TCEQ REGULATORY GUIDANCE
Waste Permits Division
RG-003 • Revised February 2026

Disposal of Special Wastes Associated with the Development of Oil, Gas, and Geothermal Resources

Purpose of This Document

This document provides guidance for the management of special wastes associated with the exploration, development, or production of oil, gas, or geothermal resources that are disposed of in municipal solid waste (MSW) landfills in accordance with Title 30, Texas Administrative Code (30 TAC), Section 7.117, Memorandum of Understanding between the Railroad Commission of Texas (RRC) and the Texas Commission on Environmental Quality (TCEQ). Rules cited in this document are in Title 30, Texas Administrative Code (30 TAC)[1].

Special waste is defined in MSW rules in 30 TAC 330.3. Some special wastes require written authorization before disposal in a MSW landfill.

Acronyms and Initialisms

- BTEX — benzene, toluene, ethylbenzene, and xylene
- COC — constituent of concern
- MSDS — material safety data sheet
- NORM — naturally occurring radioactive materials
- PCB — polychlorinated biphenyl
- TCLP — Toxicity Characteristic Leaching Procedure
- TPH — total petroleum hydrocarbons

Types of Waste

Description of Waste Items	RCRA Exempt per 40 CFR Part 261.4(b)(5)[2]	RRCT Authority Required for Disposal in TCEQ Landfill	Treatment or Testing Recommended[3]	TCEQ Approval Required Prior to Disposal, and Other Options
Asbestos-containing material	No—Subject to specific regulations	Yes	Comply with federal and state regulations for removal and disposal	No per 330.171(c)
Bags (empty), paper	No	No	None	No
Brush and vegetation from clearing land, uncontaminated	No	No	None	No—Dispose in Type IV landfill, compost facility
Buckets, detergent (empty)	No	No	None	No—Recycle

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Buckets, grease (empty)	No	No	None	No—Recycle
Concrete, contaminated from compressor stations, oil, or gas facilities	No	Yes	Test for COCs on a case-by-case basis	Yes
Concrete, uncontaminated	No	No	None	No—Disposal in Type IV landfill
Containers (empty)	No	No	None	No—Recycle
Drill cuttings	Yes	Yes	Test for COCs on a case-by-case basis	Yes
Barrels, drums, 5-gallon buckets (empty)	No	No	None	No—Recycle
Fiberglass tanks and pipe (empty)	No	No	Clean, cut or shred	No
Filters—amine, dehydration, glycol	Yes	Yes	Drain, air dry for 48 hours, test for TPH and benzene	Yes
Filters—cooling tower	Yes (No, if generated in transportation)	Yes	Drain, air dry for 48 hours, test for chromium	Yes
Filters—saltwater	Yes	Yes	Drain, air dry for 48 hours, test for pH, TPH, and chlorides	Yes
Filters—waste oil—entire unit including metal container	No	Yes	Separate parts, recycle oil and metal parts	Yes
Filters—waste oil—replaceable fiber or paper filter removed from container	No	Yes	Drain for at least 24 hours, recycle, waste-to-energy, test for lead and benzene	Yes
Iron sponge	Yes	Yes	Allow to oxidize completely to prevent combustion	Yes
Office trash, routine	No	No	None	No—Recycle
Metal plates, pipes, cable	No	No	None	No—Recycle
Molecular sieves	Yes	Yes	Cool in inert non-hydrocarbon atmosphere; hydrate in ambient air for 24 hours, test for TPH and benzene	Yes
Muds—drilling	Yes	Yes	Test for barium, TPH, and BTEX; treatment to reduce hydrocarbons may be required	Yes
Muds—sacks of unused drilling mud	No	Yes	Return to vendor, use at other sites	Yes

