

EP-5 Technical Application Sheet for All Permitted Waste Management Operations

SUBCHAPTER A

DIVISION 6. ADDITIONAL REQUIREMENTS FOR PERMITTED PITS **(Permitted Pits in Chapter A)**

DRAFT

SUBCHAPTER A
DIVISION 6. ADDITIONAL REQUIREMENTS FOR PERMITTED PITS
(Permitted Pits in Chapter A)

Table of Contents

Application Requirements

§4.150. Additional Requirements Applicable to Permitted Pits.....	3
§4.151. Design and Construction of Permitted Pits.....	4
§4.152. Monitoring of Permitted Pits.....	5
§4.153. Commercial Disposal Pits.....	7

**Additional Information That May Be Requested by the Director
and Allowed by Rule**

§4.151 (a)(3) Detailed Operating Requirements	8
§4.151 (b)(4) Additional Operating Requirements.....	8

General Permit Provisions by Rule

§4.150. Additional Requirements Applicable to Permitted Pits.....	8
§4.151 (b) Operating requirements.....	9
§4.153. Commercial Disposal Pits.....	10
§4.154. Closure of Permitted Pits.....	10

EP-5 Technical Application Sheet for Additional Requirements for Permitted Pits

SUBCHAPTER A

DIVISION 6. ADDITIONAL REQUIREMENTS FOR PERMITTED PITS

APPLICATION REQUIREMENTS

§4.150. Additional Requirements Applicable to Permitted Pits.

§4.150 (a) The permit application for all permitted pits comply with Chapter 4, Subdivision A, Division 4 requirements for submitted information with the permit application.

☐ Yes ☐ No

The permit application for all commercial pits comply with Chapter 4, Subdivision A, Division 5 requirements.

☐ Yes ☐ No ☐ The permit application are not for commercial pits.

§4.150 (b) If at any time a pit no longer meets the requirements for authorized pits under §4.113 of this title (relating to Authorized Pits), the operator of the pit shall apply for a pit permit pursuant to the requirements of this division.

§4.150 (g) The applicant has submitted information that shows the proposed pit location is compliant with §4.150 (g)(1-6):

☐ Yes ☐ No

☐ The applicant has requested an exception from the Director.

☐ The applicant has received an exception from the Director and the exception is submitted with the application.

(1) on a barrier island or a beach;

(2) within 300 feet of surface water, including wetlands;

(3) within 500 feet of any public water system well or intake;

(4) within 300 feet of any domestic water well or irrigation water well, other than a well that supplies water for drilling or workover operations for which the pit is authorized;

(5) within a 100-year flood plain; or

(6) within 500 feet of a public area.

§4.150 (h) The applicant has submitted information that shows that a minimum 50-foot buffer zone is maintained between the boundaries of the property and the outer edge or toe of the pit walls or berms.

☐ Yes ☐ No

§4.151. Design and Construction of Permitted Pits.

§4.151 (a) Application.

(1) The permit application shows that all permitted pits have complied with the general construction requirements applicable to the authorized pits in Division 3 of Chapter 4, Subchapter A, relating to Operations Authorized by Rule.

☐ Yes ☐ No

(2) The applicant has provided information, in addition to the Design and Construction information required by §4.128, that a facility diagram includes the following pit information (A-K):

☐ Yes ☐ No

(A) the maximum length, width, and depth of the pit in feet;

(B) the maximum depth of the pit below grade in feet;

(C) the maximum and minimum height of walls or dikes above grade in feet;

(D) the dimensions of the dikes including the width at the base, height, and slope;

(E) the maximum volume of the pit in barrels and cubic yards;

(F) the maximum volume of the pit minus the volume to maintain the required freeboard in barrels and cubic yards;

(G) the volume of the pit below natural grade in barrels and cubic yards;

(H) information on the pit liner type and thickness, installation methods, and manufacturer's specification sheets;

(I) a plan view drawing of each pit, including all dimensions, and any trenches or structures used to separate and convey contact and non-contact stormwater;

(J) two perpendicular, sectional views of each pit showing the bottom, sides, dikes, and natural grade, including all dimensions; and

(K) the surface area and action leakage rate calculation for any pit with a leak detection system, that is prepared and sealed by a professional engineer licensed in Texas. The action leakage rate calculations shall include:

- (i) all assumptions and dimensions used;
- (ii) the size of the pump and pipes that will be used in the leak detection system; and
- (iii) calculations demonstrating that the system is designed to sufficiently withdraw and manage the expected leakage rate.

