



Oil and Gas Waste Stream Management, Part 1

July 2020

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Topics for Discussion



- COVID-19 Agency Information
- Waste Hauler Permits
- Recycling of Domestic Wastewater
- Hydrostatic Test (HT) Discharge
- Discharges
 - TCEQ Delegation
- Landspreading (Non-Commercial)
- Authorized Recycling
- Pits (Non-Commercial)
- Closure Requirements
- Notice
- Renewals, Transfers, Amendments



COVID-19 Agency Information

COVID-19 Permit Extensions



Notice to Oil and Gas Operators

- “All current permits, licenses, registrations, and rule exceptions (except Form P-5, see subsection 2.i. for the applicable extension for Form P-5) issued by the Commission’s Oil & Gas Division with termination or expiration dates between March 1, 2020, and September 30, 2020, are hereby extended so that the new termination or expiration date will for all purposes be September 30, 2020.”

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https://www.rrc.texas.gov/media/57088/notice-to-operators_nov-resolution_4-3-2020.pdf

COVID-19 Waivers



Environmental Permits and Support is currently:

- Issuing Waivers
- Issuing Extensions
- Accepting Digital Reports
 - Hardcopy must be mailed in when availability allows
- Accepting Digital Applications
 - Hardcopy must be mailed in when availability allows
 - Applications must be signed and stamped, as necessary
 - Accepting Digital Applications until December 31, 2020



Waste Hauler Permits

Intro to Waste Hauler Permits



- Who needs a Waste Hauler permit?
 - Transports for hire oil and gas waste off a lease, unit, or other oil or gas property by any method other than by pipeline
- What do I need to get a Waste Hauler permit?
 - An active P-5 status: 512-463-6772
 - The WH-1, WH-2, WH-3 forms
 - \$250 fee
- How often does the Waste Hauler permit have to be renewed?
 - Renewed annually
 - Submit a WH-1 and the \$250 fee

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The Forms WH-1, WH-2, and WH-3 may be found at our website

May 1, 2012- Surcharge of 150% has been imposed on the \$100 application fee. Total is \$250.

FOR RENEWALS- renewing the P5 does not automatically renew the Waste Hauler.

Fees required for: initial applications, renewals, operator name changes- all \$250

Form WH-1



- The WH-1 must include:
 - Operator Name and Address
 - P-5 Organization Number
 - RRC Districts you will be transporting waste
 - RRC Districts where trailers will be housed
 - Make sure there is an **original signature**, digital/e-signatures **Not** accepted

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During the pandemic (?)

The Operator name and address should match what is on file with the P5 Department

A list of the RRC districts may be found on our website. Please include ALL districts that you will be transporting waste in

If there are multiple districts that your trailers will be housed in, please designate a primary district. If you are from out of state, please indicate as such.

Form WH-2



- **WH-2 must include:**
- Operator Name
- WHP Permit Number
- Vehicle information
 - Make/Model/Year of Vehicle
 - Serial/Vin Number
 - Capacity/Units
 - License Plates
- Original signature

Reminder: We do **Not** permit the trucks that haul the trailers

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“For the purposes of this form, ‘vehicle’ means any truck tank, trailer tank, vacuum tank, dump truck, garbage truck or other containers in which oil and gas waste will be hauled by the oil and gas waste hauler”. We do not permit the trucks that haul the trailers, only what is holding/storing the waste.

- Capacity/Units
 - Accepted units: barrels, drums, tons, or cubic yards
- License plates
 - We do **Not** accept temporary plates

Form WH-3 (1 of 3)



- The WH-3 must be submitted by the **Waste Hauler Operator**
- Items 1-4 are to be completed by the **Waste Hauler Operator**
- Items 5-10 are to be completed by the **System Operator** (the disposal well/facility)
 - Waste Hauler Operator must be permitted in same district as facility

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The System Operator is the permitted disposal facility

Form WH-3 (2 of 3)



Items 1-4 are to be completed by the **Waste Hauler Operator** and include:

- The Waste Hauler Operator Name
- The Waste Hauler Operator P-5 Number
- The Waste Hauler Permit Number
- The Waste Hauler Address as filed with the P-5 Department

Form WH-3 (3 of 3)



Items 5-10 are to be completed by the **System Operator** and include:

- The System Operator Name as shown on their P-5
- The System Operator P-5 Number
- The System Operator Address as filed with the P-5 Department
- The Disposal/Injection Well Information
- The Disposal/Systems/Facility Information
- Must be signed by System Operator

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#8: Disposal/Injection Wells Information

- RRC District, Field/Lease Name, Oil Lease or Gas ID Number, Well Number, UIC Control Number

If a well is **Non-Commercial** the following statement must be provided:

“(Waste Hauler), we understand that (System Operator) who owns and operates the following disposal, which is a non-commercial disposal site and only waste originating from (System Operator) wells will be hauled and disposal of in these disposals: (include Well Field/Lease Name, Well Number, and UIC Control Number)”

