

The Texas Commission on Environmental Quality (commission) adopts amendments to §§213.1, 213.3, 213.4, 213.12, 213.20 - 213.22, 213.24, and 213.27. Sections 213.4 and 213.21 are adopted *with changes* to the proposed text as published in the March 11, 2005, issue of the *Texas Register* (30 TexReg 1403). Sections 213.1, 213.3, 213.12, 213.20, 213.22, 213.24, and 213.27 are adopted *without changes* to the proposed text and will not be republished.

#### BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE ADOPTED 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 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 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 appeared in the Tables and Graphics section of the March 11, 2005, issue of the *Texas Register* (30 TexReg 1480), is a location map illustrating the counties and 7.5 Minute Quadrangles affected by this rulemaking. No changes were made to any of the 7.5 Minute Quadrangle Maps illustrated in Appendix A2 - A27, which appeared in the Tables and Graphics section of the March 11, 2005, issue of the *Texas Register* (30 TexReg 1481 - 1506).

#### *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 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 rulemaking 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 adopting 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 rulemaking 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 significantly 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 recommend a change to 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 adopting this change based on the lack of observable recharge features occurring downstream of Antioch Cave.

In response to the petitioner, the rulemaking changes the designation of portions of four areas in northern Hays and southern Travis Counties, totaling 4.29 square miles. The commission adopts a change of 2.89 square miles, from transition zone to contributing zone within the transition zone. In those same four areas, the rulemaking changes the designation of 1.08 square miles from transition zone to recharge zone. The commission further changes the designation of 0.32 square miles from recharge zone to transition zone. Changes to regulatory zone boundaries and changes to the Edwards Aquifer recharge zone maps incorporating the changes are illustrated in the Tables and Graphics section of the

March 11, 2005, issue of the *Texas Register* (30 TexReg 1481 - 1428, 1485 - 1488) 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 adopted Edwards Aquifer recharge zone maps, depicted on full-size 7.5 Minute Quadrangles, are maintained at commission headquarters in Austin located at 12100 Park 35 Circle. Additional information on the maps is available on the agency's Web site at [www.tceq.state.tx.us](http://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 adopting 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.

Changes to regulatory zone boundaries and changes to the official Edwards Aquifer recharge zone maps incorporating the changes are illustrated in the Tables and Graphics section of the March 11, 2005, issue of the *Texas Register* (30 TexReg 1494 - 1494, 1485 - 1486, 1499 - 1504) 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 adopted Edwards Aquifer recharge zone maps, depicted on full-size 7.5 Minute Quadrangles, are maintained at commission headquarters in Austin located at 12100 Park 35 Circle. Additional information on the maps is available on the agency's Web site at [www.tceq.state.tx.us](http://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 adopting 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 adopting changes from recharge zone to contributing zone for these areas.

Changes to regulatory zone boundaries and changes to the official Edwards Aquifer recharge zone maps incorporating the changes are illustrated in the Tables and Graphics section of the March 11, 2005, issue of the *Texas Register* (30 TexReg 1495 - 1498, 1489 - 1492, 1483 - 1484) 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 adopted Edwards Aquifer recharge zone maps, depicted on full-size 7.5 Minute Quadrangles, are maintained at commission

headquarters in Austin located at 12100 Park 35 Circle. Additional information on the maps is available on the agency's Web site at [www.tceq.state.tx.us](http://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 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 Edwards 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 modifies 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 the March 11, 2005, issue of the *Texas Register* (30 TexReg 1505 - 1506) 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 re-designated 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 that 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. 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 of an SCS, an SCS plan would have to be submitted to and approved by the executive director. It must contain special construction requirements in the system

plans and specifications, a geologic assessment, and a technical report. Sensitive features discovered during construction would have to be addressed 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 above the maximum allowable limit in the rules 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. These activities would be in addition 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.

The commission adopts the change from transition zone to recharge zone 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 re-designated 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 that 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. The re-designation would require individual WPAPs and SCS plans to be submitted to and 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 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 that 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 two milligrams per liter of ammonia nitrogen 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.

Under rulemaking 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.

