



Oil and Gas Wastewater Permitting

May 2024

Agenda

- Background for Implementing HB2771
- Permitting Options
 - Individual TPDES permits
 - General TPDES and state-only permits
- Location Considerations
- Questions

Overview

House Bill (HB) 2771, 86th Legislative Session, transfer of oil and gas permitting authority to TCEQ for discharges to surface water in the state.

Prior to HB 2771, oil and gas extraction operations were required to obtain separate NPDES authorization via EPA.

Texas Pollutant Discharge Elimination System (TPDES)

Federal delegation by the U.S. Environmental Protection Agency to implement the TPDES program to control discharges of pollutants to surface waters of the United States.

TCEQ prepares TPDES permits that comply with state and federal water quality rules and regulations:

- **individual authorizations**
- **general permits**

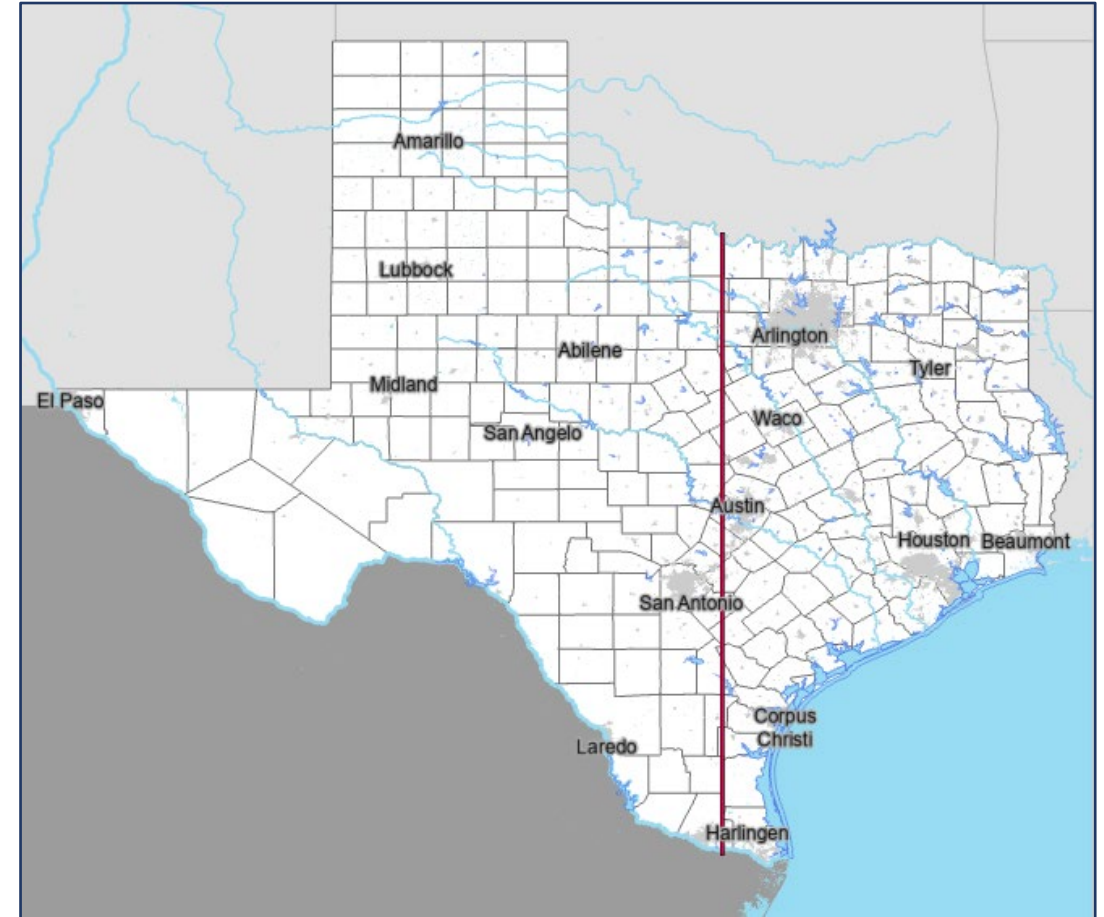
Individual and General Permits

- Individual TPDES permits:
 - Site-specific considerations
 - Requires a detailed permit application
 - Permitting process is approximately one year
- General wastewater permits
 - Typically, statewide*
 - Simplified application process
 - Permitting process is approximately 30 – 60 days

