock units in several areas. The surface topography in the area is such that storm water from high areas of

non-Edwards rock units at higher elevations drains to areas within the recharge zone at lower elevations. The commission is proposing changes from transition zone to recharge zone for outcrops of Georgetown Limestone and contributing zone within the transition zone for the areas that drain storm water to areas of recharge zone.

Proposed changes to regulatory zone boundaries and proposed changes to the official Edwards Aquifer recharge zone maps incorporating the changes are illustrated in the Tables and Graphics section of this issue of the *Texas Register* for the San Marcos North 7.5 Minute Quadrangle, Appendix A14 and A15, for the Mountain City 7.5 Minute Quadrangle, Appendix A6 and A7, for the Hunter and San Marcos South 7.5 Minute Quadrangles, Appendix A20 and A21 and A22 and A23, respectively; and for the Bat Cave 7.5 Minute Quadrangle, Appendix A24 and A25. The proposed Edwards Aquifer recharge zone maps depicted on full-size 7.5 Minute Quadrangles incorporating the changes may be viewed on the agency's Web site at www.tceq.state.tx.us or at the commission headquarters in Austin located at 12100 Park 35 Circle; at the San Antonio Regional Office, 14250 Judson Road; and the Austin Regional Office, 1921 Cedar Bend Drive, Suite 150.

Areas along the western boundary of the recharge zone in southern Hays and Comal Counties were reviewed. The areas were those in the vicinity of the Guadalupe River basin in Comal County depicted on the Smithson Valley, Sattler, and Devil's Backbone 7.5 Minute Quadrangles, the area near the Village of Wimberley depicted on the Wimberley 7.5 Minute Quadrangle, and the area near the community of Hays City depicted on the Driftwood 7.5 Minute Quadrangle. Map review and field investigation in the Guadalupe River basin area identified outcrops of the Kainer Formation including the Basal Nodular Member previously undifferentiated or mapped as other rock units on the Smithson

Valley and Sattler 7.5 Minute Quadrangles. Map review and field investigation in the Hays City area identified outcrops of the Edwards Group previously undifferentiated or mapped as other rock units on the Driftwood 7.5 Minute Quadrangle. The commission is proposing changes from contributing zone to recharge zone for these areas. A few areas previously included in the mapped recharge zone in the Guadalupe River basin and Wimberley areas were found to be hilltop, island outcrops of the Kainer Formation or the Walnut Formation draining to and surrounded by the Glen Rose Formation. The commission is proposing changes from recharge zone to contributing zone for these areas.

Proposed changes to regulatory zone boundaries and proposed changes to the official Edwards Aquifer recharge zone maps incorporating the changes are illustrated in the Tables and Graphics Section of this issue of the *Texas Register* for the Smithson Valley, Sattler, and Devil's Backbone 7.5 Minute Quadrangles, Appendix A16 and A17, A18 and A19, and A10 and A11, respectively; for the Wimberley 7.5 Minute Quadrangle, Appendix A12 and A13, and for the Driftwood 7.5 Minute Quadrangle, Appendix A4 and A5. The proposed Edwards Aquifer recharge zone maps depicted on full-size 7.5 Minute Quadrangles incorporating the changes may be viewed on the agency's Web site at www.tceq.state.tx.us or at the commission headquarters in Austin located at 12100 Park 35 Circle; at the San Antonio Regional Office, 14250 Judson Road; and the Austin Regional Office, 1921 Cedar Bend Drive, Suite 150.

The proposed rulemaking changes the designation of portions of eight areas in southern Hays and Comal Counties totaling 29.14 square miles. Areas re-designated from transition zone to recharge zone totaled 5.34 square miles. Areas re-designated from transition zone to contributing zone within the transition zone totaled 18.92 square miles. No areas were re-designated from recharge zone to

transition zone. Areas re-designated from recharge zone to contributing zone within the transition zone totaled 1.74 square miles. Areas re-designated from recharge zone to contributing zone totaled 1.41 square miles. Areas re-designated from contributing zone to recharge zone totaled 1.73 square miles.

Map Corrections Related to 1999 Rule Amendments Affecting Bexar County

During previous rule revisions (effective June 1, 1999) that amended the official Edward Aquifer recharge zone maps in Bexar, Medina, Uvalde, and Kinney Counties, the Camp Bullis 7.5 Minute Quadrangle in northern Bexar County was inadvertently omitted from the list of quadrangle maps to be affected by the re-designation of areas as contributing zone. As a result, an open area designated as recharge zone remains depicted on the Camp Bullis quadrangle map. This rulemaking proposes to modify the Camp Bullis quadrangle to change the designation of this area from recharge zone to contributing zone for an area of 0.3 square miles. This change and the resulting effect on the area included in the contributing zone are illustrated in the Tables and Graphics Section of this issue of the *Texas Register* on Appendix A26 and A27, respectively.

Regulatory Effects of Zone Designation Change

Transition Zone to Recharge Zone

In those areas currently designated as transition zone, but proposed for re-designation to recharge zone, there would be no change to the existing requirements to address aboveground or underground storage tanks under §213.5(e) and (f). Newly regulated activities could include construction of buildings; utility stations; utility lines; roads; highways; or railroads and clearing, excavation, or other activities which alter or disturb the topographic or existing storm water runoff characteristics of a site. All new

regulated activities would be subject to agency approval through a water pollution abatement plan (WPAP) under §213.5(b) and/or an organized sewage collection system (SCS) plan under §213.5(c).

Prior to commencement of construction, a WPAP will need to be submitted to and approved by the executive director and the plan must contain information on the site location, a geologic assessment, and a technical report that details the best management practices (BMPs) that will be used during and after construction to address storm water runoff and other activities that have the potential to contaminate the Edwards Aquifer. There would also be an ongoing obligation to maintain BMPs during and after construction. However, currently this area is subject to regulations on construction and some post-construction storm water discharges subject to Texas Pollutant Discharge Elimination System statewide general permits, and the re-designation would require plans to be approved by the executive director prior to commencement of construction rather than prior to the notification of intent under the general permit.

Before commencement of construction on an SCS, an SCS plan would have to be submitted to and approved by the executive director and would contain special construction requirements to protect the aquifer in the system plans and specifications, a geologic assessment, and a technical report. Sensitive features discovered during construction would have to be addressed for activities under either an approved WPAP or SCS plan. As an ongoing obligation, all new and existing SCSs must be tested to determine types and locations of structural damage and defects that would allow exfiltration of effluent to occur. All leakage must be contained immediately and repairs should be repaired as soon as possible, but at least within one year of discovery.

There would be additional activities prohibited in the re-designated areas under §213.8(a)(2), (4), and (6) and new concentrated animal feeding operations, use of sewage holding tanks as part of an SCS (not including lift stations), and new industrial and municipal wastewater discharges would be prohibited. This would be added to the list of already prohibited activities over the areas currently designated as transition zone for land disposal of certain hazardous wastes, waste disposal wells, and certain municipal solid waste landfills.

Currently, all discharges, other than industrial wastewater discharges, 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 still comply with 30 TAC §311.43, 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, Disinfection. Also, the effluent limitation under §213.6(c) applies in areas where discharges flow back onto the recharge zone from the transition zone. With the re-designation to recharge zone, new and increased wastewater discharges would need to meet wastewater treatment and disposal system requirements under §213.6(a) and (b) as discussed in the section on contributing zone to recharge zone. On-site sewage facilities regulated under 30 TAC Chapter 285, On-Site Sewage Facilities, must meet the special provision contained in that chapter for new facilities installed in the recharge zone and additional provisions may be required by the authorized agent. As part of the WPAP, a written statement is required from the authorized agent that the site is suitable for the use of private sewage facilities or that identifies those sites that are not suitable.

Changes from transition zone to recharge zone are proposed for the Oak Hill, Mountain City, Buda, and San Marcos North 7.5 Minute Quadrangles.

Transition Zone to Contributing Zone Within the Transition Zone

For those areas currently designated as transition zone, but proposed for change to contributing zone within the transition zone, all of the provisions of the rules that apply to activities in the transition zone will remain in effect including prohibited activities under §213.8(b) and (c). Regulated activities will include construction of buildings; utility stations; utility lines; construction of and storage of static hydrocarbons and hazardous substances in underground and aboveground storage tank systems (including temporary storage using an aboveground storage tank); construction on roads, highways, or railroads; and clearing, excavation, or other activities which alter or disturb the topographic or existing storm water runoff characteristics of a site.

Currently, this area is subject to regulations on construction and some post construction storm water discharges under the Texas Pollutant Discharge Elimination System statewide general permits and the re-designation would require individual plans to be approved by the executive director prior to commencement of construction rather than prior to the notification of intent process under the general permit. Prior to commencement of construction, a contributing zone plan will need to be submitted to and approved by the executive director for all regulated activities that will disturb five or more acres or are part of a common plan for development that will disturb five or more acres. The plan must contain information on the site location and a technical report which details the BMPs that will be used during and after construction to address storm water runoff and other activities that have the potential to pollute surface streams which recharge the Edwards Aquifer. There would be an ongoing obligation to maintain BMPs both during and after construction.