#9: Disposal Systems/Facilities

- RRC District, Facility Name and County, RRC assigned Permit Number, Indicate what type of facility

Waste Hauler Conclusion



For Waste Hauler Questions

- Jason Hollinger
 - Jason.Hollinger@rrc.texas.gov
 - 512-463-7371
- Waste Hauler email
 - waste_haulers_permit@rrc.texas.gov



Recycling of Domestic Wastewater

Intro to Domestic Wastewater



Recycle treated domestic wastewater/waste streams generated from mobile drinking water treatment systems

Waste streams include

- Treated domestic wastewater
- Mobile drinking water treatment system wastewater

Two recycling options

- Down-hole operations
- Surface application

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What is mobile drinking water treatment system wastewater?

- This is waste from the unit (example: reverse osmosis reject water)

The two options for Surface Application are Controlled Irrigation or Dust Suppression

Down-hole operations criteria:

Biological Oxygen Demand (BOD₅) / (CBOD₅)* \leq 80 (mg/l)

Escherichia coli (E-Coli) \leq 800 CFU/100 milliliters (ml)

Chlorine Residual (>7 day storage) 2 - 3 (mg/l) (EPA Method 334.0 or equivalent)

pH (EPA Method 9045C or equivalent field method) 6.0 - 9.0 (SU)

*Carbonaceous Biological/Biochemical Oxygen Demand (CBOD₅) may be substituted for BOD₅

Surface Application Criteria:

Biological Oxygen Demand (BOD₅) / (CBOD₅)* \leq 65 (mg/l)

Escherichia coli (E-Coli) "Dust Suppression" \leq 200 CFU/100 (ml)

Escherichia coli (E-Coli) "Controlled Irrigation" \leq 75 CFU/100 (ml)

Oil & Grease (EPA Method 1664) \leq 30 (mg/l)

pH (EPA Method 9045C or equivalent field method) 6.0 - 9.0 (SU)

Total Chlorides (or site-specific background for surficial aquifer) \leq 1,500 (mg/l)

Chlorine Residual (>7 day storage) 2 - 3 (mg/l)

Domestic Wastewater (1 of 3)



- Permits are valid for **60 days**
- There is a **one-time extension**
- Domestic Wastewater Application Worksheet found on RRC website
- We do not permit anything more than 60 days prior to start of treatment

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The extension is valid for an additional **60 days** which brings the total length of time to 120 days. **Anything more than that will require a new application.**

Domestic Wastewater (2 or 3)



Filling out the Domestic Wastewater Application Worksheet:

- Operator Name, P5 Number, and Address
- RRC District and County
- Field and Lease Names
- Well Number(s) and Drilling Permit Number(s)
- Latitude/Longitude in Decimal Degrees
- Name of Contractor providing treatment services **AND** unit number of the trailer

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If there are multiple wells on the same pad, include them on one application.

Something new that we are requiring is the unit number of the trailer for the Service Operator who will be providing treatment services generating the wastewater and should have a trailer with a unique identifying number. Please include this information on the application; either in the “Name of Contractor Providing the Treatment Services” or the “Additional or Complimentary Technical Information” boxes.

If the unit number is unavailable at the time of application submittal, please include it with the treatment notification as required by Permit Condition 2.



Filling out the Domestic Wastewater Application Worksheet:

- Type of waste stream, estimated volume of waste received, and estimated treated effluent volume
- Indicate the storage method of wastewater before recycling
- The re-use method of wastewater after treatment
- Precautions taken to minimize exposure to the waste
- Estimated time frame

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The daily estimated volume of waste must not exceed 5,000 gallons/day

Two types of storage methods:

- Lined Pit- provide linear material and thickness, manufacturers' specifications, capacity, berms; linear permeability must be less than or equal to 1×10^{-7} cm/s
- Above-ground tank- provide tank material, tank volume, tank pad, berms

Three types of re-use methods after treatment

- Down-hole application
- Controlled irrigation
- Dust suppressant

If using controlled irrigation or dust suppressant, proof of surface owner notice and agreement **must** be attached to the application

Domestic Wastewater Conclusion



Submit applications and copies of the drilling permits to domestic.wastewater@rrc.texas.gov

For Recycling of Domestic Wastewater Questions

- Environmental Permits and Support
– 512-463-3840



Hydrostatic Test (HT) Discharge



A Minor Permit to Discharge HT Water is required if:

- The wastewater resulting from the hydrostatic testing of natural gas, crude oil, or other pipelines or tanks or other vessels under jurisdiction of the Commission is discharged

A Minor Permit to Discharge HT Water is Not required if:

- The hydrostatic test water will be disposed in an authorized manner other than discharge

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Examples of an “authorized manner” include RRC permitted injection wells or above-ground disposal facilities.

