Environmental Permits

- Covers the management of oil and gas waste at or near the surface
- Includes all disposal methods other than injection wells
- Managed by the Environmental Permits group at the RRC

Management methods include:
- Pits
- Landfarming and Landtreatment
- Recycling
- Reclamation Plants
- Separation Facilities
Associated Rules and Publications

• Rule 8 – Water Protection
• Rule 57 – Reclamation Plants
• Rule 78 – Financial Security
• Rule 98 – Hazardous Waste Management
• Chapter 4, Subchapter B – Commercial Recycling

• Information associated with the Environmental Permits Unit can be found in the **Surface Waste Management Manual**, which is on the Commission’s website.
• Rule 3.8(b) – No person conducting activities subject to regulation by the commission may cause or allow pollution of surface or subsurface water in the state.
Topics to Be Covered

- Pits
- Landfarms and Landtreatment
- Reclamation Plants
- Waste Separation Facilities
- Discharges
- Waste Haulers
- Hazardous Waste
- Recycling
Authorized Disposal

• Burial at *that* well site
  • Freshwater drilling muds <3,000 mg/L chlorides (Cl)
  • Dewatered freshwater drilling muds >3,000 mg/L
  • Cuttings from freshwater or oil-based muds >3,000 mg/L Cl
  • Dewatered completion/workover pit wastes
  • Dewatered non-com. fluid recycling pit wastes

• Landfarming on *that* lease
  • Freshwater drilling muds <3,000 mg/L Cl

• Rule 8(b) “No Pollution” always applies
Non-Com. Fluid Recycling

- Recycling of fluids from a wellbore (produced water & frac flowback) is authorized without a permit “on lease” if reused “down hole”

- Operators may “share” fluids with other operators

- Operators may use a contractor to treat fluids prior to reuse
Authorized Pits

- Rule 8 authorizes some pits and requires a permit for other pits.

- Authorized pits include:
  - Reserve pit
  - Completion/Workover pit
  - Mud circulation pit
  - Fresh make up water pit
  - Non-commercial fluid recycling pit

- Authorized pits must be dewatered and backfilled in accordance with schedules found within Rule 8 and Rule 8(b) “No pollution” always applies.

- Oversight of authorized pits mainly in District Office
District Offices

Oil and Gas Division
District Boundaries

District Office
1 & 2  San Antonio
3  Houston
4  Corpus Christi
5 & 6  Kilgore
7B  Abilene
7C  San Angelo
8 & 8A  Midland
9  Wichita Falls
10  Pampa
Permitted Pits

• If a pit is not authorized by Rule 8, a pit permit application must be filed with Environmental Permits and a permit issued before use of the pit can begin.

• Examples of types of pits that require a permit:
  • Commercial Recycling Pit
  • Disposal Pit
  • Collecting Pit
  • Emergency Saltwater Storage Pit
  • Brine Pit
  • Washout Pit
  • Skimming Pit
  • Gas Plant Evaporation/Retention Pit
Form H-11:

To apply for a pit that requires a permit, complete Form H-11:

Instructions to Pit Application

Authority: Statewide Rule 8. Water Protection

A. File the application, including all attachments, with the Railroad Commission, Oil and Gas Division, P.O. Drawer 12667, Austin, Texas 78711. On the same day file one copy of the application and its attachments with the appropriate District Office. This form is not required for a minor permit.

B. Notify the surface owner of the land where the pit will be located by mailing or delivering a copy of the application form, both front and back, but excluding the attachments. If the land where the pit is proposed to be built is within corporate limits, also notify the city clerk or other appropriate city official. If application for renewal of an existing permit, notice is not required.

C. Attach a plot showing the size of the base or tract and the location of the pit within the lease or tract. Give approximate perpendicular distances to nearest intersecting lease or tract lines and section/survey lines. To avoid confusion, distinguish between the two sets of lines. Indicate scale on this plot.

D. Attach a county highway map showing the location of the pit. County highway maps are available from the Texas Department of Highways and Public Transportation. P.O. Box 5051, Alternate Map Distribution File D-10, Austin, TX 78763.

E. Application for renewal of a permit for an existing pit, attach a copy of your current application to use the pit.

F. Identify the type of pit in item 13 using one of the following definitions as listed in the Statewide Rule 8.1, New or Existing: salvage, Storage Pits, Collecting Pits, Post-Treatment Retention Pits, Drone Pits. Pits located underground have storage facilities only, such as: Vapor Recovery, Post-Treatment Retention Pits, Drilling Fluid Pits, Drilling Fluid Storage Pits, or other. Specify in item 13 and explain in item 15.

G. Attach a drawing of two perpendicular, sectional views of the pit showing the bottom, sides, dikes and the national grade. For an existing pit, dimensions below fluid level may be approximated if the pit length and width are irregular, include a top view to show pit dimensions and side walls. Indicate scale on all views.