During construction, if a sensitive feature is discovered in the path of a sewage line, construction must cease near the feature and the location and extent of those features must be assessed by a geologist and reported to the appropriate regional office in writing within two working days of discovery feature. An engineered plan that will allow the line to be constructed in a manner that will maintain the structural integrity of the line must be submitted and approved by the executive director.

While not a new requirement, with mapped re-designation it will make it easier to determine if an area is subject to the requirements under §213.6(c) regarding discharges upstream from the recharge zone. All new or increased discharges of wastewater discharges, other than industrial, within zero to five miles upstream from the recharge zone, at a minimum, will be required to achieve the level of effluent treatment specified in §213.6(c)(1). All new or increased wastewater discharges, other than industrial, 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 30 TAC §309.4, Table 1, Effluent Limitations for Domestic Wastewater Treatment Plants. More stringent treatment or more frequent monitoring may be required on a case-by-case basis.

This rulemaking is proposing that all new wastewater treatment and discharge requirements under §213.6(a) and (b) would apply to areas designated as contributing zone within the transition zone. The regulatory impact of this change is described in the discussion on re-designation from contributing zone to recharge zone.

Changes from transition zone to contributing zone within the transition zone are proposed for the Oak Hill, Mountain City, Buda, San Marcos North, San Marcos South, Hunter, and Bat Cave 7.5 Minute Quadrangles.

Contributing Zone to Recharge Zone

In those areas currently designated as contributing zone, but proposed to be changed to recharge zone, all new developments, regardless of the size of acreage disturbed would be subject to agency approval through either a WPAP, an organized SCS plan, an aboveground storage tank facility plan, and/or an underground storage tank facility plan, depending on the type of development. Newly regulated activities would include construction of and storage of static hydrocarbons and hazardous substances in underground and aboveground storage tank systems (including temporary storage using an aboveground storage tank) and installation and maintenance of organized SCSs. There are no prohibited activities under Chapter 213 within the areas currently designated as contributing zone. With re-designation to recharge zone, prohibitions under §213.8(a) would apply for the following activities: waste disposal into underground injection wells, new concentrated animal feeding operations, land disposal of Class I wastes, the use of sewage holding tanks as part of an organized SCS, new Type I municipal solid waste disposal facility operations, and new municipal and industrial wastewater discharges that would create additional pollutant loadings. In addition, for applications submitted on or after September 1, 2001, injection wells that transect or terminate in the Edwards Aquifer are prohibited.

The current contributing zone plan requirements for the areas subject to regulations are identical to the WPAP requirements for BMPs that will be used during and after construction to address storm water runoff and other activities that have the potential to contaminate the Edwards Aquifer, including an ongoing obligation to maintain BMPs both during and after construction. However, there are several differences that will be required for recharge zone development including a geologic assessment as part of the plan and incorporating a storm water pollution prevention plan into the WPAP.

Before commencement of construction on an SCS, an SCS plan would have to be submitted and approved by the executive director as described in the section on transition zone to recharge zone. Existing discharges would need to meet wastewater treatment and disposal system requirements under §213.6. New wastewater treatment and discharge requirements under §213.6(a) and (b) would apply to the newly designated recharge zone areas. New industrial and municipal wastewater discharges that would create additional pollutant loading are prohibited on the recharge zone, and increases in existing discharges that would increase or add new pollutant loads are also prohibited. Existing wastewater permits may be renewed for the same discharge volumes and with the same conditions and authorizations specified in the permit; however, permits may not be renewed if the facility becomes noncompliant. New land application wastewater treatment plants must be designed, constructed, and operated so that there are no bypasses of the facilities or any discharges of untreated or partially treated wastewater. Land application systems that rely on percolation for wastewater disposal are prohibited. Wastewater disposal systems utilizing land application methods may be considered on a case-by-case basis; however, at a minimum, those systems must attain secondary treatment as defined in Chapter 309, Effluent Limitations. Existing land application permits may be renewed for the same discharge

volumes and with the same conditions and authorizations specified in the permit depending on the facility's compliance with all applicable regulations.

On-site sewage facilities regulated under Chapter 285 must meet the special provision contained in that chapter for new facilities installed in the recharge zone, and additional provisions may be required by the authorized agent. As part of the WPAP, a written statement is required from the authorized agent that the site is suitable for the use of private sewage facilities or that identifies those that are not suitable.

Currently, aboveground storage tank systems in the contributing zone are regulated by both statewide rules and under Chapter 213. To protect the aquifer, current regulations require temporary storage of static hydrocarbons, and hazardous substances in an aboveground storage tank facility (≥ 250 gallons) require spill containment and 150-foot setback from the five-year flood plain. Permanent aboveground storage tank facilities (≤ 500 gallons cumulative storage) must be constructed and spills removed using the standards contained in §213.5(e)(1) for the recharge zone. Additional requirements, due to re-designation, will be the submittal to and the approval by the executive director prior to commencement of construction of an aboveground storage tank facility plan, which must include a site location map, geologic assessment, and technical report, unless this information is part of an approved WPAP. There are some exceptions or exemptions for regulation of aboveground storage tanks contained in §213.5(e)(4).

Currently, underground storage tank systems in the contributing zone are regulated by statewide rules under 30 TAC Chapter 334, Underground and Aboveground Storage Tanks, and there are secondary

containment requirements for underground storage tanks in Bexar and Comal Counties under 30 TAC Chapter 214, Secondary Containment Requirements for Underground Storage Tank Systems Located Over Certain Aquifers. Due to re-designation, standards for new or replacement underground storage tanks for the storage of hydrocarbons and hazardous substances will require a double-walled or an equivalent system with methods for detecting leaks in the inside wall of a double-walled system. The leak detection system must provide continuous monitoring and must be capable of immediately alerting the system's owner of possible leakages. In addition, any new underground storage tanks that do not incorporate a method for tertiary containment must be located a minimum horizontal distance of 150 feet from any domestic, industrial, or irrigation well; public water supply well without a sanitary control easement; or other sensitive feature as determined under the geologic assessment at the time of construction or replacement. An underground storage tank facility plan must be submitted to and approved by the executive director prior to commencement of construction. The plan must contain a site location map, a geologic assessment, and a technical report in accordance with §213.5(d). A technical report for a WPAP satisfies the plan requirement, provided it properly addresses the proposed underground storage tank facility.

Changes from contributing zone to recharge zone are proposed for the Driftwood, Devil's Backbone, Smithson Valley, and Sattler 7.5 Minute Quadrangles.

Recharge Zone to Contributing Zone

In those areas currently designated as recharge zone, but proposed for change to contributing zone, new regulated activities would have to meet the less stringent requirements for the contributing zone. Only regulated activities that will disturb five or more acres or are part of a common plan for development

that will disturb five or more acres would trigger the need for a contributing zone plan; however, the BMP requirements during and after construction are unchanged from the recharge zone. No activities are specifically prohibited under Chapter 213 in the contributing zone. Prior to commencement of construction, a contributing zone plan will need to be submitted to and approved by the executive director for all regulated activities.

Regulated activities are very similar to the recharge zone; however, additional requirements beyond statewide rules are not required for organized SCSs and specific construction standards for underground storage tanks are not required beyond statewide rules, except for Bexar and Comal County requirements under Chapter 214. Requirements for temporary aboveground storage tank systems are the same as the recharge zone, and permanent aboveground storage tank systems must meet the same construction design standards used in the recharge zone. No geologic assessment is required for plans submitted to the executive director for approval prior to commencement of construction.

The provisions for wastewater treatment and disposal under §213.6(a) and (b) would no longer apply, including the prohibition of new or increased wastewater discharges that would create additional pollutant loadings on the recharge zone. However, requirements under §213.6(c) for wastewater discharge upstream from the recharge zone would apply. All new or increased discharges of treated wastewater, other than industrial wastewater discharges, within zero to five miles upstream from the recharge zone, at a minimum, are required to achieve an effluent treatment of five milligrams per liter of carbonaceous biochemical oxygen demand, based on a 30-day average; five milligrams per liter of total suspended solids, based on a 30-day average; two milligrams per liter of ammonia nitrogen, based on a 30-day average; and one milligram per liter of phosphorus, based on a 30-day average. All new or

increased discharges, 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 §309.4. More stringent treatment or more frequent monitoring may be required on a case-by-case basis. All discharges, other than industrial wastewater discharges, more than five 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 and §311.44. More stringent treatment or more frequent monitoring may be required on a case-by-case basis. Any existing permitted industrial wastewater discharges within zero to ten 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 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. On-site sewage facilities regulated under Chapter 285 would no longer have to meet the special provision contained in that chapter for new facilities installed in the recharge zone; however, additional provisions may still be required by the authorized agent.

Changes from recharge zone to contributing zone are proposed for the Devil's Backbone, Wimberley, Smithson Valley, Sattler, and Camp Bullis 7.5 Minute Quadrangles.

Recharge Zone to Contributing Zone Within the Transition Zone

In those areas currently designated as recharge zone, but proposed for change to contributing zone within the transition zone, new regulated activities would have to meet the less stringent requirements. However, activities and the regulations for them in both the transition zone and the contributing zone would still apply. There would be no change in requirements for either aboveground or underground storage tank systems from the requirement in the recharge zone. A contributing zone plan (rather than a WPAP) would be required only for regulated activities that will disturb five or more acres or are part of a common plan for development and no geologic assessment would be required; however, the BMP requirements during and after construction are unchanged from the recharge zone.