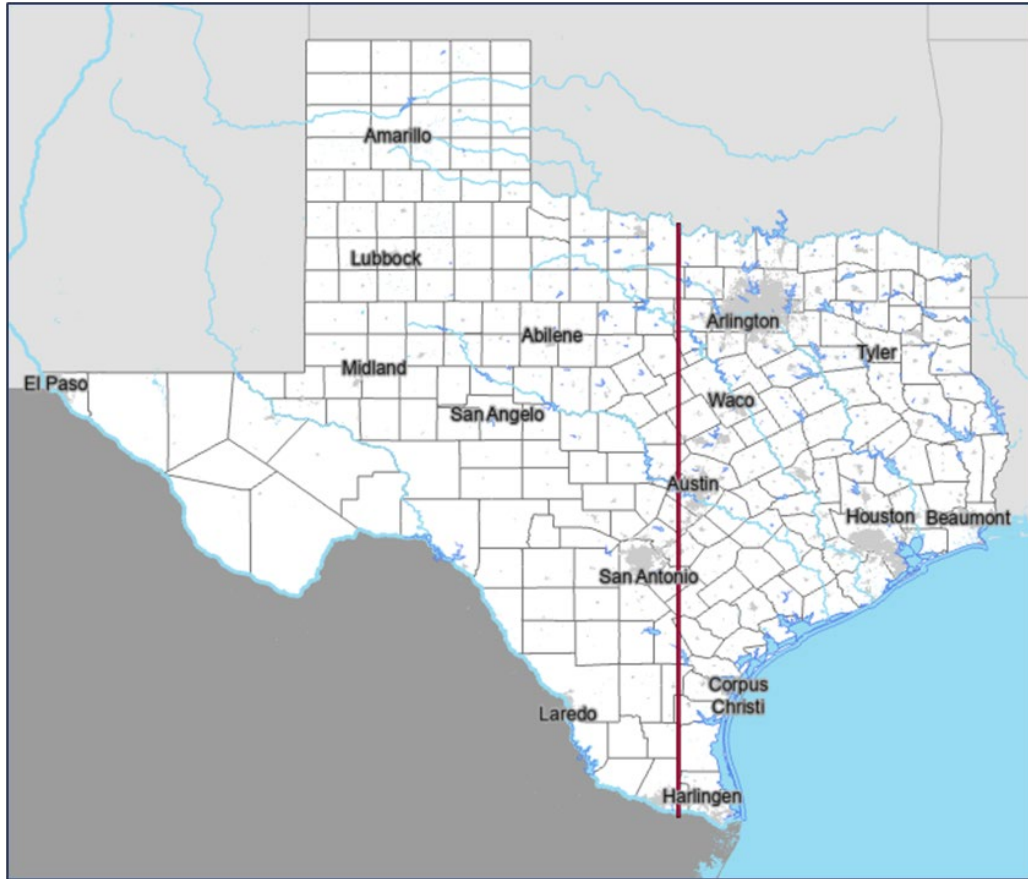
Location Considerations for Oil and Gas discharges

Federal regulations limit discharges of **produced wastewater** from oil and gas extraction operations based on location.

Federal regulations also prohibit moving **produced wastewater** generated in one area to another area for discharge under less stringent requirements.



West of the 98th Meridian



An individual permit is needed west of the 98th Meridian for the discharge of produced wastewater.

Produced wastewater discharge is **prohibited** *except* if put to beneficial use for agriculture or wildlife purposes.



40 CFR Part 435

Code of Federal Regulations (CFR) for discharges of oil and gas wastewater under the oil and gas extraction effluent limitations guidelines (ELGs) and pretreatment standards.

Subpart E – Agricultural and Wildlife Use Subcategory

Applicability: Onshore facilities located in the continental United States and **west of the 98th meridian** for which the produced water has a use in agriculture or wildlife propagation when discharged into navigable waters.

