

TEXAS PIT RULES ¹

The oil and gas industry deals with many different types of pits. Some pits are used on a temporary basis during drilling operations, some are used for workover operations, and others are used for disposal. Most states do not allow unlined pits.

When a rig is drilling, it is necessary to circulate drilling mud from the surface to the bottom of the hole, and then back up to the surface. The mud is stored in a drilling or reserve pit. Operators place drilling fluids held for disposal in centrally located impoundments. The industry utilizes several types of pits. Most states require all pits to be lined and permitted by rule or specific permit.

- **No person may maintain or use any pit for storage of oil or oil products²; and**
- **Except as authorized [by specific rules as cited in the chart, below, for specific types of pits], no person may maintain or use any pits shown below for storage of oil field fluids, or for storage or disposal of oil and gas wastes, without obtaining a permit to maintain or use the pit.³**

Following is a partial summary of the State of Texas' pit rules.⁴

Type of Pit	Description & Conditions
Basic sediment pit	Pit used in conjunction with a tank battery for storage of basic sediment removed from a production vessel or from the bottom of an oil storage tank. Formerly referred to as "Burn Pits." [Although a person may store basic sediment in a basic sediment pit, a person may <u>not</u> deposit oil or free saltwater in the pit; the total capacity of a basic sediment pit shall not exceed a capacity of 50 barrels; and the area covered by the pit shall not exceed 250 square feet. ⁵] Pit must be dewatered, backfilled, and compacted within 120 days of final cessation of use. ⁶

¹ The Texas Railroad Commission's rules discussed and cited herein are found in Chapter 3 [Oil and Gas Division] of Part 1 [Railroad Commission of Texas] of Title 16 [Economic Regulation] of the Texas Administrative Code.

² 16 TAC §3.8(d)(2)

³ 16 TAC §3.8(d)(2) [Note, however: a person is not required to have a permit to use a pit if a receiver has such a permit, if the person complies with the terms of such permit while using the pit, and if the person has permission of the receiver to use the pit.]

⁴ The information shown in the chart presented here in regard to various types of pits is drawn largely from 16 TAC §3.8(a), supplemented with additional information from other sections of 16 TAC as cited in the chart.

⁵ 16 TAC §3.8(d)(4)(C)

⁶ 16 TAC §3.8(G)(i)(IV)

Type of Pit	Description & Conditions
Brine pit	Pit used for storage of brine which is used to displace hydrocarbons from and underground hydrocarbon storage facility.
Collecting pit	Pit used for storage of saltwater or other oil and gas wastes prior to disposal. [In some cases, may also serve as a <i>skimming pit</i> .]
Completion/workover pit	Pit used for storage or disposal of spent completion fluids, workover fluids and drilling fluid, silt, debris, water, brine, oil scum, paraffin, or other materials which have been cleaned out of the wellbore of a well being completed or worked over. [A person may, without a permit, dispose of the following oil and gas wastes by burial in a completion/workover pit, <u>provided</u> the wastes are disposed of at the same well site where they are generated: spent completion fluids, workover fluids, and materials cleaned out of the wellbore of a well being completed or worked over. ⁷] Such pits used when <u>completing</u> a well shall be dewatered within 30 days, and backfilled and compacted w/i 120 days, of well completion; and when used when <u>working over</u> a well shall be dewatered within 30 days, and backfilled and compacted within 120 days, of completion of workover operations. ⁸
Drilling fluid disposal pit	Pit, other than a reserve pit, used for disposal of spent drilling fluid.
Drilling fluid storage pit	Pit used for storage of drilling fluid which is not currently being used but which will be used in future drilling operations.

⁷ 16 TAC §3.8(d)(3)(E)

⁸ 16 TAC §3.8(d)(4)(G)(i)(III)

Type of Pit	Description & Conditions
Emergency saltwater storage pit	Pit used for storage of produced saltwater for limited period of time. Use is necessitated by a temporary shutdown of disposal well or fluid injection well and/or associated equipment, by temporary overflow of saltwater storage tanks on a producing lease or by a producing well loading up with formation fluids such that the well may die. [Sometimes also referred to as <i>emergency pits</i> or <i>blowdown pits</i> .]
Flare pit	Pit which contains a flare and which is used for temporary storage of liquid hydrocarbons which are sent to the flare during equipment malfunction but which are not burned. [This pit used in conjunction with a gasoline plant, natural gas processing plant, pressure maintenance or repressurizing plant, tank battery, or a well. A person shall <u>not</u> deposit or cause to be deposited into a flare pit any oil field fluids or oil and gas wastes other than the hydrocarbons designed to go to the flare during upset conditions at the well, tank battery, or gas plant where the pit is located. A person shall not store liquid hydrocarbons in a flare pit for more than 48 hours at a time. ⁹] Pit must be dewatered, backfilled, and compacted within 120 days of final cessation of use. ¹⁰
Fresh makeup water pit	Pit used in conjunction with drilling rig for storage of water used to make up drilling fluid. [A person shall not deposit or cause to be deposited into a fresh makeup water pit any oil and gas wastes or any oil field fluids other than water used to make up drilling fluid. ¹¹] Pit must be dewatered, backfilled, and compacted within one year of cessation of drilling operations. ¹²