No SCS plan would be required; however, if during construction, a sensitive feature is discovered in the path of a sewage line, construction must cease near the feature and the location and extent of those features must be assessed by a geologist and reported to the appropriate regional office in writing within two working days of the discovery feature. An engineered plan that will allow the line to be constructed in a manner that will maintain the structural integrity of the line must be submitted and approved by the executive director.

The provisions for wastewater treatment and disposal under §213.6(a) and (b) would still apply if proposed changes to §213.21(c) are adopted and would include the prohibition of new or increased wastewater discharges that would create additional pollutant loadings on the recharge zone. On-site sewage facilities regulated under Chapter 285 would no longer have to meet the special provision contained in that chapter for new facilities installed in the recharge zone; however, additional provisions may still be required by the authorized agent.

The number of prohibited activities under §213.8 would be reduced and there would no longer be a prohibition on new concentrated animal feeding operations regulated under 30 TAC Chapter 321, Control of Certain Activities by Rule, or the use of a sewage holding tank as part of an organized SCS.

Changes from recharge zone to contributing zone within the transition zone are proposed for the Mountain City and Buda 7.5 Minute Quadrangles.

Recharge Zone to Transition Zone

In those areas currently designated as recharge zone, but proposed for change to transition zone, new regulated activities would have to meet the less stringent requirements for the transition zone. The types of land development regulated would be limited to the requirements for aboveground and underground storage tank systems currently in place for the recharge zone. Prohibited activities would be reduced and would no longer contain a prohibition on new concentrated animal feeding operations regulated under Chapter 321, or the use of a sewage holding tank as part of an organized SCS.

No WPAP or SCS plans would be required; however, statewide requirements for BMPs to control storm water discharges during and after construction under the Texas Pollutant Discharge Elimination System statewide general permits would still apply. If wastewater discharges are not upstream of the recharge zone, the wastewater treatment and disposal system requirements under §213.6(c) would not apply; however, there are additional provisions for discharges into the main stream or tributary of the Colorado River and Onion Creek as described in the section on transition zone to contributing zone within the transition zone. On-site sewage facilities regulated under Chapter 285 would no longer have

to meet the special provision contained in that chapter for new facilities installed in the recharge zone; however, additional provisions may still be required by the authorized agent.

Changes from recharge zone to transition zone are proposed for the Buda 7.5 Minute Quadrangle.

SECTION BY SECTION DISCUSSION

Administrative and grammatical changes are proposed throughout the sections to bring the existing rule language into agreement with guidance provided in the *Texas Legislative Council Drafting Manual*, October 2002.

Proposed rule language will correct inaccurate rule citations; specify locations where official maps identifying the Edwards Aquifer recharge, contributing, and transition zones are maintained; rephrase for readability; and correct the agency's name. The proposal specifies the effective dates of map changes. Wastewater discharge provisions under §213.6(a) and (b) are proposed to be extended to areas designated as contributing zone within the transition zone. The commission specifically requests comments on §213.4(a)(4) and §213.21(c) regarding when mapped changes and the resulting regulatory requirements should take effect on developments in progress on the effective date of the map change.

Subchapter A: Edwards Aquifer in Medina, Bexar, Comal, Kinney, Uvalde, Hays, Travis, and Williamson Counties

Proposed changes to §213.1(3), Purpose, update the reference to the current procedures that an applicant or a person affected may use to file a motion to overturn a decision by the executive director under 30 TAC §50.139(a), (b), and (d) - (g).

Changes to the definitions for “Recharge zone” and “Transition zone” under §213.3, Definitions, are proposed to eliminate confusion among the regulated community as to which maps apply to the Chapter 213 requirements. Groundwater conservation districts in the area have mapped the recharge zone for their own purposes, and these maps may not coincide with the areas regulated by the commission under Chapter 213. The language is proposed to be revised to indicate that regulated areas are those areas identified on official maps located in the agency’s central office and in the appropriate regional office. The definition of “Feedlot/concentrated animal feeding operation” has been changed to conform with existing rules. The definition of “Groundwater conservation district” has been changed to conform with Texas Water Code (TWC), Chapter 36.

The commission is also proposing changes to the official maps referenced under §213.3(27), “Recharge zone” and (36), “Transition zone” on the Oak Hill, Driftwood, Mountain City, Buda, Devil’s Backbone, Wimberley, San Marcos North, San Marcos South, Smithson Valley, Sattler, Hunter, and Bat Cave 7.5 Minute Topographic Quadrangles in Comal, Hays, and Travis Counties and on the Camp Bullis 7.5 Minute Topographic Quadrangles in Bexar County. The scale of the maps precludes their publication in the *Texas Register*; however, illustrative maps showing the proposed changes to the official maps are shown in Appendices A1 - A27 which appear in the Tables and Graphics section of this issue of the *Texas Register*. Detailed maps are available for public inspection on the agency’s Web site and at the commission’s Austin and San Antonio regional offices and central office, respectively located at 1321 Cedar Bend Drive, Suite 150, Austin, Texas, (512) 339-2929; 14250 Judson Road, San Antonio, Texas, (210) 490-3096; and 12100 Park 35 Circle, Building F, Room 2202, (512) 239-4506.

The proposed map changes are described in the BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES section of this rulemaking preamble.

Proposed changes to §213.4(a)(4), Application Processing and Approval, address projects in progress when recharge and transition zone maps are revised by setting a date for all mapped changes. For areas designated as recharge zone or transition zone on official maps prior to the effective date of the change, and for which this designation did not change, all Edwards Aquifer protection plans submitted to the executive director, on or after the effective date, will be reviewed under all the provisions of the subchapter in effect on the date the plan is submitted. For areas designated as recharge zone or transition zone on official maps on the effective date of the change, 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 of the rules adopting the map changes, 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 mapped changes.

Regulated activities in areas designated as transition zones on official maps prior to the effective date of changes and designated as recharge zones on the date the maps go into effect, 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 the changes.

Proposed changes to §213.12, Application Fees, revise the name of the agency from the Texas Natural Resource Conservation Commission to the Texas Commission on Environmental Quality.

Subchapter B: Contributing Zone to the Edwards Aquifer in Medina, Bexar, Comal, Kinney, Uvalde, Hays, Travis, and Williamson Counties

The commission proposes two changes to §213.20, Purpose. Subsection (b) has been updated to reflect the delegation of the permitting program under the National Pollutant Discharge Elimination System program from the United States Environmental Protection Agency (EPA) to the commission. Proposed changes to subsection (c) update the cross-reference to current procedures that an applicant or a person affected may use to file a motion to overturn a decision by the executive director under §50.139(a), (b), and (d) - (g).

Section 213.21(c), Applicability and Person or Entity Required to Apply, is proposed to be revised to delete the specific references to paragraphs under §213.3 to avoid confusion as new definitions are added to that section of the rules that result in a renumbering of the existing paragraphs. The requirements for regulated activities in the contributing zone within the transition zone have been expanded to require that sewer lines that bridge caverns or sensitive recharge features be constructed in a manner that will maintain the structural integrity of the line. The cross-referenced rules currently require that, when caverns or sensitive 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 of the sewer line must comply with the requirements under §213.5(f). Corrections of section titles are also proposed; however, the specific cross-reference numbers remain unchanged.

Also, under §213.21(c) the commission is proposing that wastewater treatment and discharge requirements in §213.6(a) and (b) be applied to all areas designated as contributing zone within the

transition zone. The contributing zone in the transition zone is located along the eastern boundary of the recharge zone and is characterized by elevated topography that allows direct wastewater discharges to streams to flow back to the recharge zone. Current rules under §213.6(c) would allow for effluent that meets certain standards to be discharged directly to the streams and would allow subsurface disposal of effluent based upon percolation in the contributing zone within the transition zone. Due to the unique geology of the contributing zone in the transition zone, these discharge limitations are not adequately protective of Edwards Aquifer water quality. The eastern recharge zone boundary is characterized by significant and often intense faulting. This faulting provides both additional avenues of infiltration and increased permeability and flow that is not present on the western recharge zone boundary. This eastern recharge zone boundary area is also at the transition to the artesian or main body of the Edwards Aquifer where most of the public water supply wells are located. Dye tracer studies have shown that groundwater travel times in this area are on the order of days to weeks to drinking water receptor wells and springs. As a result of this change, new industrial and municipal wastewater discharges that would create additional pollutant loading would be prohibited and increases in existing discharges that would increase or add new pollutant loading are also prohibited. Existing wastewater permits could be renewed for the same discharge volumes and with the same conditions and authorizations specified in the permit; however, permits may not be renewed if the facility becomes noncompliant. New land application wastewater treatment plants must be designed, constructed, and operated so that there are no bypasses of the facilities or any discharges of untreated or partially treated wastewater. Land application systems that rely on percolation for wastewater disposal are prohibited. Wastewater disposal systems utilizing land application methods may be considered on a case-by-case basis; however, at a minimum, those systems must attain secondary treatment as defined in Chapter 309. Existing land application permits could be renewed for the same discharge volumes and with the

same conditions and authorizations specified in the permit depending on the facility's compliance with all applicable regulations.

