TCEQ REGULATORY GUIDANCE
Program Support and Environmental Assistance Division
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Common Environmental Requirements for Oil and Gas Activities in Texas

This guide aims to help you understand agency jurisdiction and basic environmental laws and regulations for oil and gas (O&G) activities. It discusses common TCEQ requirements and questions related to these activities but does not serve as a substitute for compliance with the rules in the Texas Administrative Code[1] (TAC).

If you still have questions after reading, contact our Small Business and Local Government Assistance hotline at 800-447-2827 or email us at TexasEnviroHelp@tceq.texas.gov.

For more information, visit our Oil and Gas Facilities: Compliance Resources[2] webpage.

Oil and Gas Regulatory Jurisdiction

The Railroad Commission of Texas (RRC) is the state agency with primary jurisdiction for O&G drilling, exploration, and production activities. TCEQ shares some of this responsibility for certain upstream operations. A memorandum of understanding (MOU) between RRC and TCEQ, which explains each agency's authority over various O&G activities, is found in:

- RRC's rules at 16 TAC 3.30[3]
- TCEQ's rules at 30 TAC 7.117[4]

Local regulatory authorities may also have requirements not covered in this guide.

You must obtain the proper permits from all regulatory authorities with jurisdiction over your activities before starting operations.

1. www.sos.state.tx.us/tac/index.shtml
2. www.tceq.texas.gov/assistance/industry/oil-and-gas
3. texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=2&ti=16
4. www.tceq.texas.gov/goto/view-30tac

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Spill Regulation and Response

Who to contact about a spill depends on the activity that caused the spill.

RRC regulates spills associated with:

- O&G exploration, development, and production,
- pipeline transportation of crude oil and natural gas, and
- transportation of O&G waste.

Report releases or spills associated with these activities to RRC through their **24-hour emergency line** at 844-773-0305. For more information, visit RRC's Accidents and Incident Reporting[5] webpage.

TCEQ regulates spills associated with:

- truck, barge, and rail car transportation of crude oil and natural gas,
- spills of solid waste, hazardous substances, and refined petroleum products, and
- abandoned containers of unknown substances.

Report releases or spills associated with these activities to TCEQ's **24-hour emergency line** at 1-800-832-8224 or your local TCEQ regional office[6]. For more information, visit TCEQ's Emergency Response[7] webpage.

Air Quality Regulations

Air Permits

If your facility has the potential to emit air contaminants, you must obtain authorization from TCEQ before starting construction. Your facility activities and amount of emitted contaminants determine your air permitting authorization options[8].

See our Oil and Gas Facilities: Air Compliance Information[9] webpage for more information.

For help, contact TCEQ Air Permits Division by:

- Phone at 512-239-1250
- Email at airog@tceq.texas.gov

5. www.rrc.texas.gov/accidents-and-incident-reporting/
6. www.tceq.texas.gov/goto/region
7. www.tceq.texas.gov/response
8. www.tceq.texas.gov/downloads/permitting/air/guidance/nsr/og-airperm-options.pdf
9. www.tceq.texas.gov/assistance/industry/oil-and-gas/oilgas_air.html

Venting and Flaring

TCEQ regulates air emissions from flaring and venting operations at O&G production and processing sites. Flaring and venting natural gas streams may occur due to:

- centralized gas plant outages
- pipeline capacity limitations
- maintenance
- other planned and unplanned activities

Depending on their nature, certain venting and flaring emissions may be authorized for example, by an air permit, as discussed above. However, others may be unauthorized emission events, as discussed below.

RRC regulates flaring and venting operations[10] to prevent waste of natural resources.

Emission Events

An emissions event (EE) is an upset or unscheduled maintenance, startup, or shutdown (MSS) activity that results in unauthorized emissions of air contaminants. However, as discussed below, certain EEs may be eligible for enforcement discretion if affirmative defense criteria can be met.

Examples of EEs include:

- Unscheduled and unplanned maintenance onsite
- Equipment breakdown
- Leaks, spills, pipeline breaks
- Power outages onsite
- Weather related events

If activities and resulting emissions are routine, planned or predictable then they do not qualify as emissions events. Such activities must be authorized with applicable control requirements through TCEQ's air permitting program.