Intro to HT Discharges (2 of 2)



If **All** the following are met, a permit is **Not** required:

- New gathering line
- Quality water source (potable or irrigation well)
- Discharge volume is less than 10,000 gallons
- Discharge is in the right-of-way and the surface owner does not object



File the application with Technical Permitting in Austin

- Only complete applications will be accepted

If the discharge is to Surface Water

- Include the \$750 fee with the RRC application submitted to Technical Permitting, and
- Contact EPA Region 6 for federal requirements if discharging to Surface Water

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The application attachments include topographic map clearly depicting the pipeline or tank, the fill point, the discharge point, and the nearest body of surface water. If the discharged water will reach surface waters of the State, show the route of flow of the test water from the discharge point to the nearest body of surface water. Additionally, a non-topographic aerial view of the discharge point is helpful for RRC staff.



The HT Application must:

- Use the Operator Name and Address as filed with the P-5 Department
- Include the P-5 Organization Number
- Include an original signature

Applications may be sent electronically, but a subsequent hard copy of the application, including original signature, must be sent to Technical Permitting.



Administrative Review

- The first 15 days of review are Administrative only
- Technical Permitting will communicate all application deficiencies to the operator during this time
- Most permits are issued within 30 days

HT Permit Issuance



The Permit is valid for sixty days

- May be extended upon operator's request

The Permit will include sampling and/or reporting requirements if:

- The volume of discharge is over 100,000 gallons
- Use of a temporary wastewater storage system, such as frac tanks (regardless of the volume of the discharge)

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Each frac tank that is discharged out of must have a sample taken from the discharge valve. To ensure compliance, each frac tank should be cleaned before filled with the wastewater.

HT Analytical Report



The discharge effluent must be tested for and meet the criteria specified in the table below

<u>PARAMETER</u>	<u>LIMITATIONS</u>
Benzene (discharge to surface)	0.5 mg/L
Benzene (discharge to surface water)	0.05 mg/L
Oil & Grease	15 mg/L
Chemical Oxygen Demand	Report
Electrical Conductivity	Report
Total Suspended Solids	Report



Discharges

Introduction to Discharges



Discharge of oil and gas exploration, production, processing or treatment operations, or transmissions facility contact water to surface waters of the state

Requires a permit from the Environmental Protection Agency (EPA) under the National Pollutant Discharge Elimination System (NPDES) permit program

Permit Types

- Produced Water
- Gas Plant Effluent



Gas Plant Discharges



Gas Plant Effluent

Requires individual EPA NPDES permit

- Common Waste Streams:
 - Cooling tower blowdown
 - Reverse osmosis reject wastewater
 - Compressor condensation
 - Contact stormwater



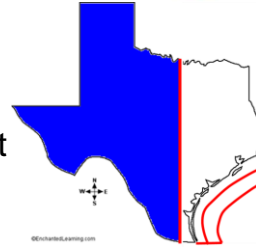
Produced Water Discharges (1 of 2)



Produced Water

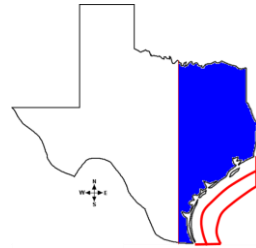
West of the 98th Meridian

- Requires individual EPA NPDES permit
- Agriculture and wildlife beneficial use



East of the 98th Meridian

- EPA General Permit TXG 330000
 - From Carrizo-Wilcox, Reklaw, or Bartosh formations
 - File Notice of Intent (NOI)
- All others require individual EPA NPDES permit



Produced Water Discharges (2 of 2)



Produced Water

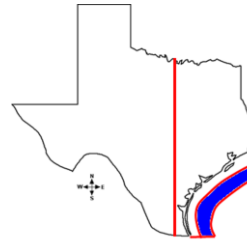
Territorial Seas

- EPA General Permit TXG 260000
 - Located offshore and discharging to territorial seas
 - File NOI



Outer Continental Shelf

- EPA General Permit GMG 290000
 - Located offshore and discharging to the Gulf of Mexico
 - File NOI



Discharge Factors (1 of 2)



Discharge Factors

- Effluent water analysis
 - Texas Surface Water Quality Standards Compliance
- Receiving waters
 - Flood zone or wetlands
 - Waters under Coastal Management Program
- Land ownership
 - Notification with ½ mile downstream
- Application fee - \$750



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Discharges to CMP boundary are also subject to CMP goals and policies by the Texas General Land Office

-such as no adverse affect to critical areas or coastal wetland, oyster reefs

Application fee only if discharging to surface waters

Discharge Factors (2 of 2)



Discharge Factors

- Water treatment process and chemicals
- EPA NPDES permit
 - Applicant must apply for coverage under a general permit or submit an individual application
- Effluent monitoring
 - Oil and Grease, Total Dissolved Solids, Whole Effluent Toxicity Test

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The NPDES information must be submitted the application to the RRC

TCEQ Delegation (1 of 3)



- House Bill 2771 will transfer authority of discharges to surface waters to Texas Commission on Environmental Quality (TCEQ)
- Upon delegation TCEQ will have authority for
 - Hydrostatic test water
 - Gas plant effluent
 - Produced water



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Delegation deadline is September 1, 2021

Discharges = Hydrostatic test water, Produced water, Gas Plant Effluent

TCEQ Delegation (2 of 3)



- Delegation includes permitting and enforcement of Discharge Permits
- No longer permitted by RRC and EPA
- Most discharges will only require one permit from TCEQ
 - Discharges that occur more than 3 miles offshore will still be required to get an EPA permit.