Section 213.21(f) is proposed to be revised from specifying the effective date for the entire Subchapter B to addressing the applicability of Subchapter B rules to projects in progress when new areas are added to the contributing zone or to the contributing zone within the transition zone. For areas designated as contributing zone or contributing zone within the transition zone on official maps prior to the effective date of this rule change, and for which this designation did not change, all plans submitted to the executive director will be reviewed under all the provisions of Subchapter B in effect on the date the plan is submitted. For projects that were re-designated from another regulatory zone under Subchapter A to either contributing zone or contributing zone within the transition zone under Subchapter B, on the effective date of these rules, the 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 these rules.

Section 213.21(h) is proposed to be deleted to avoid confusion between the initial effective date of Subchapter B and the effective date of regulations to new areas added to the contributing zone or to the contributing zone within the transition zone.

The commission is proposing several changes to §213.22, Definitions. While the definition of “Contributing zone” is unchanged, the illustrations, Figure 1a: §213.22. Contributing Zone (Southern Part) for the Edwards Aquifer and Figure 1b: §213.22. Contributing Zone (Northern Part) for the Edwards Aquifer, have been revised to reflect proposed changes to the recharge zone and to the contributing zone within the transition zone. The proposed new Figure 1 and Figure 2 appear in the Tables and Graphics section of this issue of the *Texas Register*. As discussed previously in the SECTION BY SECTION DISCUSSION explanation of §213.3, detailed maps are available for public inspection on the agency’s Web site and at the agency’s Austin and San Antonio regional offices and central office.

Figure: 30 TAC Chapter 213 - preamble

Proposed changes to §213.22(3) delete the specific reference to paragraphs under §213.3 to avoid confusion, as new definitions are added to that section which could result in a renumbering of the existing paragraphs. The general description of areas where the contributing zone within the transition zone can occur is proposed to be revised to reflect the geographic directions of the proposed additions in Comal, Hays, and Travis Counties.

Proposed changes to §213.22(4) and (5) and §213.24, Technical Report, update the rules to reflect the delegation of the EPA's National Pollutant Discharge Elimination System program to the commission as the Texas Pollutant Discharge Elimination System program.

Proposed changes to §213.27, Contributing Zone Plan Application and Exception Fees, revise the name of the agency from the Texas Natural Resource Conservation Commission to the Texas Commission on Environmental Quality.

FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENT

Jeffrey Horvath, Analyst, Strategic Planning and Grants Management Section, determined that, for the first five-year period that the proposed rules are in effect, no significant fiscal implications are anticipated for the agency or for other units of state or local government. However, fiscal implications are anticipated for owners or developers of land in several small areas in Comal, Hays, and Travis Counties as a result of the enforcement and administration of the proposed rule changes for the first five years that the rules are in effect.

The proposed amendments would redraw portions of the Edwards Aquifer recharge zone boundaries. In particular, areas currently designated as transition zone or contributing zone would be re-designated as areas in the recharge zone or as areas in the contributing zone within the transition zone. These proposed changes will have the effect of increasing regulatory requirements for many development activities in 29.96 square miles of land in Hays, Travis, and Comal Counties. At the same time, for 3.77 square miles of land in these same counties and Bexar County, areas will be re-designated from recharge zone to contributing zone, recharge zone to contributing zone within the transition zone, or recharge zone to transition zone, resulting in less stringent requirements for regulated activities.

The proposed changes are expected to result in an increase in land development costs for approximately 29.96 square miles of land. Additional costs are expected for preparing environmental assessments and engineering plans, fees for agency review of required plans, and the costs associated with construction and management practices that meet the requirements of the proposed rules.

The proposed rulemaking may result in an increase in compliance inspections, Edwards Aquifer protection plan applications, and requests for technical assistance from the agency's Edwards Aquifer protection program staff. However, it is anticipated that any additional program costs will be offset through the collection of fee revenue. Revenue is currently derived from fees assessed for the processing of plans for the construction and maintenance of projects to protect the Edwards Aquifer. Fees are levied for each application, amendment, exception, or time extension requested. The plans for which fees may be imposed are: 1) WPAPs; 2) plans for SCSs; and 3) plans for hydrocarbon storage facilities or hazardous substance storage facilities.

There are no direct fiscal implications anticipated for local governments except those units of local government that are responsible for projects involving regulated activities subject to the provisions of these rules. The costs or cost savings for these local governments will be similar to the costs for other, non-governmental entities.

PUBLIC BENEFITS AND COSTS

Mr. Horvath also determined that for each year of the first five years that the proposed rules are in effect, the public benefit anticipated will be the reduction or prevention of the degradation of the water quality of the Edwards Aquifer, resulting in the protection of public water supplies and the reduction of the risk to human health and safety from the effects of developments in urban, suburban, and rural areas on water quality. The proposed rules are also expected to preserve aquatic and related biological resources and maintain the quality of public recreational resources.

Costs are anticipated for owners and developers of land in the areas proposed to be re-designated as part of the recharge zone, or the contributing zone within the transition zone.

Owners and developers of land in the areas proposed to be re-designated as part of the recharge zone would be affected because developments, regardless of geographic size or type, would be subject to agency approval through an Edwards Aquifer protection plan. Protective measures would be more extensive because the activity would now be considered to be in direct contact with the aquifer.

Additional costs would be incurred by landowners for permitting, platting, and developing the land. New developments in areas re-designated as recharge zone would be subject to an agency-approved

WPAP and/or an organized SCS plan, and would require a geologic assessment of the site. Prohibition of new industrial and municipal wastewater discharges would apply.

Owners and developers of land in the areas proposed to be re-designated as contributing zone within the transition zone would still be subject to transition zone prohibitions and agency approval of underground and aboveground petroleum storage tank plans. In addition, they would be required to submit a contributing zone plan for approval to develop five or more acres. They would also be required to meet additional requirements such as notice of intent to commence construction, notice of discovery and assessments of caverns and sensitive features, and approval of methods to protect the Edwards Aquifer water quality from pollution migration during construction of sewer lines. Abandoned wells will be required to be plugged. Prohibition of new industrial and municipal wastewater discharges that would create additional pollutant loadings would apply to both existing and newly designated areas of the contributing zone within the transition zone.

Effects of Zone Designation Change

Transition Zone to Recharge Zone

In those areas currently designated as transition zone, but proposed for re-designation to recharge zone, there would be no change to the existing requirements to address aboveground or underground storage tanks. Newly regulated activities include construction of buildings, utility stations, utility lines, roads, highways, or railroads and clearing, excavation, or other activities which alter or disturb the topographic or existing storm water runoff characteristics of a site. All new, regulated activities would be subject to agency approval through a WPAP and/or an organized SCS plan. Prior to commencement of construction, a WPAP must be submitted to the agency for approval. The plan must contain

information on the site location, a geologic assessment, and a technical report which details the BMPs that will be used during and after construction to address storm water runoff and other activities that have the potential to contaminate the Edwards Aquifer. There would be an ongoing obligation to maintain BMPs both during and after construction.

An SCS plan would have to be submitted to the agency before beginning construction on an organized SCS. The plan would have to contain special construction requirements to protect the aquifer, a geologic assessment, and a technical report. As an ongoing obligation, all new and existing SCSs must be tested to determine types and locations of structural damage and defects that would allow exfiltration of effluent to occur. All leakage must be contained immediately and repairs should be repaired as soon as possible, but at least within one year of discovery. Sensitive features discovered during construction would have to be addressed for activities under either an approved WPAP or SCS plan.

There would be additional activities prohibited in the re-designated areas including new concentrated animal feeding operations, the use of sewage holding tanks as part of an organized SCS (not including lift stations), and new industrial and municipal wastewater discharges.

With the re-designation to recharge zone, new and increased wastewater discharges would need to meet wastewater treatment and disposal system requirements. For on-site sewage facilities, a written statement would be required from the authorized agent that the site is suitable for the use of private sewage facilities or that identifies those are that are not suitable.

Costs

The costs of preparing a geologic assessment may vary from \$800 to \$8,000, depending on the size and characteristics of the site. The costs of preparing a WPAP are estimated to be between \$3,000 to \$10,000. Fees collected by the agency for the review and approval of each plan are estimated to range from \$1,000 - \$5,000, depending on the size of the site and the nature of the activity.

Application fees for SCS plans will be based on the total number of linear feet of all lines for which approval is sought. The fee is \$.50 per linear foot, with a minimum fee of \$500 and a maximum fee of \$5,000. There will also be costs associated with testing the lines once they are put into use. Every five years, existing SCSs must be tested to determine types and location of structural damage and defects that would allow exfiltration to occur. The costs associated with this testing will vary greatly depending on the method of testing, the size of the system and how much line needs to be tested, and the necessary maintenance and repair as a result of the testing. At this time, agency staff are not aware of any existing SCSs over the proposed recharge zone. Any future systems over the recharge zone may experience testing costs ranging from about \$2,000 for a small system up to several million dollars for testing, maintenance, and repair of major city systems.

There is a large range of BMPs used during and after construction for a particular regulated activity and therefore costs associated with design and installation of BMPs could range from \$2,000 to as much as \$100,000. A vegetated filter strip using existing grassy areas to treat a small area may be relatively inexpensive to construct, whereas a large water quality pond to treat a large drainage area can be very costly to build. Any areas within the jurisdiction of the City of Austin will already have to meet requirements for permanent BMPs to comply with the City of Austin regulations.