§4.152. Monitoring of Permitted Pits.

§4.152 (a) The application for a pit permit includes a monitoring plan that establishes a procedure to routinely monitor the integrity of the pit liner.

☐ Yes ☐ No

The applicant will meet the requirements of §4.152 (a) by proposing one of the following options:

- ☐ §4.152 (a)(1)
- ☐ §4.152 (a)(2)
- ☐ §4.152 (a)(3)

(1) The permittee shall empty the pit and conduct a visual inspection on an annual basis. The permittee shall photograph the interior of the pit and otherwise record each inspection. The permittee shall maintain the photographs and records from each inspection for the life of the pit and supply these records to the Commission upon request.

(2) The permittee shall install a double liner and leak detection system between the primary and secondary liner. The leak detection system shall be monitored on a daily or weekly basis as specified in the permit to determine if the primary liner has failed.

(3) The permittee may implement an alternative monitoring procedure if the permittee demonstrates that the alternative monitoring is at least as protective of surface and subsurface waters as the procedures outlined in paragraphs (1) and (2) of this subsection and if the alternative monitoring procedure is approved by the Director.

§4.152 (b) The permittee shall monitor all pits for liner failure in accordance with the monitoring plan approved by the Commission pursuant to §4.152(a) and will consider following §4.152 (b)(1-3) when implementing the monitoring plan.

☐ Yes ☐ No

(1) Failure of the primary liner in a double liner and leak detection system occurs if:

- (A) a volume of fluid is withdrawn from the leak detection system that is greater than the calculated action leakage rate, the standard action leakage rate of 1,000 gallons per acre per day (GPAD) for pits that manage fluid waste, or 100gallons per acre per day (GPAD) for pits that manage solid oil and gas wastes;
- (B) any failure in the leak detection and return system or any component of the system occurs; or
- (C) any detected damage to or leakage from the secondary liner occurs.

(2) The failure of a liner system may be indicated through results of groundwater monitoring.

(3) If liner failure is discovered at any time, the permittee shall:

- (A) notify the Director and the District Director by phone or email within 24 hours of the failure;
- (B) coordinate subsequent response actions with the input and approval of the District Director; and
- (C) mitigate the potential for a release from the pit.
 - (i) Except as provided in clause (ii) of this subparagraph, mitigation requires reducing the waste level to below the elevation of the liner failure and then repairing the liner. The permittee shall notify the District Director once the repair is complete. The District Director shall inspect the repair before the permittee may place the pit back in active operation.
 - (ii) For disposal pits, waste should not be removed. The permittee shall take other appropriate steps to prevent release or pollution. Any steps must be approved by the District Director. The permittee shall notify the District Director once the mitigation steps and repairs are complete. The District Director shall inspect the pit before the permittee may place the pit back inactive operation.

§4.153. Commercial Disposal Pits.

§4.153 (a) Siting.

(1) The pit permit application for the commercial disposal facility includes documentation of a good faith investigation that reviewed the facilities 10-year flooding history in determining whether the facility is located in a flood-prone area.

☐ Yes ☐ No

(2) In addition to information submitted in the permit application satisfying §4.150, the commercial disposal pit is not located in areas or locations identified in (A-C) below:

☐ Yes ☐ No

(A) an area in which the disposal pit is not sufficiently isolated to prevent pollution of surface or subsurface waters;

(B) a prohibited location defined in Division 11 of this subchapter (relating to Requirements for Surface Water Protection); or

(C) any other location where there is an increased risk to surface or subsurface waters.

(3) The application for a commercial disposal pit includes the information to demonstrate that the pit will not be located in an area prohibited under §4.153

(a)(2)(A-C) Siting.

