

Texas Commission on Environmental Quality

Wastewater Discharge Permitting

Testimony of David W. Galindo Director, Water Quality Division, Office of Water House Natural Resources –Request for Information, Interim Charge #2

Thank you, Chairman and Committee members. TCEQ issues wastewater discharge permits for industrial and domestic wastewater treatment facilities under the Texas Pollutant Discharge Elimination System (TPDES) Program. TCEQ has delegated authority from the U.S. Environmental Protection Agency to issue TPDES permits that are developed to comply with state and federal regulations to ensure that the quality of the water in the receiving stream is maintained and the current and future uses of receiving waterbodies are protected. Examples of uses include: drinking water supply, fishing, swimming, agricultural, and industrial purposes. TCEQ appreciates this opportunity to share information regarding the agency's role in regulating domestic wastewater treatment systems and efforts to promote regionalization.

Overview of TCEQ's Role in Issuing TPDES Permits for Domestic Wastewater Treatment Facilities

TCEQ is the primary state agency authorized to issue TPDES permits for domestic wastewater facilities that dispose of treated effluent by discharge into waters in the state. Authorization for TCEQ to issue wastewater discharge permits is provided in the Texas Water Code Chapter 26. TCEQ issues TPDES permits for public and private wastewater treatment systems. Publicly Owned Treatment Works (POTWs) are owned by the State or a municipality (and include certain political subdivisions created by the State of Texas that provide regional municipal and industrial wastewater treatment). TCEQ currently has 2,513 active wastewater permits for POTWs. Privately owned domestic wastewater treatment facilities are not owned by a governmental entity and are typically built to provide wastewater service to residential or commercial developments. TCEQ currently has 771 active domestic wastewater permits issued for privately owned wastewater treatment facilities.

Texas Water Code Requirements for Regionalization

Texas Water Code (TWC), Section 15.001(13) defines regionalization as the development of a water supply or wastewater collection and treatment system that incorporates multiple service areas into an areawide service facility or any such system that serves an area that includes more than a single county, city, special district, or other political subdivision of the state. The Texas Water Code (TWC) § 26.081 mandates the state's regionalization policy and states that the TCEQ shall implement a policy to “*encourage and promote the development and use of regional and area-wide waste collection, treatment, and disposal systems to serve the waste disposal needs of the citizens of the state and to prevent pollution and maintain and enhance the quality of the water in the state.*” In furtherance of that policy TWC § 26.0282 authorizes the TCEQ, when considering the issuance of a permit to discharge waste, to deny or alter the terms and conditions of a proposed permit based on need and the availability of existing or proposed area-wide or regional waste collection, treatment, and disposal systems.

TCEQ Efforts to Promote Regionalization

TCEQ requires domestic wastewater applicants for new or certain major amendments to review a three-mile area surrounding the proposed facility to determine if there is a wastewater treatment plant or sewer collection lines within the area that the permittee can utilize. Applicants are required to contact those facilities to inquire if they currently have the capacity or are willing to expand to accept the volume of wastewater proposed. If an existing wastewater facility does have the capacity to accept the proposed wastewater, the applicant must submit an analysis of expenditures required to connect to a permitted wastewater treatment facility or collection system located within three miles versus the cost of the proposed facility or expansion. Applicants are required to provide copies of all correspondence with the owners of existing plants within three miles of the proposed plant regarding regionalization with their system.

The TCEQ's policy on regionalization does not provide an automatic basis to deny an application or to compel an applicant to connect to the existing wastewater treatment facility or collection system located within three miles of the proposed new facility. TCEQ has approved TPDES domestic wastewater permit applications for new, renewal, or major amendment applications to increase flow in the following situations:

1. There is no wastewater treatment plant or collection system within three miles of the proposed facility.
2. An applicant requests service from a neighboring plant and the request was denied.
3. The applicant can successfully demonstrate that an exception to regionalization should be granted based on costs, affordable rates, and financial, managerial, and technical capabilities of the existing system.