Transition Zone to Contributing Zone Within the Transition Zone

For those areas currently designated as transition zone, but proposed for change to contributing zone within the transition zone, all of the provisions of the rules that currently apply to activities in the transition zone will remain in effect. Regulated activities will include the construction of: buildings; utility stations; utility lines; underground and aboveground storage tank systems (including temporary storage using an aboveground storage tank); roads; highways; railroads; and clearing, excavation, or other activities which alter or disturb the topographic or existing storm water runoff characteristics of a site.

A contributing zone plan will need to be submitted to the agency for approval prior to commencement of construction for all regulated activities that will disturb five or more acres or are part of a common plan for development that will disturb five or more acres. The plan must contain information on the site location, and a technical report that details the BMPs that will be used during and after construction to address storm water runoff and other activities that have the potential to pollute surface streams which recharge the Edwards Aquifer. There would be an ongoing obligation to maintain BMPs both during and after construction.

During construction, if a sensitive feature is discovered in the path of a sewage line, construction must cease near the feature and the location and extent of those features must be assessed by a geologist and reported to the appropriate regional office in writing within two working days. An engineered plan that will allow the line to be constructed in a manner that will maintain the structural integrity of the line must be submitted and approved by the executive director.

There would be additional activities prohibited in the re-designated areas including new industrial and municipal wastewater discharges that would create additional pollutant loadings.

Costs

The costs associated with development over the contributing zone are much lower compared to the recharge zone. No geologic assessment is required, and the fee for contributing zone plan approval is \$250 regardless of the size and characteristics of the site. The costs associated with preparing the contributing zone plans are estimated to be between \$1,000 to \$3,000.

The areas re-designated as recharge zone or contributing zone within the transition zone will have to meet the requirements pertaining to permanent BMPs. The estimated costs associated with the design and installation of BMPs will range from \$2,000 to as much as \$100,000. Any areas within the jurisdiction of the City of Austin will already have to meet requirements for permanent BMPs to comply with the City of Austin regulations. Projects in the new contributing zone area will not have to meet these requirements if the project is less than five acres or not part of a larger plan of development that will disturb five or more acres.

Contributing Zone to Recharge Zone

In those areas currently designated as contributing zone, but proposed to be changed to recharge zone, all new developments, regardless of the size of acreage would be subject to agency approval through either a WPAP, an SCS plan, an aboveground storage tank facility plan, and/or an underground storage tank facility plan, depending on the type of development. Newly regulated activities would include the storage of static hydrocarbons and hazardous substances in underground and aboveground storage tank

systems (including temporary storage using an aboveground storage tank) and installation and maintenance of organized SCSs. With re-designation to recharge zone, prohibitions would apply for the following activities: waste disposal into underground injection wells, new concentrated animal feeding operations, land disposal of Class I wastes, the use of sewage holding tanks as part of an SCS, new Type I municipal solid waste disposal facilities operations, and new municipal and industrial wastewater discharges that would create additional pollutant loadings. In addition, for applications submitted on or after September 1, 2001, injection wells that transect or terminate in the Edwards Aquifer are prohibited. Existing discharges would need to meet wastewater treatment and disposal system requirements.

The currently required contributing zone plan requirements are identical to the WPAP requirements for BMPs that will be used during and after construction to address storm water runoff and other activities that have the potential to contaminate the Edwards Aquifer, including an ongoing obligation to maintain BMPs both during and after construction. However, for recharge zone development, a geologic assessment must be included as part of the plan and incorporated into the WPAP.

Before commencement of construction on an organized SCS, an SCS plan would have to be submitted and new wastewater treatment and discharge requirements would apply. For on-site sewage facilities, a written statement would be required from the authorized agent that the site is suitable or not suitable for the use of private sewage facilities.

Due to re-designation, there will be additional requirements prior to commencement of construction of an aboveground storage tank facility. Plans submitted to the agency for review and approval must

include a site location map, geologic assessment, and technical report, unless this information is part of an approved WPAP.

Due to re-designation, standards for new or replacement underground storage tanks for the storage of hydrocarbons and hazardous substances will require a double-walled or an equivalent system with methods for detecting leaks in the inside wall of a double-walled system. The leak detection system must provide continuous monitoring and must be capable of immediately alerting the system's owner of possible leakages. In addition, any new underground storage tanks that do not incorporate a method for tertiary containment must be located a minimum horizontal distance of 150 feet from any domestic, industrial, or irrigation well, public water supply well without a sanitary control easement, or other sensitive feature as determined under the geologic assessment at the time of construction or replacement. An underground storage tank facility plan must be submitted to and approved by the executive director prior to commencement of construction. The plan must contain a site location map, a geologic assessment, and a technical report. A technical report for a WPAP satisfies the plan requirement, provided it properly addresses the proposed underground storage tank facility.

Costs

As previously mentioned, the costs of preparing a geologic assessment are estimated to be between \$800 to \$8,000; the costs of preparing a WPAP for sites within the recharge zone are estimated to be between \$3,000 to \$10,000; and fees collected by the agency for the review and approval of the plans are estimated to range from \$1,000 - \$5,000, depending on the size of the site and the nature of the activity.

Application fees for SCS plans are estimated to be between \$500 and \$5,000, and costs associated with five-year testing of the lines once they are put into use could be as low as \$2,000 and as high as several million dollars. At this time, agency staff are not aware of any existing SCSs over the proposed recharge zone.

For underground or permanent aboveground storage tank system facility plans and modifications, the agency application fee is based on the number of tanks or piping systems for which approval is sought. The fee is \$500 per tank or piping system, with a minimum fee of \$500 and a maximum fee of \$5,000. Double walled underground storage tanks or the equivalent may cost between \$6,000 to \$9,000 above the cost for a single-walled tank.

Recharge Zone to Contributing Zone

In those areas currently designated as recharge zone, but proposed for change to contributing zone, regulated activities would have to meet less stringent requirements. Only activities that will disturb five or more acres or are part of a common plan for development that will disturb five or more acres would trigger the need for a contributing zone plan.

However, the BMP requirements during and after construction are unchanged from the recharge zone. Prior to construction, a contributing zone plan will need to be submitted to and approved by the agency for all regulated activities.

Costs

The costs associated with the development over the contributing zone are much lower compared to the recharge zone. No geologic assessment is required for the contributing zone, and the fee for review and approval of a contributing zone plan is \$250, regardless of the size and characteristics of the site. The costs associated with preparing the contributing zone plans are estimated to be between \$1,000 to \$3,000.

The areas re-designated as contributing zone will still have to meet the requirements pertaining to permanent BMPs. The estimated costs associated with the design and installation of BMPs will range from \$2,000 to as much as \$100,000. Any areas within the jurisdiction of the City of Austin will already have to meet the requirements for permanent BMPs to comply with the City of Austin regulations. Projects in the new contributing zone area will not have to meet these requirements if the project is less than five acres or not part of a larger plan of development that will disturb five or more acres.

Recharge Zone to Contributing Zone Within the Transition Zone

In those areas currently designated as recharge zone, but proposed for change to contributing zone within the transition zone, new regulated activities would have to meet less stringent requirements. A contributing zone plan (rather than a WPAP) would be required only for regulated activities that will disturb five or more acres or are part of a common plan for development, and no geologic assessment would be required. The BMP requirements during and after construction are unchanged from the recharge zone. The prohibition for new industrial and municipal wastewater discharges is unchanged.

No SCS plan would be required. However, if during construction, a sensitive feature is discovered in the path of a sewage line, construction must cease near the feature and the location and extent of those features must be assessed by a geologist and reported to the appropriate regional office in writing within two working days. An engineered plan that will allow the line to be constructed in a manner that will maintain the structural integrity of the line must be submitted and approved by the executive director.

Costs

The costs associated with the development over the contributing zone are much lower compared to the recharge zone. No geologic assessment is required for the contributing zone, and the fee for a contributing zone plan is \$250 regardless of the size and characteristics of the site. The costs associated with preparing the contributing zone plans are estimated to be between \$1,000 to \$3,000. The areas re-designated as contributing zone within the transition zone will still have to meet the requirements pertaining to permanent BMPs. The estimated costs associated with the design and installation of BMPs will range from \$2,000 to as much as \$100,000. Any areas within the jurisdiction of the City of Austin will already have to meet requirements for permanent BMPs to comply with the City of Austin regulations. Projects in the new contributing zone area will not have to meet these requirements if the project is less than five acres or not part of a larger plan of development that will disturb five or more acres.

Recharge Zone to Transition Zone

In those areas currently designated as recharge zone, but proposed for change to transition zone, new regulated activities would have to meet the less stringent requirements. The types of land development regulated would be limited to only petroleum storage tanks. No WPAP or SCS plans are required.

However, statewide requirements for BMPs to control storm water during and after construction would apply.

SMALL BUSINESS AND MICRO-BUSINESS ASSESSMENT

The fiscal implications of these sections as proposed may include small businesses but, in general, no adverse fiscal implications are anticipated for small businesses or micro-businesses. The fiscal effects on small businesses are anticipated to be similar to those fiscal effects that may be realized by all classes of business. These effects will not vary with the size of the business, but will vary with the size, location, and nature of development activities that may be proposed and undertaken on the Edwards Aquifer or those associated areas subject to these rules.