Implementation Procedures (IPs)

Procedures to Implement the Texas Surface Water Quality Standards (Regulatory Guidance, RG-194)

- The [Texas Surface Water Quality Standards](#) are implemented when issuing permits for wastewater discharges to surface waters of the state.
- Surface water quality assessment and impairment status are considered, as provided in the [Texas Integrated Report](#).

EPA review

“EPA will review the first two TPDES draft permits for each of the following SIC Codes that are developed on or after the date of program authorization: 1311, 1321, 1381, 1382, 1389, 4922, and 4925.”

- Subsequent applications may be subject to EPA review.
- Produced water facilities may include SICs 1311, 1381, 1382, 1389

| SIC | Facility Type | Pending | Issued |
|-------------|--|-----------|-----------|
| 1311 | Oil and Gas Exploration | 2 | 0 |
| 1321 | Natural Gas Liquids | 5 | 10 |
| 1381 | Drilling Oil and Gas Wells | 0 | 0 |
| 1382 | Oil and Gas Exploration Services | 0 | 0 |
| 1389 | Oil and Gas Field Services, Not Elsewhere Classified | 0 | 0 |
| 4922 | Transmission and Storage of Natural Gas | 1 | 0 |
| 4925 | Manufacture and Distribution of Gas | 1 | 1 |
| 5171 | Wholesale of Petroleum Products | 3 | 0 |
| | TOTALS | 12 | 11 |

Status of Individual Permits - May 2024

- Transferred Authorizations
 - RRC + Combined EPA/RRC + EPA **≈ 140**
 - Includes cancelled and expired permits
- Pending TCEQ Authorizations for Existing Facilities
 - 11
- Issued TCEQ Authorizations for Existing Facilities
 - 12
- TCEQ Applications or Authorizations for New Facilities
 - 2 (as of February 2024)

Individual Wastewater Permits

When is an individual TPDES industrial permit required?

- Required for facilities that do not meet requirements of a general permit



What oil and gas activity may require an individual TPDES permit?

- Oil and gas extraction
- Natural gas processing plants
- Stripper wells


Updated Industrial TPDES permit application


- Updated Administrative Report (TCEQ-20893)
- Updated Technical Report (TCEQ-10055)
 - Worksheet 12.0 oil and gas exploration, development and production





https://www.tceq.texas.gov/permitting/wastewater/industrial/TPDES_industrial_wastewater_steps.html





TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Home | Air | Land | Water | Licenses | Permits | Reporting

Stormwater Home

Available Water Quality General Permits

Industrial Wastewater Discharges: Am I Regulated?

Sewage Sludge and Biosolids: Am I Regulated?

Wastewater Pretreatment

Water Quality Permits for Agriculture

Completing Water Quality Applications

Industrial Wastewater Discharges: The Permit Process

Industrial Wastewater Discharges: The Permit Process

This page contains a brief description of the industrial wastewater permitting process for Texas Pollutant Discharge Elimination System (TPDES) permits and Texas Land Application permits (TLAPs).

If you must obtain an individual permit to discharge industrial wastewater into or adjacent to "**waters in the state**," take these steps to begin the permitting process:

1. **Contact TCEQ staff well before you apply for the permit.** This is not a requirement, but is highly recommended. Our staff will help you determine if, and what type of, a permit is needed, as well as what information needs to go into a permit application package.