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TCEQ Delegation (3 of 3)



Upon TCEQ Delegation

- Pending applications will be directed to TCEQ for permitting
- Existing permit enforcements will transfer to the TCEQ
- New applications, renewals, and transfers, and amendments will be reviewed and permitted under the TCEQ

For more information contact:

HB2771@tceq.texas.gov



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-EPA will have 30 days to complete the administrative review

-EPA will have 90 days to approve or deny the application after receipt of complete application

- Current permits under RRC and EPA will stay under 2 agencies until renewed or transferred



Landspreading



Landspreading

Treatment and disposal of low-toxicity wastes in which wastes are spread and mixed into the soils to promote reduction of organic constituents and dilution and attenuation of metals.

Permit Types

- Land Apply
- Landfarm
- Landtreatment



Landspreading Factors



Landspreading Factors:

- Berms surrounding all cells
 - Minimum two feet in height and minimum slope 3:1 (horizontal to vertical)
- Soil grain size and thickness (20 inches, slope <5%)
- Runoff, Overloading, Precipitation and Evaporation
- Depth to Groundwater
 - Groundwater monitor wells
- Distance from surface water features and 100-year floodplain

Land Apply



Land Apply

Produced Water and Gas Plant Effluent

Alternative to Discharge



Land Apply Factors

- Treatment of the wastewater
- Waste application method (Sprinkler System)
- Waste loading rate (bbl/acre/day).
- Analysis of the wastewater

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The Application Information for a Permit to Land Apply Produced Water or Gas Plant Effluent is found on the RRC website.

Landfarm and Landtreatment



Landfarm

Water base drilling muds/cuttings

Landtreatment

Oil base drilling muds/cuttings



Landfarm/Landtreatment Factors

- Thickness of waste, depth and frequency of tilling
- Exact list of anticipated waste types and volumes
- Landfarms require estimated chloride concentrations

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The Application Information for Landfarm and Landtreatment Permits is found on the RRC website.

Examples of Anticipated Waste Types: Crude oil contaminated soil, pit bottoms, oil base drilling fluid and cuttings, RCRA non-exempt crude oil contaminated soil, etc...

Authorized Landfarming



Landfarming Authorized by SWR 8:

- Wastes disposed of on the lease where they are generated
- Written consent of the surface owner
- Water base drilling fluids with a chloride concentration below 3000 mg/L
- Drill cuttings, sands and silts obtained while using water base drilling fluids with a chloride concentration of 3000 mg/l or less
- Wash water used for cleaning drill pipe and other equipment at the well site

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Authorized landfarming does not require a permit, but the operator must contact/notify the District Office.



Authorized Fluid Recycling

Introduction to Authorized Recycling



The Railroad Commission of Texas (RRC) encourages recycling of oil and gas waste.

- Common Waste Types for Fluid Recycling:
 - Produced Formation Water
 - Fracture Flow-Back Water
 - Completion/Workover Fluids
(Used Drilling Fluids / Used Drilling Muds)

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- Environmental Permit Types and Information – Applicable Rules - Notice to Operators Under the Jurisdiction of the Railroad Commission of Texas (Dec. 2014)
- Environmental Permit Types and Information – Applicable Rules - Memorandum of Understanding between the Railroad Commission of Texas (RRC) and the Texas Commission on Environmental Quality (TCEQ)

Authorized Fluid Recycling (1 of 2)



A permit from the RRC is Not required if:

- The fluid is treated by a lease or drilling unit operator, and the fluid is treated on an RRC Commission designated lease or drilling unit with drilling permit
- The fluid is treated by a facility that is not subject to the jurisdiction of the RRC
 - Example: Drilling mud manufacturers, which manufacture drilling mud from raw materials and are subject to the jurisdiction of the Texas Commission on Environmental Quality (TCEQ)
- The resultant treated fluid is distilled water

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Statewide Rule 8 Definition of Distilled Water

Distilled water--Water that has been purified by being heated to a vapor form and then condensed into another container as liquid water that is essentially free of all solutes