The commission adopts the change from transition zone to contributing zone within the transition zone 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 re-designated 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 additional requirements for recharge zone development including a geologic assessment as part of the WPAP, SCS, underground storage tank facility plan, and aboveground storage tank facility 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, Domestic Wastewater Effluent Limitation and Plant Siting. 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 ( $\geq 250$  gallons) require spill containment and 150-foot setback from the five-year flood plain. Permanent aboveground storage tank facilities ( $\leq 500$  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.

The commission adopts the change from contributing zone to recharge zone 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 re-designated 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 (2N), 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.

The commission adopts the change from recharge zone to contributing zone 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 re-designated to contributing zone within the transition zone, new regulated activities would have to meet the less stringent requirements. However, applicable regulations in both the transition zone and the contributing zone would still apply to these activities. 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.

The commission adopts the change from recharge zone to contributing zone within the transition zone for the Mountain City and Buda 7.5 Minute Quadrangles.

#### *Recharge Zone to Transition Zone*

In those areas currently designated as recharge zone but re-designated 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 include 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.

The commission adopts the change from recharge zone to transition zone for the Buda 7.5 Minute Quadrangle.

#### SECTION BY SECTION DISCUSSION

Administrative and grammatical changes were made throughout the sections to bring the existing rule language into agreement with guidance provided in the *Texas Legislative Council Drafting Manual*, November 2004.

The amended 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 amendments specify the effective dates of map changes. Comments concerning the effective date of the rule change were solicited in the proposal; however, none were received. Wastewater discharge provisions under §213.6(a) and (b) are amended to be extended to areas designated as contributing zone within the transition zone.

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

The commission amends §213.1(3), Purpose, to 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).

Amendments to the definitions for “Recharge zone” and “Transition zone” under §213.3, Definitions, eliminate confusion 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 amended 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 adopts 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 changes to the official maps are shown in Appendices A1 - A27, which appear in the Tables and Graphics section of the March 11, 2005, issue of

the *Texas Register* (30 TexReg 1480 - 1506). The adopted Edwards Aquifer recharge zone maps, depicted on full-size 7.5 Minute Quadrangles, are maintained at commission headquarters in Austin located at 12100 Park 35 Circle. Additional information on the maps is available on the agency's Web site at [www.tceq.state.tx.us](http://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 adopted map changes are described in the BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE ADOPTED RULES section of this preamble.

The commission amends §213.4(a)(4), Application Processing and Approval, to 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 September 1, 2005, effective date and for which this designation did not change, all Edwards Aquifer protection plans submitted to the executive director, on or after the September 1, 2005, 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.

The commission amends §213.12, Application Fees, to 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 amends §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. Amendments 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).

The commission amends §213.21(c), Applicability and Person or Entity Required to Apply, 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 have been made; however, the specific cross-reference numbers remain unchanged.

Also, under amended §213.21(c), wastewater treatment and discharge requirements in §213.6(a) and (b) are 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.

The commission amends §213.21(f) to address 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 September 1, 2005, 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 September 1, 2005, 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 project's plans were 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 September 1, 2005.

The commission deletes the language in §213.21(h) 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 adopts 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 changes to the recharge zone and to the contributing zone within the transition zone. The adopted new Figure 1 and Figure 2 appear in the Tables and Graphics section of the March 11, 2005, issue of the *Texas Register* (30 TexReg 1507 - 1508). As discussed previously in the SECTION BY SECTION DISCUSSION explanation of §213.3, the adopted Edwards Aquifer recharge zone maps, depicted on full-size 7.5 Minute Quadrangles, are maintained at commission headquarters in Austin located at 12100 Park 35 Circle. Additional information on the maps is available on the agency’s Web site at [www.tceq.state.tx.us](http://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.

Figure: 30 TAC Chapter 213 - preamble

The commission amends §213.22(3) to delete the specific reference to paragraphs under §213.3 to avoid confusion, as new definitions are added to that section that could result in a renumbering of the existing paragraphs. The general description of areas where the contributing zone within the transition zone can

occur was revised to reflect the geographic directions of the additions in Comal, Hays, and Travis Counties.

The commission amends §213.22(4) and (5) and §213.24, Technical Report, to 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.

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

#### FINAL REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the 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 Texas Government Code, §2001.0225.