⁹ 16 TAC §3.8(d)(4)(D)

¹⁰ 16 TAC §3.8(G)(i)(IV)

¹¹ 16 TAC §3.8(d)(4)(E)

¹² 16 TAC §3.8(d)(4)(G)(i)(I)

Type of Pit	Description & Conditions
Gas plant evaporation/retention pit	Pit used for storage or disposal of cooling tower blowdown, water condensed from natural gas, and other wastewater generated at gasoline plants, natural gas processing plants, or pressure maintenance or repressurizing plants.
Mud circulation pit	Pit used in conjunction with drilling rig for storage of drilling fluid currently being used in drilling operations. [However, <u>cannot, without a permit, deposit oil field fluids or oil and gas wastes other than:</u> (i) drilling fluids (whether freshwater-, saltwater-, or oil-base); (ii) drill cuttings, sands, and silts separated from circulating drilling fluids; (iii) wash water used for cleaning drill pipe and other equipment at the well site; (iv) drill stem test fluids; and (v) blowout preventer test fluids. ¹³] If pit contains fluids with a chloride concentration of 6,100 mg/liter or less shall be dewatered, backfilled, and compacted within one year of cessation of drilling operations (if chloride concentration is greater than 6,100 mg/liter, dewatering must occur w/i 30 days, followed by backfilling and compaction within one year of cessation of drilling operations). ¹⁴
Reserve pit [Sometimes also referred to as <i>slush pits</i> or <i>mud pits</i> .]	Pit used in conjunction with drilling rig for collecting spent drilling fluids; cuttings, sands, and silts; and wash water used for cleaning drill pipe and other equipment at the well site. [However, <u>cannot, without a permit, deposit oil field fluids or oil and gas wastes other than:</u> (i) drilling fluids (whether freshwater-, saltwater-, or oil-base); (ii) drill cuttings, sands, and silts separated from circulating drilling fluids; (iii) wash water used for cleaning drill pipe and other equipment at the well site; (iv) drill stem test fluids; and (v) blowout preventer test fluids. ¹⁵] If pit contains fluids with a chloride concentration of 6,100 mg/liter or less shall be dewatered, backfilled, and compacted within one year of cessation of drilling operations (if chloride concentration is greater than 6,100 mg/liter, dewatering must occur w/i 30 days, followed by backfilling and compaction within one year of cessation of drilling operations). ¹⁶ [If a person constructs a <u>sectioned</u> reserve pit, each section shall be considered a separate pit for determining when it should be dewatered. ¹⁷]

¹³ 16 TAC §3.8(d)(4)(A)

¹⁴ 16 TAC §3.8(d)(4)(G)(i)(I & II)

¹⁵ 16 TAC §3.8(d)(4)(A)

¹⁶ 16 TAC §3.8(d)(4)(G)(i)(I & II)

¹⁷ 16 TAC §3.8(d)(4)(G)(i)(V)

Type of Pit	Description & Conditions
Saltwater disposal pit	Pit used for disposal of produced saltwater.
Skimming pit	Pit used for skimming oil off saltwater prior to disposal of saltwater.
Washout pit	Pit located at a truck yard, tank yard, or disposal facility for storage or disposal of oil and gas waste residue washed out of trucks, mobile tanks, or skid-mounted tanks.
Water condensate pit	Pit used in conjunction with a gas pipeline drip or gas compressor station for storage or disposal of freshwater condensed from natural gas. [A person shall not deposit or cause to be deposited into a water condensate pit any oil field fluids or oil and gas wastes other than fresh water condensed from natural gas and collected at gas pipeline drips or gas compressor stations. ¹⁸] Pit must be dewatered, backfilled, and compacted within 120 days of final cessation of use. ¹⁹

Protection of Birds²⁰ [While the summary information below is presented in relation to “pits,” the Rule also addresses certain open-top storage tanks.]

- If an operator who maintains a pit does not take protective measures necessary to prevent harm to birds, the operator may incur liability under federal and state wildlife protection laws (e.g., the federal, Migratory Bird Treaty Act under which penalties may include imprisonment). State statutes also protect certain species of birds. The Railroad Commission of Texas is cooperating with federal and state wildlife authorities in their efforts to protect birds.
- An operator must screen, net, cover, or otherwise render harmless to birds, skimming pits and collecting pits (see above chart for descriptions of these types of pits); and, if the commission finds a surface film or accumulation of oil in any other regulated pit, the commission will instruct the operator to remove the oil. If the operator fails to remove the oil from the pit in accordance with the commission’s instructions or if the commission finds a surface film or accumulation of oil in the pit again within a 12-month period, the commission will require the operator (subject to the operator’s right to a pre-enforcement hearing) to screen, net, cover, or otherwise render the pit harmless to birds.

¹⁸ 16 TAC §3.8(d)(4)(F)

¹⁹ 16 TAC §3.8(G)(i)(IV)

²⁰ 16 TAC §3.22