Fluid Recycling Authorized By Rule

- Some recycling of fluids under the jurisdiction of RRC may be treated and reused without a permit as authorized by Statewide Rule 8 (d)(7)(B) and Chapter 4, Subchapter B §4.202(d)
 - **Non-Commercial Fluid Recycling (NCFR)**
 - **On-Lease Commercial Fluid Recycling**



Non-Commercial Fluid Recycling

- Non-commercial Fluid Recycling is authorized by Statewide Rule 8 if the recycling activities are located:
 - On a Railroad Commission designated lease or drilling unit associated with a drilling permit
 - On land leased or owned by the operator for the purposes of operation of a non-commercial disposal well or a non-commercial injection well

Non-Commercial Fluid Recycling Pit



Non-Commercial Fluid Recycling Pit

- Storage of fluid for Non-Commercial Fluid Recycling, or the treated recyclable fluid
- Backfill within 120 days of cessation of use



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Environmental Permit Types and Information – Applicable Rules - Summary of Statewide Rule 8



Non-Commercial Fluid Recycling Pit

- Pit Design:
 - Sufficiently large and have adequate freeboard for precipitation (two feet minimum)
 - Designed to prevent stormwater from entering
 - Constructed with dikes that are structurally sound and do not seep
 - Lined with a liner that has a hydraulic conductivity 1.0×10^{-7} cm/s or less



Non-Commercial Fluid Recycling Pit

- Monitoring:
 - Emptied and inspected at annually
 - Have a double liner and leak detection system that is monitored at least monthly
 - Records of monitoring must be kept to demonstrate compliance



Non-Commercial Fluid Recycling Pit

- District Notification:
 - Operator must provide written notification prior to construction or, prior to use for an existing pit
 - Location of the pit with lease name and number or drilling permit number
 - Latitude and Longitude coordinates
 - Dimensions of the pit and maximum capacity
 - A signed statement that the operator has permission from the surface owner for construction and use of the pit



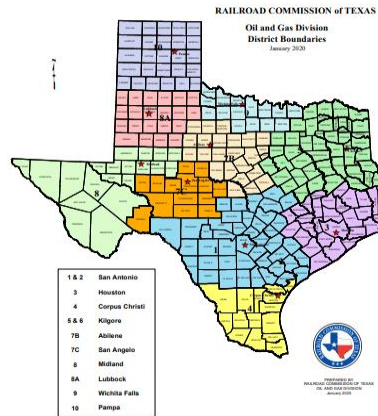
On-Lease Commercial Fluid Recycling

- On-Lease Commercial Fluid Recycling is authorized by Chapter 4, Subchapter B if the following are true:
 - Recycling takes place on a lease with a commercial disposal well or commercial injection well
 - The operator of the commercial disposal well is responsible for all activities, including the recycling, that occurs on the lease



On-Lease Commercial Fluid Recycling

- Requires RRC District Office notification seven days before recycling operations begin and within seven days of operations concluding



RRC – Contact Us – RRC Locations

On-Lease Fluid Recycling Pit



On-Lease Commercial Fluid Recycling Pit

- Any pit associated with On-Lease Commercial Fluid Recycling activities must be permitted and require financial security (Form H-11)
- If the pit is located Off-Lease, the operation is no longer authorized by Rule and would require a permit (Division 5 and 6)

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Environmental Permit Types and Information – Pits - Form H-11
Commercial Pits will be discussed in Part II



Pits

Introduction to Pits



Disposal or storage of oil and gas wastes in a pit should be allowed only if the activity does not result in the waste resources and the pollution of surface and subsurface water

Pit Categories:

- Authorized
- Non-Commercial
- Commercial

You have a Pit If...



You have a pit if...

- It's in contact with the ground but not an above ground storage tank
- If it's below grade
- If it's a concrete structure that cannot be moved quickly and easily to check for leaks
- If it's a steel containment ring with a liner
- If it's a "sump" larger than 500 gal

Authorized Pits (1 of 2)



Authorized Pit Types:

- Reserve and Mud Circulation Pit
- Completion / Workover Pit
- Basic Sediment Pit
- Fresh Makeup Water Pit
- Water Condensate Pit
- Non-Commercial Fluid Recycling (NCFR) Pit

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* Additional requirements for NCFR pits

Pit Design: Pits must be:

- Sufficiently large and have adequate freeboard (minimum of two feet at all times) for precipitation;
- Designed to prevent stormwater from entering the pit; constructed with dikes that are structurally sound and do not seep;
- Lined with a liner that has a hydraulic conductivity 1.0×10^{-7} cm/s or less.

Monitoring Procedures: Pits must be:

- Emptied and inspected at least annually, or
- Have a double liner and leak detection system that is monitored at least monthly.
- Records of monitoring must be kept to demonstrate compliance.

District Registration: Operator must provide written notification prior to construction or prior to use of an existing pit for non-commercial fluid recycling, including:

- Location of the pit with lease name and number or drilling permit number, and latitude and longitude;
- Dimensions of the pit and maximum capacity of the pit; or
- A signed statement that the operator has permission from the surface owner for construction and use of the pit.