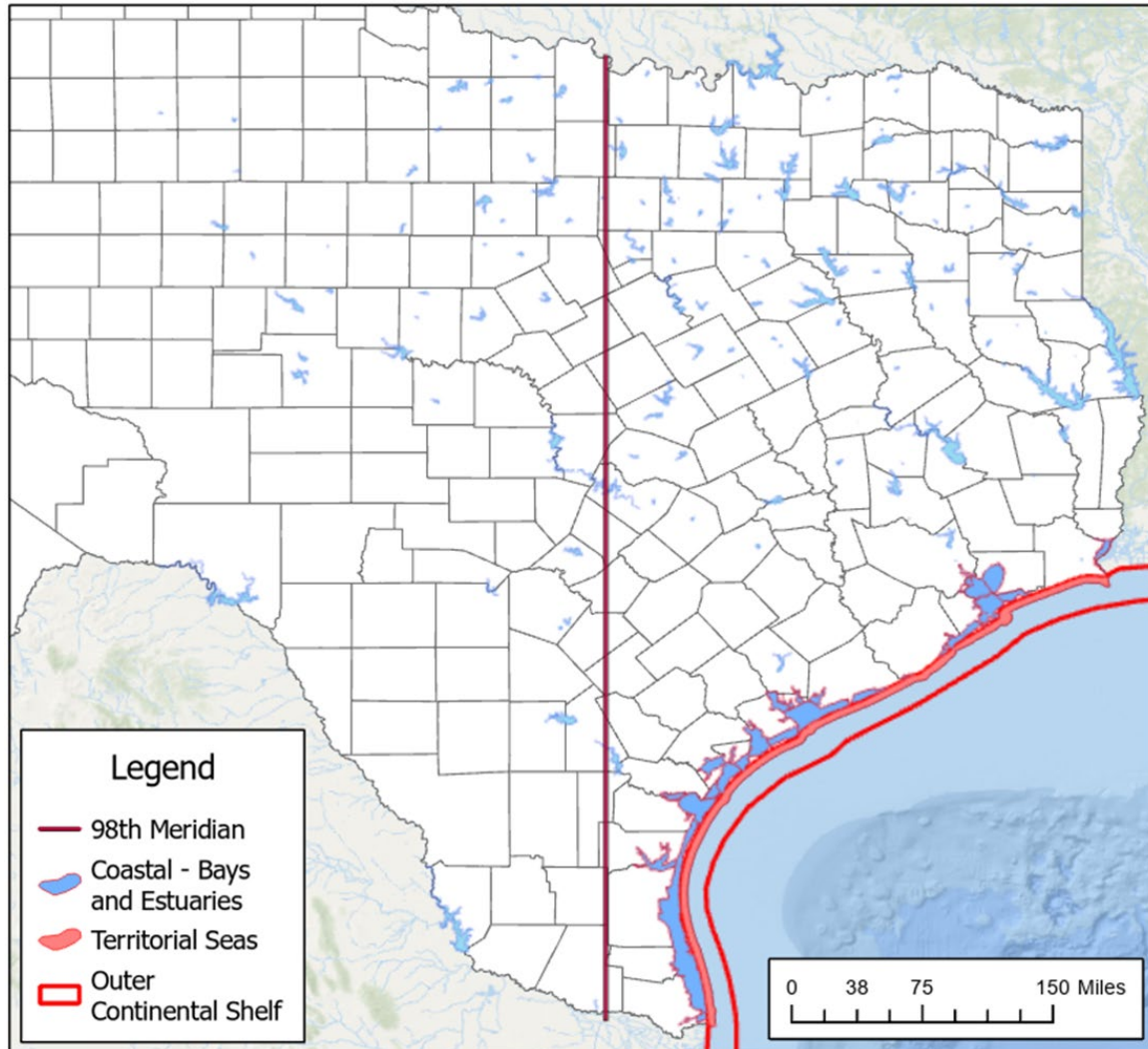


TXG310000 - Onshore Stripper Well Facilities, Coastal Facilities, and Territorial Seas Facilities (within 3-miles of the Texas Coastline)

- Combines and replaces NPDES General Permit Nos. TXG260000 and TXG330000, as well as individual permit authorizations required by the Railroad Commission.
- Approved by the Commission on January 10, 2024, and is available for coverage.
- \$800 application fee and \$100 annual water quality fee.
- Approximately 33 entities with existing NPES/RRC authorizations are expected to seek coverage.