H. If pit is lined, attach data on liner material, thickness, and installation procedures.

I. Attach an identification and description of the soil or subsoil that will make up the pit bottom and sides. The information shall describe the soil by typical name, appropriate proportion of grains sizes, texture, consistency, moisture content, and other pertinent characteristics. (Example: sandy soil, slightly plastic, small percentage of fine sand, firm and dry in place.)

J. If pit is equipped with a leak detection system, attach engineering design drawing of the pit and leak detection system.

K. If pit is not equipped with a leak detection system, describe procedures for periodic maintenance and determining liner integrity, including any special monitoring.

L. If pit is an emergency salt water storage pit, attach justification for pit size based on water production, lease water storage capacity, and anticipated well or equipment shut-down time.

Note: The Director of the Oil and Gas Division may require the applicant to provide the Commission with any additional engineering, geologic, or other information which the Director deems necessary to show that issuance of the permit will not result in the waste of oil, gas, or geothermal resources or the pollution of surface or subsurface water.

Protests and Hearings:

An affected person may file a protest to the application and request a hearing. Any protest to the application should be filed with the Commission in Austin within fifteen days of the date the application is filed with the Commission. Any such protest shall be in writing and shall include (1) the name, mailing address, and phone number of the person making the protest, and (2) a brief description of how the protestor would be adversely affected by the granting of the permit. If the Commission determines that a valid protest has been received, or that a hearing would be in the public interest, a hearing will be held after the issuance of proper and timely notice of the hearing by the Commission. If no protest is received within fifteen (15) days of receipt of the application in Austin, the application may be processed administratively.
Highlights of Form H-11

- Volume of pit
- Information on dikes
- Pit dimensions
- Depth to shallowest groundwater
- Two Perpendicular sectional view of pit
- Liner information
- Soil description
- Notification of surface owner
- Pit location
Commercial Disposal Pits

• In addition to Form H-11, commercial disposal pits also require:
  • Notification to offset landowners and newspaper notice
  • Financial Security
  • Stormwater management plan
  • Plans for routine inspections, maintenance, and monitoring
  • Monitor wells
  • Closure plan
  • Post closure monitoring plan
Permit Application Info

- Wetlands
- Geology
- Soil
- Groundwater
- Topography
- Flood Plain

[Images of topographic maps and geological maps]
Landfarming and Landtreatment

- Landfarming is a method of disposal in which a thin layer of water-based oil and gas waste is applied to the land and then mixed into the receiving soil.

- Landtreatment is similar to landfarming. The distinction is that landtreatment is for oil-based mud and cuttings.

- Both methods allow for the dilution of chlorides and metals and biodegradation of any hydrocarbons in the waste.
Reclamation Plants

- Applied for by completing Form R-9

- Purpose of reclamation plant is to recover crude oil from oil and gas waste prior to its disposal

- Reclamation plant operators are required to post financial security and provide public notice

- Submit monthly report showing all incoming waste, its origins, the amount of oil recovered, and disposal site of all solid and liquid wastes
Waste Separation Facility

• Commercial waste separation facility permits are for facilities that accept oil and gas waste, process it into its solid and liquid components, then ship the waste offsite for disposal

• Liquid wastes are typically injected and solids are sent to a landfill or disposal pit

• Operator of facility is required to provide public notice and financial security
Discharges

- Several types of discharge permits are processed by Environmental Permits:
  - Permit to Discharge Hydrostatic Test Water
  - Permit to Discharge Produced Water to Inland Waters
  - Permit to Discharge Produced Water to the Gulf of Mexico
  - Permit to Discharge Gas Plant Effluent

- All permits in which effluent will reach surface water require both a RRC permit and a permit from EPA.

- Application fee to discharge to surface water is $750.
Wastehauler Permits (WHP)

• Rule 8 requires that the wastehauler certify that all vehicles listed on its application are designed so they will not leak during transportation and that non-solid waste is transported in vessels designed for non-solid waste (e.g. closed top containers)

• Especially in Eagle Ford area, large increase in incidents of waste being hauled in improper vehicles and spilling on the roads

• Rule 8 also states no generator or receiver may knowingly utilize the services of an unpermitted carrier to transport oil and gas wastes.

• Commission can pursue enforcement action against the wastehauler, the disposal site, and the generator of the waste.
Commercial Recycling

• Chapter 4, Subchapter B
• Six Divisions:
  • General Requirements
  • On-Lease Solid Waste Recycling
  • Off-Lease or Centralized Solid Waste Recycling
  • Stationary Solid Waste Recycling
  • Off Lease or Centralized Fluid Recycling
  • Stationary Fluid Recycling
Commercial Recycling

• Rules set minimum requirements for applications and permits

• Rules establish leachability standards for metals, chlorides, and benzene and a minimum compressive strength requirement for the roadbase

• Rules do not establish minimum standards for recycling fluids because water quality for reuse may vary from operator to operator

• Permits will prohibit speculative waste accumulation and require financial security
Contact Information

Environmental Permits Main Line
512.463.3840