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Muds—unused additives	No	Yes	Check MSDS; test for barium	Yes
"Pigging waste" from gathering lines in primary field operations	Yes	Yes	Check MSDS for corrosion inhibitors; test for TPH, benzene, RCRA metals, and NORM	Yes
"Pigging waste" from transmission lines	No	Yes	Check MSDS for corrosion inhibitors; test for TPH, benzene, and arsenic	Yes
Pipe scale and other deposits removed from piping and equipment	Yes (No, if generated in transportation)	Yes	Test for TPH, RCRA metals, and NORM	Yes
Pipe dope, unused	No	Yes	Check MSDS (may contain lead)	Yes—Reuse if possible
Plastic pit liners	Yes	Yes	Decontaminate	No
Pumps, valves, etc.	No	No	Test for NORM	No—Recycle
Rags and gloves, soiled	No	No	None	No
Sand—produced during exploration	Yes	Yes	Test for TPH, benzene, and NORM	Yes
Soil—containing crude oil hydrocarbon	Yes (No, if generated in transportation)	Yes	Test for TPH and benzene	Yes
Soil—containing lube oil hydrocarbons	No	Yes	Test for cadmium, chromium, lead, TPH, benzene, and PCBs	Yes
Sulfur—ferrous elemental sulfur and soil contaminated with sulfur	No	Yes	Recover sulfur	Yes
Sorbent pads—crude oil and other exempt wastes	Yes	Yes	Test for TPH and benzene	Yes
Sorbent pads—lube oil and other nonexempt wastes	No	Yes	Test for TPH and benzene	Yes
Tank seals—rubber	No	Yes	Allow to drain	Yes—Recycle
Tower packing	No	Yes	Test for chromium	Yes—Recycle
Water-treatment backwash solids	Yes	Yes	Test for RCRA metals and NORM	Yes
Wooden pallets, uncontaminated	No	No	None	No—Dispose in Type IV landfill

[1] www.tceq.texas.gov/goto/view-30tac.

[2] The scope of the Resource Conservation and Recovery Act (RCRA) 40 CFR Part 261.4(b)(5) exemption [www.ecfr.gov/current/title-40/part-261/section-261.4#p-261.4(b)(5)] for oil and gas wastes is limited to

drilling fluid and cuttings, produced water, and other waste unique or intrinsic to exploration and production in "primary field operations." Additionally, both exempt and E&P nonexempt wastes may be subject to the jurisdiction of the Railroad Commission of Texas depending upon the activity of generation. Guidance for determining whether an oil and gas waste is exempt or nonexempt, including the definition of "primary field operations," is available in the RRC manual, *Interim Guidance for Statewide Rule 98* [www.rrc.texas.gov/oil-and-gas/publications-and-notices/manuals/hazardous-waste-management-manual/]. Oil and gas waste is always nonexempt when generated in transportation operations (downstream of primary field operations).

[3] An alternative to the toxicity characteristic leaching procedure (TCLP) analysis is a total constituent analysis. If a total (for example, total lead, total benzene, etc.) exceeds the example limits listed below or exceeds 20 times the TCLP limit for a Class 2-like waste, then the TCLP must be performed and the TCLP results must not exceed the stated limits for disposal in a standard MSW Type I landfill unit. For TCLP results that exceed the example limits listed below but do not exceed a hazardous limit, the waste may be authorized for disposal into an MSW Type I landfill with a Class 1 industrial waste unit. More TCLP limits can be found on Table 1, Appendix 1 of 30 TAC 335 Subchapter R:

Constituent	Total Limit (mg/kg)	MSW Type I TCLP Limit (mg/L)	Hazardous Waste TCLP Limit (mg/L)
Benzene	10	0.5	0.5
Arsenic	36	1.8	5.0
Barium	2,000	100	100
Cadmium	10	0.5	1.0
Chromium	100	5.0	5.0
Lead	30	1.5	5.0
Mercury	4	0.2	0.2
Selenium	20	1.0	1.0
Silver	100	5.0	5.0

Additional constituent limits for disposal in an MSW Type I landfill unit:

- TPH < 1,500 mg/kg may be disposed of in a standard MSW Type I landfill unit.
- TPH ≥ 1,500 mg/kg must be placed of in a Class 1 industrial cell if disposed in an MSW Type I landfill unit, as specified in 30 TAC 330.171(b)(4).
- PCBs ≥ 50 mg/kg may not be disposed of in an MSW Type I landfill unit, unless authorized by the USEPA as specified in 40 CFR Part 761 [www.ecfr.gov/current/title 40/chapter I/subchapter R/part 761].
- NORM concentrations must be below 30 picocuries per gram for disposal in an MSW Type I landfill unit as specified in 25 TAC 289.259(d)(1)(A).