Onshore Stripper Well Facilities

TXG310000



- **Authorize discharge to surface waters**
 - produced wastewater
 - well treatment (not hydraulic fracturing fluids)
 - workover fluids
- **Prohibition of discharge to surface waters**
 - drilling fluids
 - drill cuttings
 - produced sand
 - dewatering effluent
 - formation test fluids
 - well completion fluids
 - hydrate control fluids
 - domestic waste
 - sanitary waste
 - contaminated miscellaneous discharges and uncontaminated miscellaneous discharges
 - contaminated stormwater

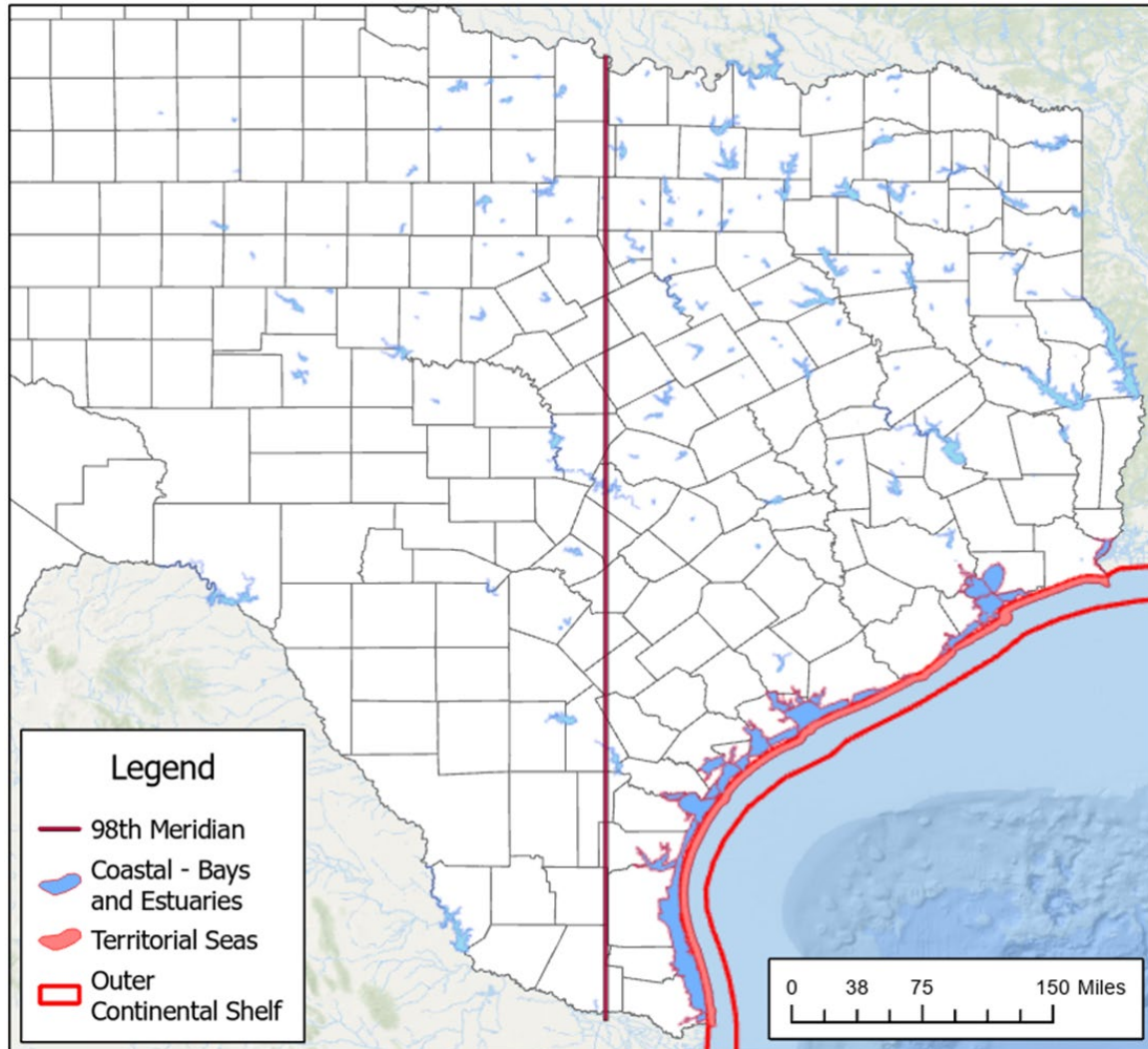
Onshore Stripper Well Facility TXG310000