Authorized Pits (2 of 2)



Authorized pits

- Statewide Rule 8 authorizes the use of several types of pits without a permit. Use of the pits without a permit is authorized if:
 - The pit is operated and backfilled according to the requirements in the rule, and
 - The pit does not cause pollution
- The operator must notify the appropriate RRC District Office

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Information regarding requirements are found under the Summary of Statewide Rule 8

Non-Commercial Pits



Non-Commercial Pit Types

- Collecting Pit
- Emergency Saltwater Storage Pit
- Gas Plant Evaporation/Retention Pit
- Brine Pit
- Stand-alone Washout Pit
- Skimming Pit



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Commercial Pits will be discussed in Part II

Permitted Pit Factors



Permitted Pit Factors:

- Local hydrology and geology
- Form H-11, completed front/back
- Liners, concrete or dual lined with leak detection
- Plan View and Two perpendicular cross sections
 - Berm design
 - Minimum two feet freeboard
- Pit designed to store waste above ground level must be designed under seal of PE
- Property ownership

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- Environmental Permit Types and Information – Pits – Application to Maintain and Use a Pit (Form H-11)



Closure Requirements



Statewide Rule 8

- Dispose of oil and gas wastes in an authorized manner
- Pits backfilled and compacted in the time and manner required by the director



Statewide Rule 8

- Reserve and Mud Circulation Pits
 - Chlorides < 6,100 mg/liter dewatered, backfilled, and compacted within 1 year from cessation of drilling operations
 - Chlorides > 6,100 mg/liter dewatered, backfilled, and compacted within 30 days from cessation of drilling operations



Statewide Rule 8

- Completion/Workover Pits
 - Dewatered within 30 days from work completion
 - Backfilled and compacted within 120 days from work completion

- Other Authorized Pits
 - Dewatered, backfilled, and compacting within 120 from cessation of pit use

Closure by Type (1 of 2)



Discharge

- Flowlines disconnected and disposed of in an authorized manner

Pit

- Dewater and empty any wastes
- May require soil sampling
- Backfill and compact
- Contouring and reseeding
- GW monitoring and plugging (if applicable)

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PARAMETER LIMITATION

pH (EPA Method 9045C or equivalent) - 6 to 10 standard units

Electrical Conductivity (EC) - $1 \leq 4.0$ mmhos/cm

TPH (EPA Method 5035A/TX1005) - $\leq 10,000$ mg/kg or 1 % by weight

Total Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)³ (EPA Method 5035A/8021/8260B or equivalent) - ≤ 30 mg/kg

Metals (Total)

(EPA Method 6010/6020/7471A or equivalent)

Arsenic ≤ 10 mg/kg

Barium $\leq 10,000$ mg/kg

Cadmium ≤ 10 mg/kg

Chromium ≤ 100 mg/kg

Lead ≤ 200 mg/kg

Mercury ≤ 10 mg/kg

Selenium ≤ 10 mg/kg

Silver ≤ 200 mg/kg

Closure by Type



Landspreading

- Cell sampling
- Level berms
- Contouring and reseeded

Notify Technical Permitting in Austin and District Office prior to closure per permit requirements

District Office must inspect closure for approval

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PARAMETER LIMITATION

pH (EPA Method 9045C or equivalent) - 6 to 10 standard units

Electrical Conductivity (EC) - $1 \leq 4.0$ mmhos/cm

Sodium Adsorption Ratio (SAR) (Saturated Paste Method using EPA Method 300, 6010, 6020 or equivalent) - ≤ 12

Cation-Exchange Capacity (CEC) (EPA Method 9080/9081 or equivalent) - Site Specific

TPH (EPA Method 5035A/TX1005) - $\leq 10,000$ mg/kg or 1 % by weight

Total Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)₃ (EPA Method 5035A/8021/8260B or equivalent) - ≤ 30 mg/kg

Metals (Total)

(EPA Method 6010/6020/7471A or equivalent)

Arsenic ≤ 10 mg/kg

Barium $\leq 10,000$ mg/kg

Cadmium ≤ 10 mg/kg

Chromium ≤ 100 mg/kg

Lead ≤ 200 mg/kg

Mercury ≤ 10 mg/kg

Selenium ≤ 10 mg/kg

Silver ≤ 200 mg/kg



Notice Requirements for Non-Commercial Permits



Statewide Rule 8

- Notice to surface owner where disposal will take place
- Notice to City Clerk if located within corporate limits
- Notice to surface owner of discharge and one-half mile downstream

Requirements by Rule (2 of 2)



Statewide Rule 8

- The applicant shall mail or deliver the required notice to the surface owners and the city clerk or other appropriate official **on or before** the date the application is mailed or delivered to the commission in Austin
- Notice shall consist of a copy of the application together with a statement that any protest to the application should be filed with the commission within 15 days of the date the application is filed with the commission

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Give Notice in a reasonable time frame – **No more than 15 days prior to application submittal.**

When to Notice (1 of 2)



When to Notice:

- New Applications, Renewal Applications, Major Amendments
- Applications that are eligible for renewal of the permit require that proper notice be provided prior to issuance of a renewed permit. The notice requirements will be the same requirements of a new application.