First, the rulemaking 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 rulemaking does not exceed a standard set by federal law. Moreover, even if the rules did exceed a standard set by federal law, this rulemaking 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 Texas Government Code, §2001.0025.

Second, this rulemaking does not exceed an express requirement of state law. The rulemaking 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 rulemaking is intended to comply with the stated requirements of state law and not exceed them.

Third, this rulemaking 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 rulemaking 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 rulemaking does not adopt a rule solely under the general powers of the agency instead of under a specific state law. While this rulemaking 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.

#### TAKINGS IMPACT ASSESSMENT

The commission prepared a takings impact assessment for the adopted rulemaking action under Texas Government Code, §2007.043. The specific purpose of this rulemaking is to regulate activities having the potential for causing pollution of the Edwards Aquifer. The adopted amendments 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 adopted amendments meet the exception in Texas Government Code, §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 possible degradation of water quality that presents a real and substantial threat to public health and safety. The adopted amendments 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 adopted amendments 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 adopted amendments significantly advance public health and safety. The kinds of activities that are regulated or prohibited

are specified for each zone in relation to the potential for pollution of the Edwards Aquifer, so as not to impose a greater burden than is necessary. These rules are necessary to carry out the stated authority of the commission to protect human health and the environment.

In addition, Texas Government Code, §2007.003(b)(13) and (c), applies to this rulemaking action.

Texas Government Code, §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 contained regulations governing 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 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 rules are not subject to the Texas Coastal Management Program.

#### PUBLIC COMMENT

A public hearing on this proposal was held in Austin on April 6, 2005. Comments were submitted by BSEACD, City of Austin (COA), and one individual. Commenters generally supported the rulemaking

but had some suggested changes. The public comment period closed at 5:00 p.m., Monday, April 25, 2005.

#### RESPONSE TO COMMENTS

The individual commented that his interests were probably not related to the proposed revisions to Chapter 213. The commenter stated that there are faults running through an area near a composting facility north of Bracken, Texas. The commenter expressed a concern about seepage of runoff from the composting area into groundwater with a potential for contamination of the aquifer. The commenter also stated that the berm that was constructed to contain storm water runoff has failed several times and there is concern that the runoff would flow directly into Cibolo Creek. The individual did not suggest any changes to the recharge zone or any of the regulated areas.

**The commission recognizes the individual's comments; however, the comments address the operation of a specific facility and not the substance of the proposal and are therefore beyond the scope of this rulemaking. Review of maps confirmed the fault in question. The fault is located east of the recharge zone, within the transition zone, and is covered by the restrictions for that zone. Review of the area containing the berm confirmed the possible overland storm water flow route to Cibolo Creek. However, the area of possible impact to Cibolo Creek is downstream of the recharge zone. The commission made no change in response to this comment.**

BSEACD and the COA commented that the petitioned changes to the boundary along the eastern side of the recharge zone have generally been incorporated into the proposed rule change. However, the commenters indicate that the proposed rule changes around the intersection of FM 1626 and FM 967 in

Hays County do not reflect some of the geologic data that were provided in the petition, subsequent meetings, and field trips. In general the data presented in the petition indicate more exposures of the Edwards Aquifer rock units than reflected in the proposed rule changes.

**The commission disagrees with this information provided by BSEACD. Portions of the area in question are already in the existing recharge zone. Numerous field investigations did not reveal exposures of Edwards Aquifer rock units that were as extensive as depicted in the petition. The proposed rule changes increase the amount of recharge area and add a new designation that has been applied in the San Antonio area of contributing zone within the transition zone. This new zone offers an additional level of protection for an area where storm water runoff flows back onto the recharge zone. The commission made no change in response to these comments.**

BSEACD and the COA commented that they are in general agreement with much of the proposed rule changes but differ with the commission's evaluation of the western side of the recharge zone.

Revisions that were petitioned along the western side of the recharge zone were not incorporated into the proposed rule changes. BSEACD and the COA stated that the Basal Nodular Member of the Kainer Formation (Edwards Group) should be included in the Edwards Aquifer recharge zone of Hays and southern Travis Counties. They contend that this rock unit has the same hydraulic characteristics throughout the San Marcos geologic platform area, including Comal, Hays, and southern Travis Counties.