- An oil and gas extraction operation located on land (not in or on water) **east of the 98th meridian** which only includes wells that produce 10 barrels per calendar day or less of crude oil and that are operating both at the maximum feasible rate of production and in accordance with recognized conservation practices.
- A stripper well facility does not include gas wells or wells injecting water for disposal or for enhanced recovery of oil or gas.
- Effluent Limitations and Monitoring Requirements

| Parameter | Daily Maximum Limitations | Daily Average Limitations | Sample Type | Monitoring Frequency |
|---|---------------------------|---------------------------|-------------|------------------------------|
| Flow | Report, MGD | N/A | Estimate | Once/month |
| Total Dissolved Solids | 3000 mg/L | N/A | Grab | Once/year |
| Oil & Grease | 35 mg/L | 25 mg/L | Grab | Once/month |
| pH | 6.0 - 9.0 standard units | N/A | Grab | Once/month |
| Lethal Whole Effluent Toxicity (WET) limit > 100% <i>Daphnia pulex</i> (24-hour acute LC50 ¹) | ≥ 100% | ≥ 100% | Grab | Once/six months ² |
| Lethal WET limit > 100% <i>Pimephales promelas</i> (24-hour acute LC50 ¹) | ≥ 100% | ≥ 100% | Grab | Once/six months ² |