When to Notice (2 of 2)



When to Notice:

- The requirement to provide notice for amendments applications will be determined on a case by case basis.
 - It is recommended that you contact Technical Permitting prior to submitting an amendment application to determine if notice will be required.
- Transfers of permits do not require notification unless the transfer application includes a significant amendment.

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Notice Must Include



Notice must Include:

- Notice to Surface Owners, Adjacent Surface Owners and City/County Clerk Officials
 - A full copy of the application
 - A statement that any protest to the application should be filed with the Commission within 15 days of the date the application is filed with the Commission
 - The mailing address for Technical Permitting
 - Description of facility/operations

Notice by Type: Discharge (1 of 3)



Discharge - New (Initial) Applications

Permit Type	Surface Owner Notice	Adjacent SO Notice	Published Notice	City Clerk or Appropriate official	Additional Information
DISCHARGE - Gas Plant - On-shore - Off-shore	Yes	Yes – ½ mile downstream	No	Yes – If in corporate limits	Need Authorization if Discharging into a Flood Control Ditch or Similar Waterway.
HT Discharge - Surface - Surface Water	Yes	No	No	No	

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Discharge does not differentiate between Private, Centralized and/or Commercial.

Notice by Type: Discharge (2 of 3)



- One half mile downstream starts from the point of discharge – in most cases where the effluent leaves the pipe.
- The point of discharge and the facility location are not always one in the same.

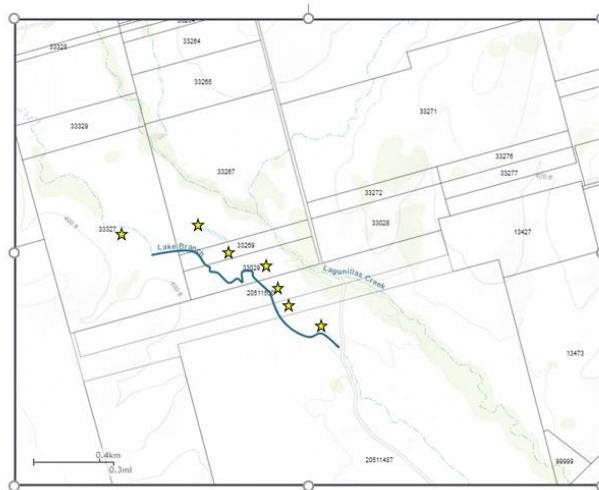


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Discharge.

Point of Discharge – Where effluent leaves the pipe

Notice by Type: Discharge (3 of 3)



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The rule states “give notice to the surface owners of each waterfront tract between the discharge point and ½ mile downstream of the discharge point except for those waterfront tracts within the corporate limits of an incorporated city, town or village.” this is in Statewide Rule 8.

The highlighted distance is for example purposes only and is not drawn to scale (i.e, it may be more or less than 0.5 miles downstream from the discharge point). This demonstration is not meant to be reflective of a specific discharge permit.

Property IDs 33327 (Discharge Point), 33267, 33269, 33029, 20511560 and 20511487 are landowners that require notification in this example.

Notice by Type: Pit



Pits – New (Initial) Application

Permit Type	Surface Owner Notice	Adjacent SO Notice	Published Notice	City Clerk or Appropriate official
Private or Centralized Pit	Yes	No	No	Yes – If in corporate limits
Commercial Pit	Yes	Yes	Yes – 2 consecutive weeks	Yes – If in corporate limits
Commercial Collecting Pit at an <u>SWD</u>	Yes	No	No	No

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What is not on the list is Authorized Pits because they do not require a permit. This Section does NOT cover Disposal Pits, that will be towards the end of this section.

Notice by Type: Landspreading



Landspreading - Landfarm, Landtreatment, Land Apply

Permit Type	Surface Owner Notice	Adjacent SO Notice	Published Notice	City Clerk or Appropriate official
PRIVATE <u>Landspread</u> -Landfarm -Landtreatment -Land Apply	Yes	No	No	Yes – If in corporate limits
CENTRALIZED <u>Landspread</u> -Landfarm -Landtreatment -Land Apply	Yes	Yes	No	Yes – if in corporate limits
COMMERCIAL <u>Landspread</u> -Landfarm -Landtreatment -Land Apply	Yes	Yes	Yes – 2 consecutive weeks	Yes – If in corporate limits

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Proof of Notice



Providing Proof of Notice

- Must include a copy of the notification letter(s) provided to surface owner/offset landowner(s)
- Certified mail is recommended*

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*Certified mail can be used as a form of providing proof of notice to the RRC for offset landowner notice. If the certified mail receipt shows that the mail has not or cannot be delivered to an affected party, the applicant may be responsible for providing additional notice to such affected parties.