TCEQ regulates the reporting and recordkeeping requirements for EEs and scheduled maintenance startup and shutdown (SMSS) activities.

When to Notify TCEQ

If your site experiences a reportable EE or excess opacity event (EOE) from one or more emissions points, notify TCEQ **within 24 hours** of discovery.

- 30 TAC 101.1(88)[11] defines a reportable EE as any emissions event that in any 24-hour period, results in an unauthorized emission from any emissions point equal to or in excess of the reportable quantity (RQ).

10. www.rrc.texas.gov/about-us/faqs/oil-gas-faq/flaring-regulation/
11. www.tceq.texas.gov/goto/view-30tac

- Per 30 TAC 101.1(32)[12], an EOE is when an opacity reading is equal to or exceeds 15 additional percentage points above an applicable opacity limit, averaged over a six-minute period.

If your site plans to perform a SMSS activity, notify TCEQ **at least 10 days before** starting the activity. Submit a separate notification for each regulated entity. If your activity does not meet the 30 TAC 101.1(91) definition of a SMSS[13], follow the reporting and recordkeeping requirements for EEs.

How to Notify TCEQ

Submit air emissions and maintenance events (AEME) notifications and reports to TCEQ using one of the methods below:

- Report online through the State of Texas Environmental Electronic Reporting System[14] (STEERS)
- Fax a completed AEME form[15] to your regional office

You need a STEERS account to report online. If you do not have one already, use the following resources to help you:

- STEERS Create an Account[16] webpage
- A Guide to Creating an Account in STEERS E-Permitting[17] (RG-531a)

For more information on how to notify TCEQ of your EE or SMSS activity, visit TCEQ's Air Emissions and Maintenance Events Reporting Form[18] webpage.

What to Expect After Notifying TCEQ

After you submit a report of an EE, TCEQ conducts an initial screening and sends you a questionnaire if appropriate. These questions are based on the Demonstration Criteria in 30 TAC 101.222[19] and are used to determine whether an EE is subject to an affirmative defense to administrative enforcement penalties.

Based on the results of the investigation, TCEQ may pursue enforcement actions against regulated entities, which may include the assessment of a penalty.

For more information about TCEQ's review of EEs and SMSSs, visit the Reports of Air Emission Events[20] webpage.

12. www.tceq.texas.gov/goto/view-30tac
13. www.tceq.texas.gov/goto/view-30tac
14. www.tceq.texas.gov/goto/steers
15. www.tceq.texas.gov/airquality/emission-events/cefoumforms.html
16. www3.tceq.texas.gov/steers/help/spa/createacct.html
17. www.tceq.texas.gov/downloads/assistance/publications/rg-531a.pdf
18. www.tceq.texas.gov/airquality/emission-events/cefoumforms.html
19. www.tceq.texas.gov/goto/view-30tac
20. www.tceq.texas.gov/airquality/emission-events

Nonattainment Areas

EPA's National Ambient Air Quality Standards[21] (NAAQS) set emission limits for six common air pollutants. The Clean Air Act identifies two types of NAAQS: primary and secondary. Areas that do not meet the **primary standard** are called "nonattainment areas."

Regulated entities or sites in a nonattainment county may be subject to state implementation plan (SIP) rules and requirements, as well as more stringent permitting requirements. A SIP is a plan, submitted by the state to EPA, to reduce pollution in areas that are not meeting the standards. For more information about the Texas SIP and nonattainment areas, visit our Texas State Implementation Plan[22] webpage.

Waste Regulations

RRC regulates discarded materials that result from activities under their jurisdiction. RRC regulated waste is classified as "O&G waste." TCEQ regulates all other discarded materials which are classified as "solid waste."

For more information see RRC's Surface Waste Management Manual[23] and TCEQ's Oil and Gas Facilities: Waste Compliance Information[24] webpage.