Barriers that Impede Regionalization

There are substantial costs associated with constructing, obtaining permits, and maintaining a domestic wastewater treatment facility. If a developer is able to connect to an existing wastewater treatment facility or collection system, the owners of the existing facility may require the developer to pay for the cost to install pipe and other associated equipment to connect to the existing treatment system. The costs to install pipe and other infrastructure is often cost prohibitive based on the distance (number of miles) to the existing wastewater system. The cost to install the infrastructure to connect to an existing wastewater treatment facility is often a major factor in determining if regionalization of wastewater treatment systems will occur. Another factor in determining if a connection to an existing wastewater treatment facility will occur is the wastewater treatment capacity of the existing facility. The existing wastewater facility will need to have sufficient capacity to accept the additional wastewater or are willing to expand the current treatment system to accept the volume of wastewater proposed.

TCEQ Texas Pollutant Discharge Elimination System Program for Domestic Wastewater Treatment
TCEQ Requirements for Planning the Operational Capacity for Wastewater Treatment Facilities

The TCEQ requires domestic wastewater treatment facilities to conduct planning for future additional flow that may occur due to population or other growth in the area. TCEQ implements the 75/90 rule that is found in 30 TAC 305.126 and has the following requirements for future planning at domestic wastewater treatment facilities:

1. Whenever flow measurements for any sewage treatment plant facility in the state reaches 75% of the permitted average daily or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion and/or upgrading of the wastewater treatment and/or collection facilities.
2. Whenever the average daily or annual average flow reaches 90% of the permitted average daily flow for three consecutive months, the permittee shall obtain necessary authorization from the commission to commence construction of the necessary additional treatment and/or collection facilities.

In the case of a wastewater treatment facility which reaches 75% of the permitted average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee may submit an engineering report to TCEQ supporting this claim. If in the judgment of TCEQ the population to be served will not cause permit noncompliance, then the requirements of the 75/90 rule may be waived.

Challenges in Operating Domestic Wastewater Treatment Systems

Public and private domestic wastewater systems, particularly those with limited resources, may face challenges to perform maintenance on the wastewater collection system and other equipment at the treatment facility. Some operators of domestic wastewater treatment systems may lack financial, managerial, or technical capacity or a combination of these elements that would help them operate the treatment facility. Wastewater operators in economically disadvantaged areas have previously expressed concerns with raising taxes to pay for repairs or other costs associated with operating the treatment facility. Factors that can add to the challenges in operating a wastewater treatment facility include:

- aging infrastructure
- decreasing customer base throughout which to disperse the costs
- geographic isolation and lack of alternative sources
- lack of qualified or knowledgeable operators

Technical and Managerial Assistance

The TCEQ can work with operators of wastewater treatment systems to provide technical support and other resources to address the challenges that threaten the ability to adequately maintain and operate the treatment facility. The TCEQ also provides assistance to operators of wastewater treatment facilities that want to explore regional projects.

TCEQ Texas Pollutant Discharge Elimination System Program for Domestic Wastewater Treatment

Texas Water Infrastructure Coordination Committee

The Texas Water Infrastructure Coordination Committee (TWICC) provides a “one-stop-shop” for funding and other assistance for water and wastewater providers who are seeking funding for regional projects, service for rural areas, interconnects with neighboring systems and other infrastructure needs. TCEQ is one of the founding agencies which includes the Texas Department of Agriculture, EPA, PUC, TRWA, Texas Water Development Board, United States Department of Agriculture Rural Development, Texas Section of the American Water Works Association, North American Development Bank, Communities Unlimited Incorporated, General Land Office, and Federal Emergency Management.

Contact Information

For additional information on the topics discussed above, please contact:

David W. Galindo, Director

Texas Commission on Environmental Quality, Water Quality Division

Phone: 512-239-0951

Email: David.galindo@tceq.texas.gov