



Rules Protecting the Edwards Aquifer Recharge, Contributing, and Transition Zones

A large number of people in Texas, including San Antonio's growing population, depend on the Edwards Aquifer for drinking water. The aquifer is an underground water-bearing formation that lies beneath a belt of counties along I-35 and US 90 in Central Texas.

Eight of these counties—Williamson, Travis, Hays, Comal, Bexar, Medina, Uvalde, and Kinney—fall under the Edwards Aquifer rules of the Texas Commission on Environmental Quality (TCEQ). These rules were established to ensure that contaminated runoff does not harm the quality of water in the Edwards Aquifer.

What this pamphlet covers (and what it doesn't).

This pamphlet will help you find out (1) whether the Edwards Aquifer rules apply to you, (2) the type of protective practices you may have to adopt, and (3) where to get more information.

This regulatory guidance pamphlet provides general information about the Edwards Aquifer rules, and is not intended to be a substitute for the official Edwards Aquifer rules or any other final TCEQ rules. To see the official Edwards Aquifer rules, please refer to Title 30 of the Texas Administrative Code (TAC), Chapter 213. These rules are available on our Web site, at www.tceq.state.tx.us/goto/rules.

What are the “Recharge, Contributing, and Transition, Zones”?

As was mentioned above, aquifers are underground water-bearing formations. In protecting water quality in aquifers, the focus is placed primarily on activities in their recharge, contributing, and transition zones.

The *recharge zone* of an aquifer is the area where geologic layers of the aquifer are exposed at the surface, and water infiltrates into the aquifer through cracks, fissures, caves, and other openings

throughout these layers. In this zone, contaminants in surface water can readily enter the aquifer.

The *contributing zone* of an aquifer includes all watersheds that feed runoff into rivers and streams that flow over the recharge zone.

In the *transition zone*, geologic features such as faults and fractures present possible avenues for contaminants in surface water to reach the aquifer.

The recharge, contributing, and transition, zones are shown on official maps.

How do I tell which zone I am in?

There are several ways to find out what zone of the aquifer you're in.

You can look it up in our Edwards Aquifer map viewer, which is located on the TCEQ Web site, at www.tceq.state.tx.us/goto/eapp/mapviewer. (These maps are not official, but the Web page has links to sources for the official maps.)

In addition, you can also contact your regional TCEQ office, and staff there will be able to help. They also have hard copies of the aquifer maps available for viewing. Contact information for these offices is provided at the end of this pamphlet.

Who is NOT affected?

If you are conducting the following activities, you are not affected by the Edwards Aquifer rules (but you still may have to follow other TCEQ rules that are in effect statewide):

- Clearing vegetation without disturbing the soil,
- Farming, ranching, and other agricultural activities except concentrated animal feeding operations that are regulated under 30 TAC, Chapter 321.
- Maintenance of existing facilities (no added site disturbance).
- Resurfacing paved roads, parking lots, sidewalks, or other impervious surfaces.
- Exploring for, developing, or producing oil, gas, or geothermal resources.

- Building single-family homes on lots over five acres, with no more than one single-family residence per lot.
- Building fences or engaging in other similar activities where there is little or no potential for (1) contaminating groundwater or (2) changing topographic, geologic, or sensitive features.

Who IS affected?

If (1) you are carrying out construction-related or post-construction activity on the recharge or transition zones and (2) your activity has a potential for polluting the aquifer and surface streams that recharge it, then you are affected by the Edwards Aquifer rules. Some examples of activities covered by these rules are:

- Constructing buildings, utility stations, utility lines, roads, highways, or railroads.
- Filling, clearing, excavating, or carrying out any other activity that alters or disturbs topographic, geologic, or recharge characteristics of a site.
- Conducting other activities that may pose a potential for contaminating the Edwards Aquifer or surface streams that recharge it.

On the *recharge and transition zones*, you are affected by the Edwards Aquifer rules if you install underground or aboveground storage tanks (USTs or ASTs) or piping, and the installation is designed to store either hazardous substances or fuels, lubricating oils, mineral spirits, or other petroleum-based liquids.

