



Soil Boring Plans for Arid Exempt Municipal Solid Waste Landfills

Texas Commission on Environmental Quality
Waste Permits Division
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Purpose of this Document

This document provides guidelines for addressing the soil boring plan requirement for new municipal solid waste (MSW) arid exempt landfills and lateral expansions. Eligibility requirements for an arid exemption are outlined in a separate document – [Qualifying for an Arid Exemption at a Municipal Solid Waste Landfill](#).

Soil Boring Plan Requirement

Title 30 Texas Administrative Code (30 TAC), Chapter 330, [§330.57\(a\)](#) requires applicants for new municipal solid waste arid exempt landfills (AE) and lateral expansions to conduct a subsurface investigation in accordance with [§330.63\(e\)\(4\) and \(e\)\(4\)\(A\)](#), to characterize the site. The requirement applies to Type IAE landfills and Type IVAE landfills (classification of MSW landfills is detailed in [§330.5](#)). A soil boring plan must be approved by the Texas Commission on Environmental Quality prior to initiation of the work. The soil boring plan must include a map showing the boundaries of the facility and the waste disposal areas, the 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). The soil boring plan should be prepared and signed by a qualified groundwater scientist, as defined in [§330.3](#).

Number and Depth of Borings

The number of borings should be determined according to the following table. For areas greater than 100 acres, determine the number of borings in consultation with the executive director.

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

| Size of Area (acres) | Minimum Number of Borings | Minimum Number of Borings at Least 5 Feet Below Elevation of Deepest Excavation | Minimum Number of Borings at Least 30 Feet Below Elevation of Deepest Excavation |
|------------------------|---------------------------|---|--|
| 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 |

Additional borings may be required in areas with stratigraphic complexities.

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 §[330.57\(f\)](#), and be included in Part III of the new permit or permit amendment application (for a lateral expansion).

For More Information

If you have questions about this information, please contact the MSW Permits Section by telephone at (512) 239-2335, by e-mail to mswiper@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.