Activities that generate oil and gas waste (RRC's jurisdiction):

- O&G exploration and production in the oil and gas field (hazardous and nonhazardous).
- Pipeline transportation of crude oil and natural gas (hazardous and nonhazardous)
- Natural gas processing plants, pressure maintenance plants, and repressurizing plants (nonhazardous)
- Commercial service company facility operated by a permitted waste hauler (hazardous and nonhazardous)

Activities that generate solid waste (TCEQ's jurisdiction):

- Commercial service company facility that supports O&G exploration, development, and production (hazardous and nonhazardous)
- Natural gas processing plants, pressure maintenance plants, and repressurizing plants (hazardous)
- Transportation of crude oil and natural gas by barge, railcar, and truck (hazardous and nonhazardous)
- Pipeline transportation of refined products (hazardous and nonhazardous)

21. www.epa.gov/criteria-air-pollutants/naaqs-table
22. www.tceq.texas.gov/airquality/sip
23. www.rrc.texas.gov/oil-and-gas/publications-and-notices/manuals/surface-waste-management-manual/
24. www.tceq.texas.gov/assistance/industry/oil-and-gas/oilgas_waste.html

O&G Waste and Landfills

Waste generated from an O&G operation disposed of at a TCEQ-authorized municipal solid waste (MSW) landfill is classified as "special waste." Certain Type I MSW landfills are authorized to receive, process, and dispose of these wastes. Contact your local landfill to see if they are authorized to accept special waste.

See the following resources for more information:

- Disposal of Special Wastes Associated with the Development of Oil, Gas, and Geothermal Resources[25] (RG-003)
- Special Waste Disposal[26]
- Municipal Solid Waste Viewer[27]

Injection Wells

Underground injection control (UIC) wells are classified into five different classes. Injection wells are used for disposal of O&G, municipal, industrial, or hazardous wastes; injection of fluids to extract minerals; and enhanced oil recovery.

All injection wells are regulated by either TCEQ (the commission in the Act) or the Railroad Commission of Texas (RRC). Injection wells are classified into five different types:

- Class I wells, which are used for deep injection, are regulated by the TCEQ. (The RRC reviews and comments on these applications.)
- Class II wells, which are related to energy byproducts, are regulated by the RRC.
- Class III wells, which are used to extract minerals other than oil and gas, are regulated by the TCEQ or the RRC, depending on the type of well.
- Class IV wells are generally banned, but may be authorized by the TCEQ or the EPA in certain environmental cleanup operations.
- Class V wells, which are used for many different activities, are regulated by either the TCEQ or the RRC, depending on the type of well.

Find more information for each class of well on our Injection Wells: Am I Regulated?[28] webpage.

- See requirements for injection wells and a review of regulatory control for each class of well on our Underground Injection Control Permits[29] webpage.

For further information or assistance with UIC, contact TCEQ's UIC program by phone at 512-239-6466 or email at uic@tceq.texas.gov.

25. www.tceq.texas.gov/downloads/permitting/waste-permits/publications/rg-003.pdf
26. www.tceq.texas.gov/permitting/waste_permits/msw_permits/msw_specialwaste.html
27. www.tceq.texas.gov/gis/msw-viewer
28. www.tceq.texas.gov/permitting/radmat/uic_permits/UIC_Am_I_Regulated.html
29. www.tceq.texas.gov/permitting/radmat/uic_permits/uic.html

Class VI wells, used for geologic sequestration of carbon dioxide, fall under EPA[30].

Water Rights

Surface Water

Surface water is owned by the state and held in trust for the public. With few exceptions, you need a water rights permit[31] before you begin construction to divert, impound, take, or use surface water.

Your plans for the surface water will determine which permit application[32] to submit:

- **Short-term projects**, such as O&G well drilling and hydrostatic testing, require a temporary permit. There are two types of temporary permits, each with different conditions and application processes.
- **Long-term projects** require a new permit.

For help with these permits, contact TCEQ's Water Rights Permitting section by phone at 512-239-4600 or by email at wras@tceq.texas.gov.

Groundwater

Local or regional Groundwater Conservation Districts[33] (GWCD) manage and regulate groundwater production and use.

If your property is not located in a GWCD, groundwater is subject to the rule of capture. This rule states that groundwater captured by a well and brought to the surface belongs to the landowner. Under the rule of capture, the landowner:

- cannot capture and use the water to injure a neighbor or willfully waste the resource.
- is liable for damages if their water pumping activity lowers the elevation of neighboring land.

Surface Casing

RRC's Groundwater Advisory Unit[34] (GAU) provides groundwater protection determinations for surface casing. It also establishes surface casing depth requirements and any isolation zones that require casing to protect groundwater when drilling and installing a well.

