



Qualifying for an Arid Exemption at a Small Municipal Solid Waste Landfill

What is an Arid Exemption?

An arid exemption is a designation applied to small municipal solid waste (MSW) landfills in arid regions that meet certain criteria. Arid exempt (AE) landfills are exempt from liner requirements in [Title 30, Texas Administrative Code \(30 TAC\)](#)¹, Chapter 330, Subchapter H and exempt from groundwater monitoring requirements in Subchapter J.

Arid Exempt Landfill Types

The classification of MSW landfills and other facilities is detailed in 30 TAC 330.5. MSW Type I landfills that qualify for an arid exemption are designated Type IAE; MSW Type IV landfills that qualify for an arid exemption are designated Type IVAE.

- Type IAE landfills may accept the same types of waste as Type I landfills but may not accept Class 1 industrial solid waste (except wastes that are Class 1 only because of asbestos content).
- Type IVAE landfills, like Type IV landfills, may only accept brush, construction and demolition waste, and rubbish. Type IV and IVAE landfills may not accept putrescible (organic) wastes, household wastes, or wastes from very small quantity hazardous waste generators.

Descriptions of waste types are provided in definitions in 30 TAC 330.3.

Eligibility Criteria for an Arid Exemption

A prospective applicant should submit a certification of eligibility to TCEQ for review before preparing and submitting a permit or permit amendment application to know

¹ www.tceq.texas.gov/goto/view-30tac

if the facility will qualify, and to determine the number of soil borings that would be required.

To be eligible for an arid exemption, the following criteria must be met:

- The facility disposes
 - less than 20 tons per day (TPD) of authorized waste in a Type IAE landfill unit or a Type IVAE landfill unit, or
 - less than 20 TPD of authorized waste in a Type IAE unit and less than 20 TPD in a Type IVAE unit at the same facility (for a total waste acceptance rate of less than 40 tons per day for the facility);
- There is no evidence of existing groundwater contamination from the facility;
- The facility serves a community that has no practicable waste management alternative; and
- The facility is in an area with average annual precipitation less than or equal to 25 inches, based on data for the most recent 30-year reporting period.

The criteria are detailed in 30 TAC 330.5(b)(1). All the conditions must be met. A facility that meets these requirements must maintain the integrity of any existing on-site groundwater monitor wells and make them available for the collection of samples [330.5(b)(7)].

An exemption request may be denied if the available information indicates that granting the exemption could result in a substantial threat of groundwater contamination [330.5(b)(2)].

If any of the following occurs at an AE facility, the facility will no longer qualify for the arid exemption and will thereafter need to comply with the full requirements for a MSW Type I or Type IV facility, including establishing a groundwater monitoring system, on a schedule specified by the executive director [330.5(b)(4)]:

- The owner or operator has knowledge or becomes aware of groundwater contamination from the facility within a one-mile radius of the unit;
- The facility no longer meets the definition of a Type IAE or Type IVAE landfill facility; or
- A practicable alternative becomes available.

Demonstration of No Practicable Waste Management Alternative

A community may demonstrate that it has no practicable waste management alternative in any of three ways, according to 30 TAC 330.63(d)(5)(C):

- By documenting that the additional costs of alternatives are estimated to exceed 1 percent of the community's budget for all public services; or
- By documenting that haul distances to alternative sites are unreasonably long (document the anticipated haul distance and the economic implications to the community served); or
- By documenting that no other alternative is feasible to implement, given the community location and economic condition (include a statement on what alternatives have been considered and why they are not feasible to implement).

Authorization for a Separate Type IVAE Landfill Unit at a Type IAE Landfill Facility

A separate Type IVAE unit may be authorized at a Type IAE landfill facility according to the provisions of 30 TAC 330.5(b)(1)(A).

Existing Type IAE landfill permits that specify the less than 20 TPD waste disposal limit may be revised via a major amendment to allow disposal of an additional less than 20 TPD of authorized waste in a separate Type IVAE landfill unit at the same facility according to 30 TAC 330.5(b)(2).

Type IAE and Type IVAE landfill units at a facility must be in separate excavations. The minimum recommended separation between the excavations is 50 feet.