**Field evidence indicates a change in the overall character of the Basal Nodular Member (Walnut Formation) in the vicinity of the Comal/Hays County line. This change affects such geologic**

**characteristics as the lithology, color, texture, fabric, hydraulic conductivity, porosity, and fossil content of the Basal Nodular Member or Walnut Formation, thus affecting the rock unit's ability to allow water to flow in or out of the unit. Generally, north of the county line the Walnut Formation exhibits no signs of conducting water to the aquifer and therefore should not be included in the recharge zone. The rock unit to the southwest of the vicinity of the Comal/Hays County line is more indicative of the Basal Nodular Member in Bexar County and to the northeast takes on the characteristics of the Walnut Formation. The Walnut Formation is in the contributing zone and is covered by the restrictions for that zone. The commission made no change in response to these comments.**

COA stated that the contributing zone within the transition zone does not offer adequate protection to those areas so designated and therefore should be included in the recharge zone.

**The commission disagrees with this comment because the nature of the geology in those areas is predominantly clay and thus not susceptible to infiltration into the recharge zone, but storm water runoff does drain from these areas back onto the recharge zone. The commission made no change in response to this comment.**

**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 amended sections are adopted under TWC, §5.103, which provides the commission with the authority to promulgate rules necessary for the exercise of the 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; establishes the level of quality to be maintained; and controls 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 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; TWC, §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; TWC, §26.051, requires the commission to report annually on the Edwards Aquifer program expenses and allocation of fees; TWC, §26.121, prohibits

unauthorized discharges; TWC, §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; TWC, §26.401, states the goal for groundwater protection in the state; TWC, §27.051(h), prohibits the commission from authorizing an injection well that transects or terminates in the Edwards Aquifer with certain exceptions; and TWC, §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 adopted 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, the goal of this chapter is that the existing quality of groundwater not be degraded, consistent with the protection of public health and

welfare, the propagation and protection of terrestrial and aquatic life, the protection of the environment, the operation of existing industries, and the maintenance and enhancement of the long-term economic health of the state.

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

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

### **§213.3. Definitions.**

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

(1) **Abandoned well** - A well that has not been used for six consecutive months. A

well is considered to be in use in the following cases:

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

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

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

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

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

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

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

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

(8) **Edwards Aquifer** - That portion of an arcuate belt of porous, waterbearing, predominantly carbonate rocks known as the Edwards (Balcones Fault Zone) Aquifer trending from

west to east to northeast in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, and Williamson Counties; and composed of the Salmon Peak Limestone, McKnight Formation, West Nueces Formation, Devil's River Limestone, Person Formation, Kainer Formation, Edwards Group, and Georgetown Formation. The permeable aquifer units generally overlie the less-permeable Glen Rose Formation to the south, overlie the less-permeable Comanche Peak and Walnut formations north of the Colorado River, and underlie the less-permeable Del Rio Clay regionally.

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

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

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

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

deposits, wells, borings, and excavations.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(26) **Private service lateral** - A wastewater line extending from the building drain to an existing private or public sewage collection system or other place of disposal that provides service to one single-family residence or building, with the operation and maintenance as the sole responsibility of the tenant or owner of the building. A wastewater line extending from the convergence of private

service laterals from more than one single-family residence or building is considered a sewage collection system.

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

(28) **Regulated activity** -

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

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

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

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

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

(B) Regulated activity does not include:

(i) clearing of vegetation without soil disturbance;

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

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

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

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

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

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

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

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

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

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

(B) rapid infiltration to the subsurface may occur.

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

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

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

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

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

(35) **Tertiary containment** - A containment method by which an additional wall or

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

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

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

(38) **Underground storage tank system** - Any one or combination of underground tanks and any connecting underground pipes used to contain an accumulation of regulated substances, the volume of which, including the volume of the connecting underground pipes, is 10% or more beneath the surface of the ground.

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

**§213.4. Application Processing and Approval.**

(a) Approval by the executive director.

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

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

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

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

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

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

(C) Regulated activities in areas designated as transition zone on official maps prior to the effective date of this paragraph and designated as recharge zone on the effective date of this

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

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

(5) Assumption of program by local government.