LOCAL EMPLOYMENT IMPACT STATEMENT

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

DRAFT REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the proposed rulemaking in light of the regulatory impact analysis requirements of Texas Government Code, §2001.0225, and determined that the rulemaking is not subject to §2001.0225, which applies only to certain major environmental rules that meet at least one of four criteria. A "major environmental rule" means a rule the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. These rules meet the definition of a "major environmental rule" but do not meet any of the four criteria that would trigger applicability of §2001.0225.

First, the proposal does not exceed a standard set by federal law. The only related federal law establishes the Sole Source Aquifer Program implemented by the EPA for portions of the Edwards Aquifer, which applies only to federally-funded projects conducted on the aquifer. Under that program, no federal financial assistance may be made to projects that the EPA determines may contaminate the Edwards Aquifer so as to create a significant hazard to public health. To date, no federal regulations setting technical standards exist. There is no federal law that specifically addresses construction activities that may impact the Edwards Aquifer. Therefore, the proposal does not exceed a standard set

by federal law. Moreover, even if the rules did exceed a standard set by federal law, this proposal is specifically required by state law that requires the commission to protect the quality of water in the Edwards Aquifer from pollution (see TWC, §§26.011, 26.046, and 26.0461) and is exempt from the applicability of §2001.0025.

Second, this proposal does not exceed an express requirement of state law. The proposal is designed to implement the commission's statutory responsibility to control the quality of water in the state, including groundwater, under TWC, §§26.011, 26.046, and 28.011. The proposal is intended to comply with the stated requirements of state law and not exceed them.

Third, this proposal does not exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program. This proposal is not covered by any delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program.

Finally, this proposal does not adopt a rule solely under the general powers of the agency instead of under a specific state law. While this proposal adopts a rule under the general powers of the agency, it is also adopted under specific state laws regarding the Edwards Aquifer, TWC, §§26.046, 26.0461, and 28.011, which provide for the protection of the aquifer from pollution.

The commission prepared a takings impact assessment for these rules under Texas Government Code, §2007.043. The specific purpose of the rules is to regulate activities having the potential for causing pollution of the Edwards Aquifer. The rules will substantially advance this specific purpose by delineating more accurate boundaries for the contributing zone, recharge zone, and the transition zone of the Edwards Aquifer. Promulgation and enforcement of these rules could affect private real property.

Texas Government Code, Chapter 2007, prohibits governmental actions that “take” real property, unless the governmental action meets one of the enumerated exceptions. These proposed rules meet the exception in §2007.003(b)(13), which states that a governmental action that is taken in response to a real and substantial threat to public health and safety, and that is designed to significantly advance the health and safety purpose and does not impose a greater burden than necessary, is excepted from the requirements of Chapter 2007. If the Edwards Aquifer is not adequately protected, there is the possibility of degradation to the quality of the water supply that presents a real and substantial threat to public health and safety. The proposed rules will significantly contribute to the prevention of this threat. The Edwards Aquifer is the sole or primary source of water for over 1.5 million people. The proposed rules will define the boundaries of the contributing zone, recharge zone, and the transition zone more accurately. Activities that have the potential for causing significant pollution of the Edwards Aquifer will be regulated appropriately. Therefore, the proposed rules significantly advance public health and safety. These rules are necessary to carry out the stated authority of the commission to protect human health and the environment.

Additionally, in addition to Texas Government Code, §2007.003(b)(13), §2007.003(c) applies to these rules. Section 2007.003(c) exempts the enforcement or implementation of a statute, ordinance, order, rule, regulation, requirement, resolution, policy, guideline, or similar measure that was in effect September 1, 1995, and that prevents the pollution of a reservoir or an aquifer designated as a “sole source” aquifer. This exception applies to the enforcement or implementation of the entire rule even though only part of the Edwards Aquifer has been designated as a sole source aquifer (see 40 FR 58344 (1975) and 53 FR 20897 (1988)). From March 21, 1990 to December 27, 1996, 30 TAC Chapter 313 regulated activities over the recharge or transition zone of the Edwards Aquifer until the rules were relocated to Chapter 213.

CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission reviewed the proposed rulemaking and found that the rules are neither identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11, nor will they affect any action/authorization identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11. Therefore, the proposed rules are not subject to the Texas Coastal Management Program.

ANNOUNCEMENT OF HEARING

The commission will hold a public hearing on this proposal in Austin on April 6, 2005, 10:00 a.m. in Building F, Room 2210, at the commission’s central office located at 12100 Park 35 Circle. The hearing is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the hearing; however, commission staff members will be available to discuss the proposal 30 minutes before the hearing and will answer questions before and after the hearing.

Persons with disabilities who have special communication or other accommodation needs who are planning to attend the hearing should contact Joyce Spencer, Office of Legal Services at (512) 239-5017. Requests should be made as far in advance as possible.

SUBMITTAL OF COMMENTS

Comments may be submitted to Joyce Spencer, Texas Register Team, Office of Legal Services, MC 205, P.O. Box 13087, Austin, Texas 78711-3087 or faxed to (512) 239-4808. All comments should reference Rule Project Number 2003-029-213-WT. Comments must be received by 5:00 p.m., April 25, 2005. For further information or questions concerning this proposal, please contact Steve Musick, Water Supply Division, at (512) 239-5552.

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

§§213.1, 213.3, 213.4, 213.12

STATUTORY AUTHORITY

The amendments are proposed under TWC, §5.103, which provides the commission with the authority to promulgate rules necessary for the exercise of its jurisdiction and powers provided by the TWC and other laws of Texas; and TWC, §5.105, which provides the commission with the authority to establish and approve all general policy of the commission by rule. TWC, §26.011, provides that the commission administer the provisions of TWC, Chapter 26, and establish the level of quality to be maintained and control the quality of the water in the state. Waste discharges or impending discharges are subject to rules adopted by the commission in the public interest. TWC, §26.011, also grants the commission with the powers necessary or convenient to carry out its responsibilities. TWC, §26.341, recognizes that it is the policy of the state to maintain and protect the quality of groundwater and surface water resources from certain substances in underground and aboveground storage tanks that may pollute groundwater and surface water resources. TWC, §26.345, allows the commission to develop a regulatory program regarding underground and aboveground storage tanks. Additionally, TWC, §26.046, requires the commission to hold annual public hearings to receive evidence from the public on actions that the commission should take to protect the Edwards Aquifer from pollution; §26.0461 allows the commission to impose fees for inspecting the construction and maintenance of projects covered by plans and for processing plans or amendments that are subject to review or approval under the commission's Edwards Aquifer rules; §26.051 requires the commission to report annually on the Edwards Aquifer program expenses and allocation of fees; §26.121 prohibits unauthorized

discharges; §26.137 requires the commission to provide for a 30-day comment period in the review process for Edwards Aquifer protection plans in the contributing zone; §26.401 states the goal for groundwater protection in the state; §27.051(h) prohibits the commission from authorizing an injection well that transects or terminates in the Edwards Aquifer with certain exceptions; and §28.011 authorizes the commission to make and enforce rules for the protection and preservation of groundwater quality. Texas Health and Safety Code (THSC), §361.024, provides the commission with the authority to promulgate rules consistent with the Solid Waste Disposal Act and standards of operation for the management and control of solid waste. THSC, §366.012, provides the commission with the authority to adopt rules governing the installation of on-site sewage disposal systems.

The proposed amendments implement TWC, §28.011, which allows the commission to make and enforce rules and regulations for protecting and preserving the quality of underground water.

§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 [of the Water Code], 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) (No change.)

(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 [for reconsideration], under §50.139(a), (b), and (d) - (g) [§50.39(b) - (f)] of this title (relating to Motion to Overturn Executive Director's Decision [for Reconsideration]), of the executive director's final action on an Edwards Aquifer protection plan, modification to a plan, or exception.

§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 [which] contains the casing, pump₁ and pump column in good condition; or

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

(2) - (3) (No change.)

(4) **Appropriate regional office** - For regulated activities covered by this chapter and located in Hays, Travis, and Williamson Counties [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 [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 [which] 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 [EPA], American Society of Civil Engineers, and Water Environment Research Foundation guidance.

(6) - (8) (No change.)

(9) **Edwards Aquifer protection plan** - A general term that [which] 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 [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 [Feedlot/concentrated] animal feeding operation** - As defined in §321.32 of this title (relating to Definitions). [A concentrated, confined livestock or poultry facility operated for meat, milk or egg production, growing, stabling, or housing, in pens or houses wherein livestock or poultry are fed at the place of confinement and crop or forage growing or production of feed is not sustained in the area of confinement.]

(12) **Geologic or manmade features** - Features including₁ but not limited to₂ closed depressions, sinkholes, caves, faults, fractures, bedding plane surfaces, interconnected vugs, reef deposits, wells, borings, and excavations.

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

(14) (No change.)

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

(16) **Hazardous substance** - Any substance designated as such by the administrator of the United States Environmental Protection Agency [EPA] under the Comprehensive Environmental Response, Compensation, and Liability Act; regulated in accordance with [the] 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 [which] prevent the infiltration of water into the soil. Rainwater collection systems for domestic water supplies are not considered impervious cover.