On the *contributing zone*, you are affected by the Edwards Aquifer rules if (1) you disturb more than five acres or (2) you are conducting activities as part of a large plan of development that may disturb five or more acres.

I AM affected, so what do I have to do?

This section describes the steps you have to take, depending on what you plan to do on your land, —to protect water quality during and after construction. The first order of business is to determine whether you must prepare and submit an Edwards Aquifer Protection Plan (EAPP).

Protect water quality during construction— when an EAPP is NOT required.

In all cases, before any work begins, *you must install erosion and sediment (E&S) controls* that meet the requirements of the Edwards Aquifer rules, and you must maintain these controls throughout the construction process.

In certain cases, however, you do not have to file an EAPP. The activities exempted from an EAPP (but still requiring E&S controls) are:

- Installing natural gas, telephone, electric, water, or other utility lines that do not carry pollutants.
- Installing one or more permanent AST facilities with a cumulative volume of 500 gallons or less.
- Installing equipment used to transmit electricity that uses oil circuit breakers (construction of supporting structures, however is not exempt).
- Constructing a single-family residence or any associated residential structure when the construction is for the individual landowner on his or her own property, as long as the construction does not cause the site's impervious cover to exceed 20 percent.

You must wait until vegetation is established and the exposed soil in the construction area is stabilized before removing the E&S controls for the activities listed above.

Protect water quality during construction— when an EAPP IS required.

If you are involved in activities other than those listed above, you must submit an EAPP. Consult with your TCEQ regional office on how to prepare and submit one. The plan must show how contaminants will be removed from runoff—both during construction and after your construction is complete—by implementing and maintaining permanent best management practices (BMPs) designed by a Texas Licensed Professional Engineer. One of the main concerns for water quality is silt and sediment carried from the site and into the aquifer by storm water runoff.

You must get your EAPP approved before you start any activity that could cause runoff contamination, such as:

- Disturbing the soil—for example, by clearing, bulldozing, or excavating.

- Beginning to construct roads, highways, or buildings.
- Installing AST facilities over the recharge and transition zones that have a cumulative volume of 500 gallons or more stored in tanks, and any UST facilities that are to be used for storing hazardous substances or liquid petroleum fuels (UST facilities are the only regulated activity in the transition zone).

Of course, before any work begins, you must also install E&S controls that meet the requirements of the Edwards Aquifer rules, and you must maintain these controls throughout the construction process.

Getting your plan reviewed and approved.

Submit your plan to the TCEQ regional office that serves the county in which your development is located. The eight counties that fall under the Edwards Aquifer rules are served by either the San Antonio office or the Austin office (see contact information at the end of this pamphlet).

Applications for activities in the recharge, contributing, and transition zones will receive a two-stage review. In the first stage, called administrative review, we determine whether your application is complete. If your application is submitted in person during a scheduled meeting with staff, we will complete this review as part of our meeting.

The second stage of the review focuses on technical aspects of your application. In the technical review, we determine whether your plan will adequately protect surface water and the aquifer as you carry out the intended activity.

No site disturbance may begin until both of these review periods are completed and an approval letter has been issued.

We may inspect your site periodically to ensure that you are complying with (1) the temporary provisions of your approved plan during construction and (2) the plan's permanent provisions after construction.

Where can I find more answers?

Two TCEQ publications offer thorough information on the Edwards Aquifer rules: *Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices* (RG-348) and *Optional Enhanced Measures for the Protection of Water Quality in the Edwards Aquifer: An Appendix to RG-348* (RG-348a).

You can find forms, checklists, publications and other information regarding our Edwards Aquifer Protection Program on our Web site, at <www.tceq.state.tx.us/goto/eapp>.

You can also contact Edwards Aquifer Protection Program staff at the TCEQ regional office that serves your county:

Williamson, Travis, or Hays County

Austin Regional Office, TCEQ
2800 S IH-35, Ste. 100
Austin, TX 78704-5700
Phone: 512-339-2929 • Fax: 512-339-3795

Comal, Bexar, Medina, Uvalde, or Kinney County

San Antonio Regional Office, TCEQ
14250 Judson Rd.
San Antonio, TX 78233-4480
Phone: 210-490-3096 • Fax: 210-545-4329