For more information, contact RRC's GAU by phone at 512-463-2741 or email at gau@rrc.texas.gov.

30. www.epa.gov/uic/class-vi-wells-used-geologic-sequestration-carbon-dioxide
31. www.tceq.texas.gov/permitting/water_rights/wr-permitting/wr_amiregulated.html
32. www.tceq.texas.gov/permitting/water_rights/wr-permitting/wr_applications.html/
33. www.tceq.texas.gov/groundwater/groundwater-planning-assessment/districts.html
34. www.rrc.state.tx.us/oil-and-gas/applications-and-permits/groundwater-advisory-unit/

Dam Safety

TCEQ's Dam Safety Program[35] monitors and regulates private and public dams. If you plan any activities listed in Table 2, TCEQ may request an engineering study. The professional engineer's report must certify that your planned activities will not compromise the dam's integrity.

Table 2. Dam Engineering Study Requirements

Location Near Dam	Activity
In or across dam or spillway	Install a utility line or construct a road
200 feet	Dredge the reservoir or construct a road
500 feet	Explore for oil or gas, drill an oil or gas well, or perform horizontal drilling or fracturing
0.5 miles	Blast

Drinking Water

TCEQ regulates drinking water in Texas. Public water systems (PWS) serve water for human consumption to at least 15 connections or 25 people at least 60 days out of the year. If you have your own water source (such as a well) and supply water to other people or connections, you may be a PWS. Human consumption is defined as uses by humans in which water can be ingested into or absorbed by the human body.

Examples include:

- Drinking
- Bathing
- Brushing teeth
- Washing hands or dishes
- Cooking or preparing foods

If your facility has a restroom that is available to the public, or employs 25 people or more at least 60 days a year, you are considered a PWS—even if you do not serve food or drinks to the public.

35. www.tceq.texas.gov/compliance/investigation/damsafetyprog.html

Serving Bottled Water

Your water source and system must still be approved by TCEQ and meet all requirements, even if you supply bottled water for drinking. You cannot use bottled water to achieve compliance with a maximum contaminant level.

Serving Purchased Treated (Potable) Water

Some people buy treated (or potable) water and redistribute it. Sometimes, the water seller takes sanitary control of the buyer's system and is then responsible for ensuring that both systems meet requirements. Sanitary control means the buyer has plumbing restrictions and inspections set by the seller.

If you buy and redistribute treated water, you are responsible for following TCEQ regulations if either:

- your water seller does not take sanitary control of your distribution system, or
- the buyer changes the chemical nature of the water—for example, by adding more disinfectant.

For more information about drinking water compliance and applicable rules and regulations, including resources for temporary housing and RV campsites, visit our Water Compliance Resources[36] webpage.

Wastewater Regulations

Industrial Wastewater

Under authority granted by EPA, TCEQ issues Texas Pollutant Discharge Elimination System (TPDES) permits to authorize discharges of produced water, hydrostatic test water, and gas plant effluent discharges resulting from certain oil and gas activities into water in the state. Permittees that must report Discharge Monitoring Report (DMR) data will report to TCEQ via NetDMR[37].

For more information, visit our TCEQ Oil and Gas Wastewater Permits[38] webpage.

36. www.tceq.texas.gov/assistance/water#drinking-water>
37. www.tceq.texas.gov/goto/netdmr
38. www.tceq.texas.gov/assistance/industry/oil-and-gas/oil-and-gas-wastewater-permits

Domestic Wastewater (Sewage)

Domestic sewage and wastewater includes waterborne human waste and waste from washing, bathing, and food preparation.

Domestic sewage generated:

- Near an oil and gas exploration or production well site is regulated by **RRC**.
- On O&G leases but not near a well site is regulated by **TCEQ**.

If you generate:

- **Less than 5,000 gallons of wastewater daily,** you may qualify for an On-Site Sewage Facilities[39] (OSSF) authorization.
- **More than 5,000 gallons of wastewater daily and your site is under TCEQ jurisdiction,** you need a domestic wastewater permit[40].

Transportation and Disposal of Domestic Sewage

You must use a TCEQ-registered sludge transporter to transport domestic sewage regulated by RRC and TCEQ.

- See our Sludge Transporters: Am I Regulated[41] webpage for more information.