Limitations on Waste Acceptance

Owners or operators of MSW facilities must establish a waste acceptance plan in accordance with 30 TAC 330.61(b) that identifies the sources and characteristics of the wastes to be received. The waste acceptance plan must specify limitations for each type of waste that may have a constituent or characteristic that may impact or influence the design and operation of the facility.

Type IAE landfill units may not accept Class 1 nonhazardous industrial solid waste, which is prohibited by 30 TAC 330.173(a). However, wastes that are classified as Class 1 nonhazardous industrial solid waste only because of asbestos content may be accepted at a Type IAE landfill that is authorized to accept regulated asbestos-containing material (RACM) in accordance with 330.171(c)(3) and 330.173(c)(3)(I), unless acceptance of industrial waste is prohibited by the permit. All Class 1

nonhazardous industrial asbestos wastes must be manifested and reported as required by 330.173 (g) and (h). Unless specifically authorized by the facility permit, Type IAE landfill facilities permitted after October 9, 1993, that are authorized to accept RACM may not accept RACM from industrial sources in excess of 20 percent of the total amount of all other waste accepted during the current or previous year [330.173(e)].

Soil Boring Plan for Arid Exempt Landfill

Applicants for new MSW AE landfills and lateral expansions are exempt from the geology report requirements of 30 TAC 330.63(e) except for the requirement to submit a soil boring plan in accordance with 330.63(e)(4) and (e)(4)(A), and the information in 330.63(e)(6). The requirement applies to Type IAE landfills and Type IVAE landfills

The soil boring plan must be prepared and signed by a qualified groundwater scientist (defined in 30 TAC 330.3) and must be approved by TCEQ prior to initiation of the work.

The soil boring plan must include a map showing the boundaries of the facility and the proposed waste disposal areas, surface elevations, and the locations and depths of all proposed borings. The plan must also indicate the depths of the proposed landfill excavations and identify the elevation of the deepest excavation (EDE; the EDE is the lowest elevation in any part of any excavation).

Number and Depth of Borings

The number of borings should be determined according to the following table. Additional borings may be required in areas with stratigraphic complexities. For areas greater than 100 acres, determine the number of borings in consultation with TCEQ.

Number and depth of borings for AE landfill, based on size of project area.

<i>Size of Project Area (acres)</i>	<i>Minimum Number of Borings</i>	<i>Minimum Number of Borings at Least 5 Feet Below Elevation of Deepest Excavation</i>	<i>Minimum Number of Borings at Least 30 Feet Below Elevation of Deepest Excavation</i>
10 or less	3	-	3
Greater than 10 to 15	4	1	3
Greater than 15 to 20	5	2	3
Greater than 20 to 35	6	2	4
Greater than 35 to 50	7	3	4
Greater than 50 to 100	7-10	3-4	4-6

Locations of Borings

Boring locations should be chosen to allow characterization of the area within and adjoining the proposed waste disposal footprint.

Soil Boring Report

The results of the soil boring investigation should be compiled in a report that includes a map showing the surveyed locations and elevations of the borings, boring logs that include the information described in 30 TAC 330.63(e)(4), and cross sections developed from the logs illustrating the site geology and the investigator's interpretation.

The report should be prepared and signed by a qualified groundwater scientist in accordance with 30 TAC 330.57(f).

Information to Include in a Permit Application

An application for a new permit or permit amendment for an AE landfill facility must include:

- A certification of eligibility for an arid exemption required by 30 TAC 330.63(d)(5) along with the supporting documentation, including a certification following the procedures in 330.63(e)(6) that there is no evidence of groundwater contamination from the landfill;
- A copy the letter from TCEQ approving the certification of eligibility if the certification has already been submitted and approved;
- A copy of the soil boring plan and TCEQ approval letter; and
- A soil boring report.

The application must be prepared according to the procedures in 30 TAC Chapter 330, Subchapter B, except that the application parts pertaining to 30 TAC, Chapter 330, Subchapter H (relating to liner design) and Subchapter J (relating to groundwater monitoring and corrective action) are not required.

Contact Us

If you have questions, please contact the MSW Permits Section by telephone at (512) 239-2335, by email to mswper@tceq.texas.gov, or in writing to MC 124 - Municipal Solid Waste Permits Section, Waste Permits Division, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087.