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

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

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

(I) regulates activities covered under this chapter; and

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

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

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

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

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

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

(F) Upon written notice, certification may be revoked or suspended by the executive director if the local entity does not meet the terms and conditions of the agreement provided under subparagraph (D) of this paragraph, or fails to meet the criteria for certification provided under subparagraph (B) of this paragraph.

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

(b) Contents of application.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(c) Application submittal.

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

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

(d) Signatories to applications.

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

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

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

(C) For a political entity such as a municipality, state, federal, or other public

agency, either a principal executive officer or a duly authorized representative must sign the application. A representative must submit written proof of the authorization.

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

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

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

(f) Additional provisions. As a condition of approval, the executive director may impose additional provisions deemed necessary to protect the Edwards Aquifer from pollution. The executive director may conditionally approve an Edwards Aquifer protection plan or impose special conditions on the approval of a plan.

(g) Deed recordation.

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

(A) a water pollution abatement plan;

(B) an aboveground storage tank plan;

(C) an underground storage tank plan;

(D) modifications to any of these plans for a proposed regulated activity; or

(E) an exception.

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

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

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

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

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

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

(3) An Edwards Aquifer protection plan approval or extension will expire and no

extension will be granted if more than 50% of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the appropriate regional office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.

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

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

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

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

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

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

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

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

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

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

(k) Compliance. The holder of the approved or conditionally approved Edwards Aquifer protection plan is responsible for compliance with this chapter and any special conditions of the approved plan through all phases of plan implementation. Failure to comply with any condition of the executive director's approval is a violation of this chapter and is subject to administrative rule or orders and penalties as provided under §213.10 of this title (relating to Enforcement). Such violations may also be subject to civil penalties and injunction.

**§213.12. Application Fees.**

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

**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 amended sections are adopted under TWC, §5.103, which provides the commission with the authority to promulgate rules necessary for the exercise of the 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; establishes the level of quality to be maintained; and controls 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 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; TWC, §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; TWC, §26.051, requires the commission to report

annually on the Edwards Aquifer program expenses and allocation of fees; TWC, §26.121, prohibits unauthorized discharges; TWC, §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; TWC, §26.401, states the goal for groundwater protection in the state; TWC, §27.051(h), prohibits the commission from authorizing an injection well that transects or terminates in the Edwards Aquifer with certain exceptions; and TWC, §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 adopted 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) The purpose of this subchapter is to regulate activities in the contributing zone to the Edwards Aquifer having the potential for polluting surface streams which recharge the Edwards Aquifer and to protect existing and potential beneficial uses of groundwater in the Edwards Aquifer.

(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 not exclusive and other rules also apply. In addition to the rules of the commission, the Texas general and individual permits for 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, under §50.139 (a), (b), and (d) - (g) of this title (relating to Motion to Overturn Executive Director's Decision), of the executive director's final action on a contributing zone plan or modification to a plan.

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

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

(b) This subchapter applies 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 §213.22 of this title and delineated on the official recharge and transition zone maps of the agency as provided by §213.3 of this title (relating to Definitions), 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) of this title (relating to Required Edwards Aquifer Protection Plans, Notification, and Exemptions); §213.6(a) and (b) of this title (relating to Wastewater Treatment and Disposal Systems); §213.7 of this title (relating to Plugging of Abandoned Wells and Borings); and to the transition zone provisions of §213.8(b) of this title (relating to Prohibited Activities).

(d) Unless otherwise provided under this subchapter, executive director approval of a contributing zone plan must be obtained prior to beginning construction of a new or additional regulated activity.

(e) Regulated activities are allowed to be conducted under this subchapter only by applicants who have a letter of contributing zone plan approval issued by the executive director. This letter is issued under §213.23 of this title (relating to Plan Processing and Approval).

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

(3) The effective date of this subsection is September 1, 2005.

(g) Assumption of program by local government.

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

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

(B) it has adopted ordinances or has other enforceable means sufficient to enforce the program throughout the local governmental entities jurisdiction; and

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

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

(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 shall be paid to the commission.