(18) - (21) (No change.)

(22) **Organized sewage collection system** - Any public or private sewage [sewerage] 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) - (26) (No change.)

(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 [and groundwater conservation districts].

(28) **Regulated activity** -

(A) (No change.)

(B) Regulated activity does not include:

(i) (No change.)

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

(iii) - (v) (No change.)

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

(A) - (B) (No change.)

(30) - (31) (No change.)

(32) - (35) (No change.)

(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 [and groundwater conservation districts].

(37) -(39) (No change.)

§213.4. Application Processing and Approval.

(a) Approval by the executive director.

(1) -(3) (No change.)

(4) Projects in progress when recharge and transition zone maps are revised [and the effective date of this rule].

(A) For areas designated as recharge zone or transition zone on official maps prior to the effective date of this paragraph [rule], and for which this designation did not change [on the effective date of this rule], all Edwards Aquifer protection plans submitted to the executive director, on

or after the effective date of this paragraph [the rule], 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 [not] designated as recharge zone or transition zone on official maps on [prior to] the effective date of this paragraph [rule], 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 [not be subject to this subchapter] if, on the effective date [of the rule], 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 [the rule].

(C) Regulated activities in areas designated as transition zone on official maps prior to the effective date of this paragraph [rule] and designated as recharge zone on the effective date of this paragraph [rule] will be regulated as transition zone activities if, on the effective date [of the rule], 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 [the rule].

(D) The effective date of this paragraph is 20 days after the adoption is filed with the Office of the Secretary of State [the amendments to §§213.3 - 213.10 is June 1, 1999].

(5) Assumption of program by local government.

(A) (No change.)

(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, including₂ but not limited to₂ a program that:

(I) regulates activities covered under this chapter; [,] and

(II) (No change.)

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

(iii) (No change.)

(C) (No change.)

(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 [; rather, fees] shall be paid to the commission for continued proper oversight and enforcement. [Nor shall such agreement provide for partial assumption of the program unless expressly authorized by the commission.]

(E) (No change.)

(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) (No change.)

(b) Contents of application [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) (No change.)

(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) - (iii) (No change.)

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

(A) - (D) (No change.)

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

(c) Application submittal.

(1) One [Submit 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 [which] 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 [Applications].

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

(A) - (B) (No change.)

(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) (No change.)

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

(e) - (f) (No change.)

(g) Deed recordation.

(1) (No change.)

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

(3) - (4) (No change.)

(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% [ten percent] 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) - (2) (No change.)

(3) An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50% [50 percent] 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) - (5) (No change.)

(i) (No change.)

(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 [which] would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;

(3) - (6) (No change.)

(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 [rule] 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.

§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 [Office of the agency], 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 [Natural Resource Conservation Commission]." 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.

**SUBCHAPTER B: CONTRIBUTING ZONE TO THE EDWARDS AQUIFER IN MEDINA,
BEXAR, COMAL, KINNEY, UVALDE, HAYS, TRAVIS, AND WILLIAMSON COUNTIES**

§§213.20 - 213.22, 213.24, 213.27

STATUTORY AUTHORITY

The amendments are proposed under TWC, §5.103, which provides the commission with the authority to promulgate rules necessary for the exercise of its jurisdiction and powers provided by the TWC and other laws of Texas; and TWC, §5.105, which provides the commission with the authority to establish and approve all general policy of the commission by rule. TWC, §26.011, provides that the commission administer the provisions of TWC, Chapter 26, and establish the level of quality to be maintained and control the quality of the water in the state. Waste discharges or impending discharges are subject to rules adopted by the commission in the public interest. TWC, §26.011, also grants the commission with the powers necessary or convenient to carry out its responsibilities. TWC, §26.341, recognizes that it is the policy of the state to maintain and protect the quality of groundwater and surface water resources from certain substances in underground and aboveground storage tanks that may pollute groundwater and surface water resources. TWC, §26.345, allows the commission to develop a regulatory program regarding underground and aboveground storage tanks. Additionally, TWC, §26.046, requires the commission to hold annual public hearings to receive evidence from the public on actions that the commission should take to protect the Edwards Aquifer from pollution; §26.0461 allows the commission to impose fees for inspecting the construction and maintenance of projects covered by plans and for processing plans or amendments that are subject to review or approval under the commission's Edwards Aquifer rules; §26.051 requires the commission to report annually on

the Edwards Aquifer program expenses and allocation of fees; §26.121 prohibits unauthorized discharges; §26.137 requires the commission to provide for a 30-day comment period in the review process for Edwards Aquifer protection plans in the contributing zone; §26.401 states the goal for groundwater protection in the state; §27.051(h) prohibits the commission from authorizing an injection well that transects or terminates in the Edwards Aquifer with certain exceptions; and §28.011 authorizes the commission to make and enforce rules for the protection and preservation of groundwater quality. THSC, §361.024, provides the commission with the authority to promulgate rules consistent with the Solid Waste Disposal Act and standards of operation for the management and control of solid waste. THSC, §366.012, provides the commission with the authority to adopt rules governing the installation of on-site sewage disposal systems.

The proposed amendments implement TWC, §28.011, which allows the commission to make and enforce rules and regulations for protecting and preserving the quality of underground water.

§213.20. Purpose.

(a) (No change.)

(b) Nothing in this subchapter is intended to restrict the powers of the commission or any other governmental entity to prevent, correct, or curtail activities in the contributing zone that result or may result in pollution of the Edwards Aquifer or hydrologically connected surface waters. This subchapter

is [These rules are] not exclusive and other rules also apply. In addition to the rules of the commission, the Texas general and individual [EPA NPDES general] permits for storm water discharges from construction activities [Storm Water Discharges from Construction Activities] and local ordinances and regulations providing for the protection of water quality may also apply to activities in the contributing zone.

(c) The executive director must review and act on contributing zone plans subject to this subchapter. The applicant or a person affected may file with the chief clerk a motion to overturn [for reconsideration], under §50.139 (a), (b), and (d) - (g) [§50.39(b)-(f)] of this title (relating to Motion to Overturn Executive Director's Decision [for Reconsideration]), of the executive director's final action on a contributing zone plan or modification to a plan.

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

(a) This subchapter applies [These rules apply] only to the contributing zone as defined in §213.22 of this title (relating to Definitions) of the Edwards Aquifer. This subchapter is [These rules are] not intended to be applied to any other contributing zones for any other aquifers in the State [state] of Texas.

(b) This subchapter applies [These rules apply] only to regulated activities disturbing at least five acres, or regulated activities disturbing less than five acres which are part of a larger common plan of development or sale with the potential to disturb cumulatively five or more acres.

(c) Areas identified as contributing zone within the transition zone described by [definition] §213.22[(2)] of this title and delineated on the official recharge and transition zone maps of the agency as provided by §213.3[(25) and (34)] of this title (relating to Definitions), [respectively,] are subject to both the requirements of this subchapter governing the contributing zone and to the provisions of the recharge zone in §213.5(a)(3) and (4), (c)(3)(K), and (d) - (f) [§213.5(a)(3) and (4); 213.5(d), (e), and (f)] of this title (relating to Required Edwards Aquifer Protection Plans, Notification, and Exemptions [Prohibited Activities]); §213.6(a) and (b) of this title (relating to Wastewater Treatment and Disposal Systems); and §213.7 [213.7] of this title (relating to Plugging of Abandoned Wells and Borings [Required Edwards Aquifer Protection Plans, Notification, and Exemptions]); and to the transition zone provisions of §213.8(b) [213.8(b)] of this title (relating to Prohibited Activities) [which govern activities in the transition zone].

(d) - (e) (No change.)

(f) Applicable regulation for projects in progress when contributing zone or contributing zone within the transition zone designations are revised.

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

(2) For areas that were newly designated as contributing zone or contributing zone within the transition zone on official maps on the effective date of this subsection, regulated [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 [not subject this subchapter] if, on the effective date [of the rule], 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 section [the rule].

(3) The effective date of this subsection is 20 days after the adoption is filled with the Office of the Secretary of State.

(g) Assumption of program by local government.

(1) (No change.)

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

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

(i) regulates activities covered under this chapter; [,] and

(ii) (No change.)

(B) - (C) (No change.)

(3) (No change.)

(4) An agreement under paragraph (3) of this subsection 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 [; rather, fees] shall be paid to the commission. [Nor shall such agreement provide for partial assumption of the program unless expressly authorized by the commission.]

(5) Certification must [shall] be for a term not to exceed five years, subject to renewal.

(6) - (7) (No change.)

[(h) The effective date of this subchapter is June 1, 1999.]

§213.22. Definitions.

The definitions in Texas Water Code, §§26.001, 26.263, and 26.342, and in §213.3 of this title (relating to Definitions) apply to this subchapter. Those definitions have the same meaning unless the context in which they are used clearly indicates otherwise, or those definitions are inconsistent with the definitions listed in this section.