Coastal Facilities

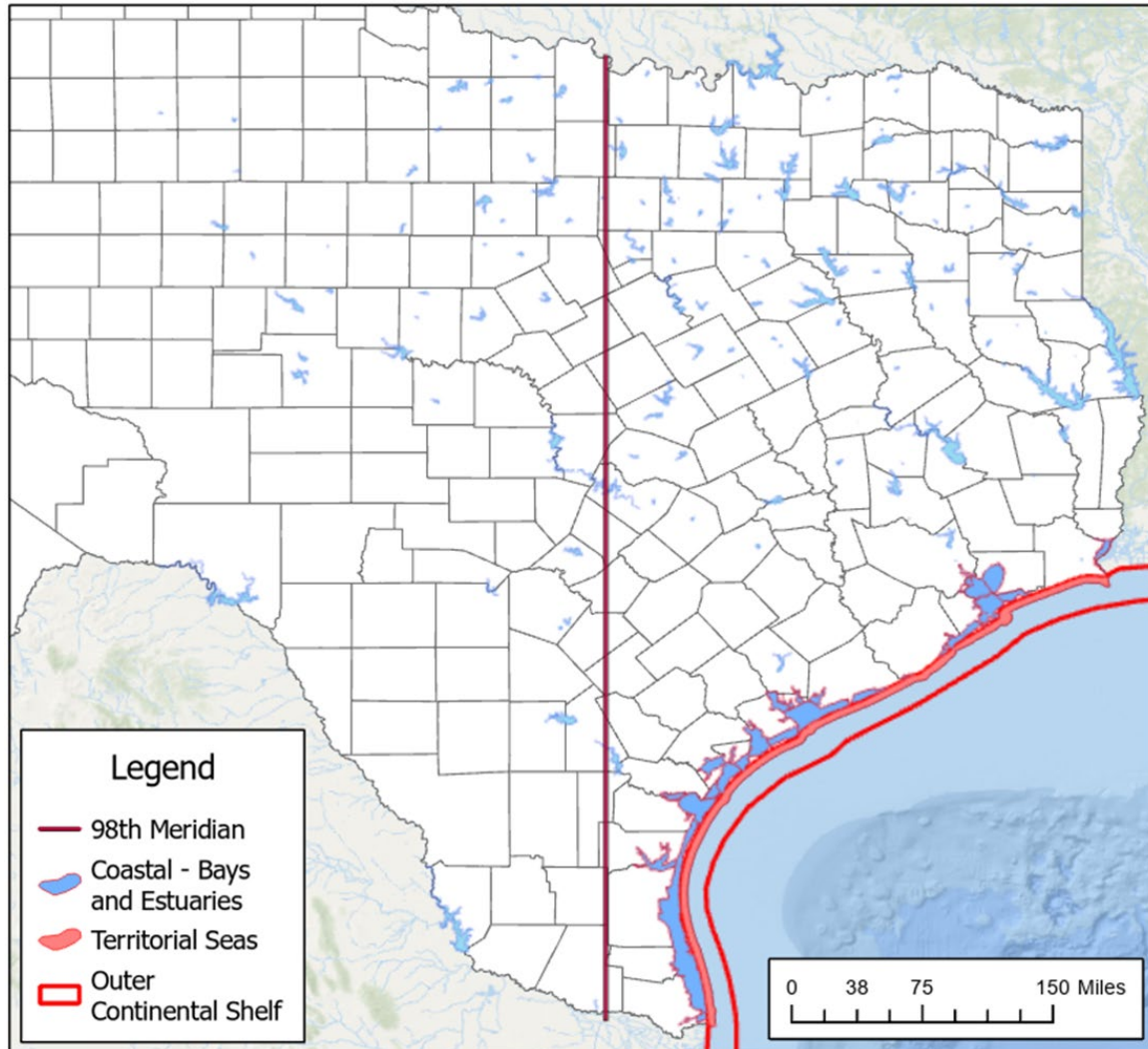
TXG310000



- **Authorize discharge to surface waters**
 - Domestic waste
 - Sanitary waste (M10 and M9IM)
 - Uncontaminated miscellaneous discharges
 - Contaminated miscellaneous discharges
- **Prohibition of discharge to surface waters**
 - drilling fluids
 - drill cuttings
 - **Produced wastewater**
 - produced sand
 - dewatering effluent
 - formation test fluids
 - Well treatment, completion, and workover fluids
 - Hydrate control fluids
 - Contaminated stormwater from inland facilities