☐ Yes ☐ No

§4.153 (b) Design and construction. The application for a disposal pit permit contains the following (1-4) design and construction criteria:

☐ Yes ☐ No

(1) the dimensions of all disposal pits;

(2) the locations and dimensions of all trenches used to separate and convey contact stormwater and non-contact stormwater;

(3) the maximum waste elevations and final cover; and

(4) details of the final cover anchor trench and final cover composition.

ADDITIONAL INFORMATION THAT MAY BE REQUESTED BY THE DIRECTOR THAT IS ALLOWED BY RULE

§4.151 (a) Application.

(3) The permittee shall provide any other information necessary to address the operating requirements detailed in subsection (b) of this section.

§4.151 (b) Operating requirements.

(4) Additional requirements as determined by Director. Any pit permits issued pursuant to this subchapter may contain additional requirements concerning design and construction including requirements relating to construction materials, dike or berm design, liner material, liner thickness, procedures for installing liners, overflow warning devices, leak detection devices, monitor wells, and fences that the Director determines are necessary to prevent pollution.

GENERAL PERMIT PROVISIONS, BY RULE

§4.150. Additional Requirements Applicable to Permitted Pits.

§4.150 (c) No person may use a pit without the express permission of the permittee. A person who uses a pit without the express permission of the permittee may be subject to legal enforcement action regardless of whether the person maintains an active Organization Report pursuant to §3.1 of this title (relating to Organization Report; Retention of Records; Notice Requirements.)

§4.150 (d) Any person using or maintaining a pit without the required permit shall be immediately required to cease usage and close the pit in accordance with §4.154 of this title (relating to Closure of Permitted Pits). Any person using or maintaining a pit without the required permit may be subject to enforcement action regardless of whether the person maintains an active Organization Report pursuant to §3.1 of this title.

§4.150 (e) Permitted pits are subject to containment requirements to prevent pollution of surface or subsurface water and will be included as permit conditions at the sole discretion of the Commission.

§4.150 (f) In the event of an unauthorized release of oil and gas waste, treated fluid, or other substances from any pit permitted by this subchapter, the operator shall take any measures necessary to stop or control the release and report the release to the District Office within 24 hours.

§4.151 (b) Operating requirements.

(1) Signage. The permittee shall post a sign at each permitted pit. The sign shall show the permit number in letters and numerals at least three inches in height.

(2) Freeboard. Unless otherwise required by permit or rule, the permittee shall maintain all pits such that each pit maintains a freeboard of at least two feet plus the capacity to contain the volume of precipitation from a 25-year, 24-hour rainfall event.

(3) Liners.

(A) Equipment, machinery, waste, or other materials that could reasonably be expected to puncture, tear, or otherwise compromise the integrity of the liner shall not be used or placed in lined pits.

(B) Unless the permit specifically provides otherwise, the liner for any permitted pit required to be lined shall comply with the general requirements for lining in Division 3 of this subchapter (relating to Operations Authorized by Rule), except that the thickness of a high-density polyethylene liner in a permitted pit shall be a minimum of 60 mil and, for any other type of synthetic liner, a minimum of 30mil.

(C) A brine pit permitted under this subchapter shall be constructed with a primary and secondary liner and a leak detection system.

§4.153. Commercial Disposal Pits.

§4.153 (c) Closure. Unless otherwise required by permit or if the Director determines that such post-closure monitoring is necessary to prevent pollution, a post-closure monitoring period of no less than five years is required for any commercial disposal pit and any facility where a commercial disposal pit is located.

§4.154. Closure of Permitted Pits.

In addition to the requirements outlined in §4.132 of this title (relating to Closure), the permittee is required to comply with the following when operations at the pit terminate.

- (1) Unless otherwise required by permit, all pits shall be dewatered and emptied within 120 days of cessation of use.
- (2) After the soil sampling analysis has been approved by the Director, the pit shall be backfilled and compacted within 120 days.
- (3) Once backfilled, the pit shall be reseeded with vegetation natural to the geographic region to prevent erosion after pit closure. Use of treated produced water to establish a natural vegetative cover for the region requires prior approval from the Director pursuant to §4.184 or §4.185 of this title (relating to Permitted Recycling, and Pilot Programs, respectively).