Dispose of the waste at an appropriately authorized facility. Domestic septage from portable toilets at RRC-regulated facilities may be disposed of at TCEQ-authorized facilities if it is not mixed with other waste materials.

- RRC regulated waste sludge cannot be land applied at TCEQ-permitted facilities for the beneficial use of sewage sludge or water treatment sludge.

Stormwater

Stormwater regulations fall into two categories: construction and industrial. If you conduct activities described in either of the permits, you need to apply for authorization and meet that permit's requirements.

Construction General Permit (CGP)

EPA granted TCEQ authority under the TPDES program to regulate construction stormwater discharges associated with O&G including:

- exploration, production, and processing
- treatment operations

39. www.tceq.texas.gov/permitting/ossf/on-site.html
40. www.tceq.texas.gov/permitting/wastewater/municipal
41. www.tceq.texas.gov/permitting/registration/sludge

- transmission facilities

TCEQ amended the CGP[42] to expand the applicability for non-exempt O&G construction activities. If your activities are regulated by the CGP, use our assistance tools[43] to help you comply with its requirements.

Facilities that store refined products intended for off-site use and crude oil in aboveground storage tanks are eligible for CGP coverage if the construction project:

- disturbs at least one acre of land.
- is part of a larger common plan of development[44] and disturbs at least one acre of land.

Construction activity at certain facilities might meet an exemption or exception[45] from stormwater discharge authorization under the CGP.

For more information, visit our Stormwater General Permit for Construction Activities[46] webpage.

Industrial Multi-Sector General Permit (MSGP)

The 2021 Industrial Multi-Sector General Permit (MSGP) will go through a similar amendment process to include O&G activities at a later date. To determine if your facility requires authorization under the current permit, please visit the Stormwater Multi-Sector General Permit for Industrial Facilities[47] webpage.

If your activities are regulated by the permit[48], please use our assistance tools[49] to help you comply with its requirements.

Edwards Aquifer

If you are located in the Edwards Aquifer area, additional rules may apply. Regional staff for the Edwards Aquifer Protection Program[50] offer help understanding these requirements.

- If you are located in Williamson, Travis, or Hays County, call TCEQ's Austin Regional Office at 512-339-2929.
- For help in Comal, Bexar, Medina, Uvalde, or Kinney County, call TCEQ's San Antonio Regional Office at 210-490-3096.

42. www.tceq.texas.gov/downloads/permitting/stormwater/general/construction/2023-cgp-txr150000.pdf
43. www.tceq.texas.gov/assistance/water/stormwater/sw-construction.html
44. www.tceq.texas.gov/permitting/stormwater/construction/common_plan_of_development_steps.html
45. www.tceq.texas.gov/downloads/permitting/stormwater/general/construction/2023-cgp-txr150000.pdf#page=15
46. www.tceq.texas.gov/permitting/stormwater/construction
47. www.tceq.texas.gov/permitting/stormwater/industrial
48. www.tceq.texas.gov/downloads/assistance/water/stormwater/msgp/txr050000-page18-82.pdf
49. www.tceq.texas.gov/assistance/water/stormwater/sw-industrial.html
50. www.tceq.texas.gov/goto/eapp

Reused or Reclaimed Water

You must get authorization from TCEQ to use reclaimed water from municipal and certain industrial sources for hydraulic fracturing activities. For more information, visit our Requirements for Reclaimed Water[51] webpage.

Complaints

Submit environmental complaints to the proper governmental entity listed in Table 4 below.

Table 3. Complaint Issues and Government Entity Contact

Complaint Issue	Government Jurisdiction
Tracking dust onto public roads	Local Government
Exploration and production of crude oil and natural gas	RRC District Office[52]
Noise	Local law enforcement agency
Nuisance odor	TCEQ[53]
Spills of O&G waste including produced water	RRC
Spills of refined product	TCEQ
Traffic generated by O&G activity	Local law enforcement agency
Private water supply wells[54]	RRC
Public drinking water supply	TCEQ

51. www.tceq.texas.gov/assistance/industry/water/reclaimed_water.html/#drilling
52. www.rrc.texas.gov/about-us/locations
53. www.tceq.texas.gov/compliance/complaints
54. Suspected contamination associated with O&G exploration and production.