Territorial Seas Facilities

TXG310000

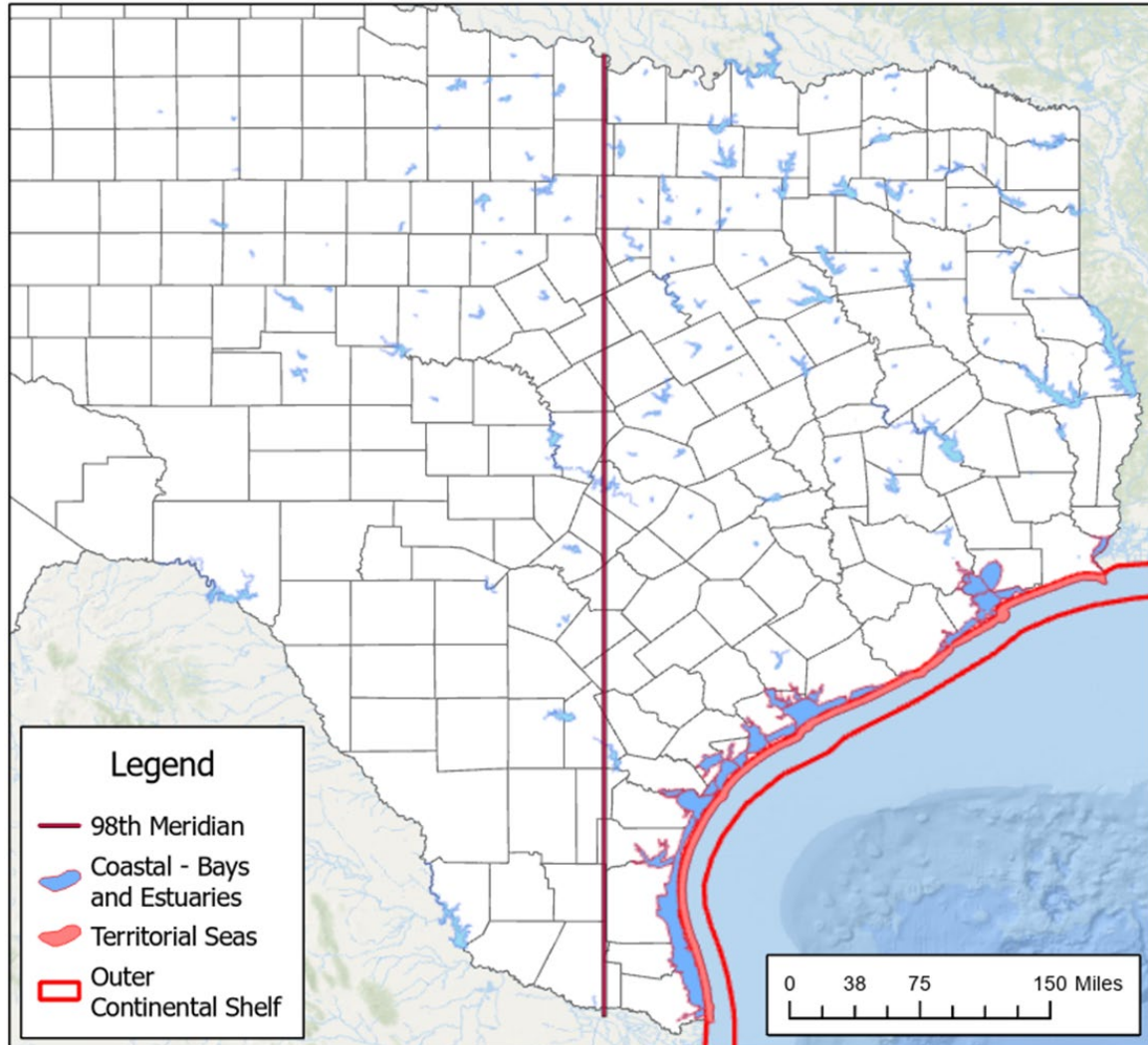


- **Authorize discharge to surface waters**
 - Produced wastewater
 - Hydrate control fluids
 - Well treatment, completion, and workover fluids
 - Deck drainage
 - Domestic waste
- **Prohibition of discharge to surface waters**
 - hydrate control fluids
 - domestic waste
 - sanitary waste
 - contaminated miscellaneous discharges and uncontaminated miscellaneous discharges
 - contaminated stormwater

WQG280000 - State-only Gulf of Mexico Outer Continental Shelf (3 – 10.357 miles of Texas Coastline)

- Developed to replace individual RRC permit authorizations.
- Approved by the Commission on January 10, 2024, and is available for coverage.
- \$800 application fee and \$100 annual water quality fee.

Outer Continental Shelf Facilities (between 3 and 10.357 miles of the Texas coastline) WQG280000



- **Authorize discharge to surface waters**
 - Produced wastewater
 - Hydrate control fluids
 - Well treatment, completion, and workover fluids
 - Deck drainage
 - Domestic waste
 - Uncontaminated miscellaneous discharges
- **Prohibition of discharge to surface waters**
 - Non-aqueous drilling fluids
 - Produced sand
 - Dewatering effluent
 - Formation test fluids


TXG670000 – Hydrostatic Test Discharges

New crude oil and natural gas pipelines and vessels are automatically authorized to discharge under the TPDES general permit without the requirement to submit a permit application.

Existing crude oil and natural gas pipelines and vessels are required to submit a streamlined electronic administrative Notice of Intent.

Available for coverage state-wide.

← ↻ 🏠 <https://www.tceq.texas.gov/permitting/wastewater/general> 📱 🗪 🔍

 TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

[Home](#) | [Air](#) | [Land](#) | [Water](#) | [Licenses](#) |
[Permits](#) | [Reporting](#)

Available Water Quality General Permits

Industrial Wastewater Discharges: Am I Regulated?

Sewage Sludge and Biosolids: Am I Regulated?

Wastewater Pretreatment

Water Quality Permits for Agriculture

Completing Water Quality Applications

Available Water Quality General Permits

View a list of general permits that authorize the discharge of wastewater and/or stormwater into waters in the state.

The discharge of wastewater and certain types of stormwater into or adjacent to **water in the state** (HTML) must be authorized by the Texas Commission on Environmental Quality (TCEQ). This authorization may come in the form of an individual discharge permit or a general permit. Seeking authorization under a general permit is generally less time-consuming than authorization under an individual permit and usually requires fewer resources.

The status of general permits that are being renewed or amended will be discussed at quarterly **Water Quality Advisory Workgroup** meetings, which are open to the public.



wqap@tceq.texas.gov

alyssa.loveday@tceq.texas.gov