*Notice sent to surface owner: Must include either a copy of the letter (letter includes stating application attached) or a signed statement that the application was received.

Notice General Comments (1 of 2)



General Comments

- If providing a telephone number for Environmental Permits and Support, be sure to provide the CORRECT phone number (512-463-3840). The fax number is not acceptable
- Landowner Notice is not required if the facility will be located on land owned by the applicant

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*Only applicable to Reclamation Facilities without associated pits

Technical Review includes verification that operator has authorization for proposed application. (Landowner Notice, Surface Lease Agreement, Property Deed)

Notice General Comments (2 of 2)



General Comments

- Failure to provide proper notice may result in an application not being approved or cancellation of a permit after issuance if it is found that proper notice was not provided (refer to the specific rules)

***Commercial Requirements will be in Part II**

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Part II will be presented on July 28, 2020



Renewals, Transfers, Amendments

Renewals



Renewals

- Most permits issued by Environmental Permits & Support are renewable. These permits are typically issued for a period of five years and expire automatically unless renewal is requested by the Permittee.
- To request renewal of an RRC environmental permit, the Permittee must send a complete renewal application to Technical Permitting in Austin, and to the appropriate District Office, requesting renewal at least **60 days prior** to the expiration of the permit.

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Not all permits are renewable, not all issuances last five years. Exceptions – R9s, Letter of Authorities, etc.

Discharge Renewals



Discharge Renewals Require:

- Request Letter
- Application Fee (if applicable)
- Notice (if applicable)
 - Surface owner at point of discharge
 - Surface owners ½ tract downstream
 - City Clerk or other appropriate official
- Water Analysis

Private Permit Renewals



Private Permit Renewals Require:

- Request Letter
- Notice (if applicable)
 - Landowner
 - City Clerk or other appropriate official
- New Form H-11 (Pits Only)

Centralized Permit Renewals



Centralized Permit Renewals Require:

- Request Letter
- CCE (if applicable)
- Notice (if applicable)
 - Landowner
 - Adjacent landowner
 - City Clerk or other appropriate official
- NORM Survey (excluding Landspreading)
- New Form H-11 (pits only)



Transfers

- To transfer an RRC environmental permit, the Operator who will be the new Permittee after the transfer is complete, must send a letter to Technical Permitting in Austin requesting transfer of the permit(s).



Transfers

- The transfer request should be received after ownership has been transferred, but 60 days before the new Operator begins operations.
- A transfer request does not guarantee approval of a permit transfer and the permit may be subject to modification.

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The new Operator is bound by the conditions of the permit and RRC may enforce all conditions of the permit.

Transfers (3 of 3)



Transfers

- Commercial permits and discharges associated with a Form P-4 must transfer the Form P-4 before the environmental permit can be transferred.
- Non-commercial pit permits associated with an RRC-designated lease will require a transfer request when the Form P-4 is transferred to the new Operator unless otherwise stated in the current permit.

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Form P-4 - Certificate of Compliance and Transportation Authority

Transfers by Type



- **Transfer of Discharge**
 - Request
 - Water Analysis

- **Transfer of Private/Centralized**
 - Request
 - New Form H-11 (pits only)

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Form H-11 only consists of the first page, no attachments are required unless the design of the pit will be amended.

*



Amendments

- To request an amendment of an RRC environmental permit, the Permittee must send a letter describing the requested amendments to Technical Permitting in Austin, that includes why the amendments are necessary.
- Any change to operations regarding the permit must be noted. Any change to Diagrams, descriptions, etc. must be included.



Amendments

- Depending on the significance of the permit amendment, notice may be required.
- An amendment request does not guarantee approval of a permit amendment and the permit may be subject to modification.
- **Do not** implement any changes subject to the amendment request prior to authorization from Technical Permitting and issuance of an amended permit.

Amendments (3 of 3)



- An amendment request does not guarantee approval of a permit amendment and the permit may be subject to modification.
- Do not implement any changes subject to the amendment request prior to issuance of the amended permit, authorization from Technical Permitting and approval of the revised financial security (if financial security is required).

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Do not begin construction, etc. until the Amended permit is complete.

Amendment Examples



Amendment Examples

- Amendment Requirements are case by case and determined based on significance of change.
- Examples:
 - Volume/Capacity
 - Surface Area
 - Location
 - Operational change
 - Waste Streams
 - Equipment

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Above are a few examples of common reasons for an Amendment.

Amendments Require



Amendments Require

- Request Letter
- Detailed Description of change and any applicable Diagrams

Amendments May Require

- Notice

Conclusion



Questions

Environmental Permits and Support
512-463-3840

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