(1) **Best management practices [Management Practices (BMPs)]** - Schedule of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to the Edwards Aquifer and hydrologically connected surface streams. Best management practices [BMPs] also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

(2) **Contributing zone** - The area or watershed where runoff from precipitation flows downgradient to the recharge zone of the Edwards Aquifer. The contributing zone is illustrated on Contributing Zone (Southern Part) for the Edwards Aquifer and Contributing Zone (Northern Part) for

the Edwards Aquifer. The contributing zone is located upstream (upgradient) and generally north and northwest of the recharge zone for the following counties:

Figure 1: 30 TAC §213.22(2)

[Figure 1a: 30 TAC §213.22(2)]

Figure 2: 30 TAC §213.22(2)

[Figure 1b: 30 TAC §213.22(2)]

(A) - (D) (No change.)

(3) **Contributing zone within the transition zone** - The area or watershed where runoff from precipitation flows downgradient to the recharge zone of the Edwards Aquifer. The contributing zone within the transition zone is depicted in detail on the official recharge and transition zones maps of the agency as provided for in §213.3 [§213.3(25) and (34)] of this title (relating to Definitions)[, respectively]. The contributing zone within the transition zone is located [downstream (downgradient) and] generally south and east [southeast] of the recharge zone and includes specifically those areas where stratigraphic units not included in the Edwards Aquifer crop out at topographically higher elevations and drain to stream courses where stratigraphic units of the Edwards Aquifer crop out and are mapped as recharge zone.

(4) **Texas [EPA National] Pollutant Discharge Elimination System [general] permits for storm water discharges from construction activities (TPDES [EPA NPDES general] permits)** - Texas Pollutant Discharge Elimination System [United States Environmental Protection Agency national pollutant discharge elimination system] general or individual permits issued by the agency for storm water discharges from construction activities in Texas [Region 6 as reissued in the July 6, 1998 issue of the Federal Register (63 FR 36489-36519)].

(5) **Notice of intent (NOI) [NOI]** - Notice of intent required by the Texas Pollutant Discharge Elimination System [EPA NPDES] general permits for storm water discharges from construction activities.

(6) **Regulated activity -**

(A) Any construction or post-construction activity occurring on the contributing zone of the Edwards Aquifer that has the potential for contributing pollution to surface streams that enter the Edwards Aquifer recharge zone.

(i) These activities include construction or installation of:

(I) - (VII) (No change.)

(ii) Clearing, excavation, or other activities which alter or disturb the topographic or existing storm water [stormwater] runoff characteristics of a site are regulated activities.

(iii) Any other activities that pose a potential for contaminating storm water [stormwater] runoff are regulated activities.

(B) "Regulated activity" does not include:

(i) (No change.)

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

(iii) (No change.)

(iv) routine maintenance of existing structures that does not involve site disturbance including, [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 that [which] present little or no potential for contaminating hydrologically-connected surface water;

(v) - (vi) (No change.)

(7) **Site** - The entire area within the legal boundaries of the property described in the application. Regulated activities on a site located partially on the recharge zone and the contributing zone must be treated as if the entire site is located on the recharge zone, subject to the requirements under Subchapter A of this chapter (relating to Edwards Aquifer in Medina, Bexar, Comal, Kinney, Uvalde, Hays, Travis, and Williamson Counties).

§213.24. Technical Report.

For all regulated activities, a technical report must accompany the application for contributing zone plan approval. The report must address the following issues. The site description, controls, maintenance, and inspection requirements for the storm water pollution prevention plan (SWPPP) developed under the Texas Pollutant Discharge Elimination System (TPDES) [EPA NPDES] general permits for storm water [stormwater] discharges may be submitted to fulfill paragraphs (1) - (5) of this section [of the technical report], providing the following requirements are met.

(1) The report must contain a location map and the site plan.

(A) (No change.)

(B) The site plan must be drawn at a minimum scale of one [1] inch to 400 feet. The site plan must show:

(i) - (iv) (No change.)

(v) areas of soil disturbance and areas that [which] will not be disturbed;

(vi) - (viii) (No change.)

(ix) locations where storm water [stormwater] discharges to a surface water.

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

(A) - (D) (No change.)

(E) other factors that could affect the surface water quality. [;]

(3) The report must describe the volume and character of storm water [stormwater] runoff expected to occur. Estimates of storm water [stormwater] runoff quality and quantity should be based on area and type of impervious cover, as described in paragraph (2)(C) of this section. An estimate of the runoff coefficient of the site for both the pre-construction and post-construction conditions should be included in the report.

(4) The report must describe any activities or processes that [which] may be a potential source of contamination and must provide the following information:

(A) the intended sequence of major activities that [which] disturb soils for major portions of the site (e.g., grubbing, excavation, grading, utilities, and infrastructure installation);

(B) (No change.)

(C) a site map indicating the following: approximate slopes anticipated after major grading activities; areas of soil disturbance; areas that [which] will not be disturbed; locations of major structural and nonstructural controls identified in the technical report; locations where stabilization practices are expected to occur; surface waters (including wetlands); and locations where storm water [stormwater] discharges to a surface water;

(D) (No change.)

(E) the name of the receiving water(s) at or near the site that [which] will be disturbed or [which] will receive discharges from disturbed areas of the project.

(5) The report must describe the temporary best management practices (BMPs) and measures that will be used during construction. The technical report must clearly describe for each major activity identified in paragraph (4) of this section appropriate control measures and the general timing (or sequence) during the construction process when the measures will be implemented. The SWPPP [storm water pollution prevention plan (SWPPP)] developed under the TPDES [EPA NPDES] general permits for storm water [stormwater] discharges may be submitted to fulfill this part of the technical report providing the following requirements are met.

(A) BMPs and measures must prevent pollution of surface water or storm water [stormwater] that originates upgradient from the site and flows across the site.

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

(C) A plan for the inspection of the temporary BMPs [best management practices] and measures and for their timely inspection, maintenance, repair, and, if necessary, retrofit must be included in the report.

(D) BMPs and measures must meet the requirements contained in §213.5(b)(4)(D)(i) of this title (relating to Required Edwards Aquifer Protection Plans, Notification, and Exemptions).

(E) - (F) (No change.)

(G) All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's [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.

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

(I) Sediment must be removed from sediment traps or sedimentation ponds when design capacity has been reduced by 50% [50 percent].

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

(6) The report must describe the permanent BMPs [best management practices (BMPs)] and measures that will be used after construction.

(A) BMPs and measures must prevent pollution of surface water or storm water [stormwater] originating on-site or upgradient from the site and flows across the site.

(B) BMPs and measures must prevent pollution of surface water downgradient of the site, including pollution caused by contaminated storm water [stormwater] runoff from the site.

(C) BMPs and measures must meet the requirements contained in §213.5(b)(4)(D)(ii) of this title.

(i) 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 [Licensed Professional Engineer]. All construction plans and design information must be signed, sealed, and dated by the Texas licensed professional engineer [Licensed Professional Engineer].

(ii) (No change.)

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

(I) (No change.)

(II) No additional approvals will be granted until the pilot study is complete and the applicant demonstrates adequate protection of surface water that enters the recharge [recharges] zone of the Edwards Aquifer.

(III) (No change.)

(IV) If the innovative technology demonstrates inadequate protection of surface streams that [which] enter the recharge zone of the Edwards Aquifer, a retrofit of

the permanent BMP may be required to achieve compliance with §213.5(b)(4)(D) of this title and no additional units will be approved for use on the contributing zone.

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

(A) increased stream flashing; [,]

(B) the creation of stronger flows and instream [in-stream] velocities; [,] and

(C) other instream [in-stream] effects caused by the regulated activity that [which] increase erosion that results in water quality degradation.

(8) (No change.)

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

(A) (No change.)

(B) Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from the five-year [five year] floodplain of any stream drainage.

(10) The technical report must indicate the placement of permanent aboveground storage tank facilities. Permanent aboveground storage tank facilities for static hydrocarbons [hydrocarbon] and hazardous substances with cumulative storage capacity of 500 gallons or greater must be constructed, and spills removed using the standards contained in §213.5(e)(1) of this title.

(11) Exemption.

(A) Regulated activities exempt from the contributing zone [Contributing Zone] plan application requirements under this section are:

(i) (No change.)

(ii) the installation of underground tanks for the storage of static hydrocarbons [hydrocarbon] and hazardous substances.

(B) 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 contributing zone plan application requirements under this subchapter, provided that the land owner [he/she] does not exceed 20% [20 percent] impervious cover on the site.

(C) Temporary erosion and sedimentation controls are required to be installed and maintained for exempted activities on the contributing zone. All temporary erosion and sedimentation controls must meet the requirements contained in paragraph (5) of this section, must be installed prior to construction, must be maintained during construction, and may be removed only when vegetation is established and the construction area is stabilized. This subparagraph does not apply to single-family [single family] residences on a site greater than five [5] acres or on a site less than five [5] acres and not a part of a common plan of development or sale with the potential to disturb cumulatively five or more acres.

(D) The executive director may monitor storm water [stormwater] 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.

§213.27. Contributing Zone Plan Application and Exception Fees.

The person submitting an application for approval or modification of any contributing zone plan or exception under this subchapter must pay an application fee of \$250. The fee is due and payable at the time the application is filed. The fee must be sent to either the appropriate regional office or the cashier in the agency headquarters located in Austin, accompanied by an Edwards Aquifer Contributing Zone 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." [Natural

Resource Conservation Commission.”] 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.