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

(6) 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 paragraph (4) of this subsection or fails to meet the criteria for certification provided under paragraph (2) of this subsection.

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

**§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** - 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 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 2: 30 TAC §213.22(2)

(A) all areas within Kinney County, except the area within the watershed draining to Segment 2304 of the Rio Grande Basin;

(B) all areas within Uvalde, Medina, Bexar, and Comal Counties;

(C) all areas within Hays and Travis Counties, except the area within the watersheds draining to the Colorado River above a point 1.3 miles upstream from Tom Miller Dam, Lake Austin at the confluence of Barrow Brook Cove, Segment 1403 of the Colorado River Basin; and

(D) all areas within Williamson County, except the area within the watersheds draining to the Lampasas River above the dam at Stillhouse Hollow reservoir, Segment 1216 of the Brazos River Basin.

(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 of this title (relating to Definitions). The contributing zone within the transition zone is located generally south and east 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 Pollutant Discharge Elimination System permits for storm water discharges from construction activities (TPDES permits)** - Texas Pollutant Discharge Elimination System general or individual permits issued by the agency for storm water discharges from construction activities in Texas.

(5) **Notice of intent (NOI)** - Notice of intent required by the Texas Pollutant Discharge Elimination System 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) buildings;

(II) utility stations;

(III) utility lines;

(IV) underground and aboveground storage tank systems;

(V) roads;

(VI) highways; or

(VII) railroads.

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

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

(B) "Regulated activity" does not include:

(i) the clearing of vegetation without soil disturbance;

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

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

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

(v) routine maintenance that involves little or no change to the topographic or geologic features; or

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

(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) general permits for storm water discharges may be submitted to fulfill paragraphs (1) - (5) of this section, providing the following requirements are met.

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

(A) The location map must be a legible road map with directions, including mileage, which would enable the executive director to locate the site for inspection.

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

The site plan must show:

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

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

(iii) a drainage plan showing all paths of drainage from the site to surface streams;

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

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

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

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

(viii) surface waters (including wetlands); and

(ix) locations where storm water 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) the size of the site in acres;

(B) the projected population for the site;

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

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

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

(3) The report must describe the volume and character of storm water runoff expected to occur. Estimates of storm water 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 may be a potential source of contamination and must provide the following information:

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

(B) estimates of the total area of the site that is expected to be disturbed by excavation, grading, or other activities;

(C) a site map indicating the following: approximate slopes anticipated after major grading activities; areas of soil disturbance; areas that 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 discharges to a surface water;

(D) location and description of any discharge associated with industrial activity other than construction; and

(E) the name of the receiving water(s) at or near the site that will be disturbed or 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 developed under the TPDES general permits for storm water 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 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 runoff from the site.

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

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

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

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

(6) The report must describe the permanent BMPs and measures that will be used after construction.

(A) BMPs and measures must prevent pollution of surface water or storm water 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 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. All construction plans and design information must be signed, sealed, and dated by the Texas licensed professional engineer.

(ii) The technical report must contain a plan for the inspection of the permanent BMPs and measures and for their timely inspection, maintenance, repair, and, if necessary,

retrofit, if requirements contained in §213.5(b)(4)(D) of this title are not being met. This plan must be prepared by the engineer designing the permanent BMPs and measures and signed by the owner or responsible party.

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

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

(III) If the innovative technology demonstrates adequate protection, additional units may be approved for use as permanent BMPs and measures on the contributing zone.

(IV) If the innovative technology demonstrates inadequate protection of surface streams that 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 be taken to avoid or minimize surface stream contamination, or changes in the way that 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 velocities; and

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

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

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

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

(C) If wastewater is to be discharged in the contributing zone, requirements under §213.6(c) of this title (relating to Wastewater Treatment and Disposal Systems) must be satisfied.

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

(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 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 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 plan application requirements under this section are:

(i) the installation of underground utilities, including:

(I) storm and sanitary sewage lines;

(II) natural gas lines;

(III) telephone lines;

(IV) electric lines; and

(V) water lines; and

(ii) the installation of underground tanks for the storage of static hydrocarbons 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 does not exceed 20% 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 residences on a site greater than five acres or on a site less than five 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 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." 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.