



Technical Resources for Permit Applications

Purpose

This document describes the recommended content of permit applications and plans submitted to the Department of Environmental Quality. It is intended to serve as a technical resource for the regulated community.

Applicability

This information applies principally to municipal solid waste landfill facilities permitted under OAR 340-093-0050 and regulated under OAR 340 Division 94. It can also be relevant and helpful in preparing applications and plans for non-municipal landfill facilities regulated under OAR 340 Division 95 and other solid waste facilities regulated under OAR 340 Division 96.

Organization of applications and plans

DEQ recommends that permit applications and plans follow the organization suggested in this document. Using this organization will facilitate DEQ review and approval of documents.

[Section 1: Location Restrictions](#)

[Section 2: Phase I Site Characterization](#)

[Section 3: Phase II Site Characterization](#)

[Section 4: Geotechnical Investigations](#)

[Section 5: Conceptual Design of Landfill Facilities](#)

[Section 6: Leachate Treatment and Disposal Feasibility Study](#)

[Section 7: Detailed Design](#)

[Section 8: Facility Construction Program](#)

[Section 9: Landfill Operations](#)

[Section 10: Environmental Monitoring](#)

[Section 11: Closure and Post-Closure](#)

[Section 12: Financial Assurance](#)

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Phase 1 Site Characterization Report

Typically, a Site Characterization Report is required as part of a new Solid Waste Permit Application, or in some cases, a Letter Authorization Application. Many existing sites may also need to complete or update their SCR if it has not been done recently. Guidance on the structure and content of the SCR can be found in DEQ's Solid Waste Guidance, Municipal Solid Waste Landfills, [Section 2 \(Phase I\)](#) and [Section 3 \(Phase II\)](#).

The purpose of the Phase I SCR is to provide general information about the site and the surrounding area. It is not meant to be an exhaustive, in-depth examination since that will be dealt with in further phases of the SCR as required. The Phase I SCR has always been meant to be more of a current literature review rather than the summary of site-specific fieldwork accomplished. The only real exception to this is the required door-to-door survey to determine the current water source (community system, well, or surface water intakes are examples) for each improved property in the area of interest.

The following is DEQ's recommended organizational structure of a Phase I Site Characterization Report and some possible sources of information. For more sources, see DEQ's Solid Waste Guidance, Municipal Solid Waste Landfills, [Section 2 \(Phase I\)](#):

1. Introduction

Provide a brief review of the location restriction information covered under [Section 1 \(Location Restrictions\)](#). Note any problems locating data. Describe the owner and operator of the proposed facility including how to contact them. State the reason or purpose of this facility. Provide a brief description of proposed (current) site operations.

2. Existing conditions

Describe the location of the site (township, range, and section); nearest city or town; nearest U.S. or State Highway; access to the site; legal description; local land use zoning; and vicinity map(s). Try the following web sites for information for this section: USGS quadrangles can be found using DEQ's Longitude Latitude Identification application. Most Oregon counties have tax lot and zoning information available on the web. Contact the county office in question for availability and access. Aerial photographs can be accessed via Google Earth and the USGS Earth Explorer, for example.

3. Climate/meteorology

A good place to start is the Western Regional Climate Center or the PRISM Climate Group at Oregon State University.

4. Hydrology

Surface water and stream flow data can be found at Oregon's Water Resources Department web site. Wetlands are described in the National Wetlands Inventory. Flood plain delineation and/or flood maps can be found at the Federal Emergency Management Agency's Flood Hazard Mapping Section.

5. Water balance

The most common water balance model is the EPA's Hydrologic Evaluation of Landfill Performance (HELP). Another useful set of models can be found on the USGS web site.

6. Water use inventory

Oregon Water Resources Department contains a lot of useful information. Nearly all water well logs on

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file with this Department are available in summary format. Groundwater and surface-water Public Water System locations can be found using DEQ's interactive map viewer. The Oregon Health Authority Drinking Water Program houses a database on the latest chemical testing of drinking water sources, including nitrate.

7. Geology

Oregon's Department of Geology and Mineral Industries and the US Geologic Survey provide information on Oregon geology and hazards.

8. Soils

While not specified in the Phase I guidance, a review of the on-site soils is required if there is no liner system or if the natural soils are to be used in construction and/or operation of the site. The Natural Resources Conservation Service Web Soil Survey provides easy access to soils information.

9. Hydrogeology

Regional basin reports are available from either Water Resources Department, the US Geological Survey, or DEQ's Water Quality Division.

10. Other information

Other information may be required to complete the Phase I SCR. An example of this may include, but is not limited to, a description of any mining activities nearby, nearby high-tension electrical transmission lines or airports, pipelines adjacent or passing through the site, or any known endangered or threatened species in the general area. Rare and endangered species information can be found at the Oregon Biodiversity Information Center (formerly Oregon Natural Heritage Information Center). The Department of State Lands web site houses essential indigenous anadromous salmonid habitat information, and the US Fish and Wildlife Service can provide information on wetlands.

11. Phase II SCR Workplan

The Phase II SCR Workplan must be included with the Phase I SCR. The workplan must describe how the information requirements found in Section 3 of the Landfill Guidance will be addressed. A schedule of events must be included.

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Contact

If your facility/project is in this county...	...then contact this DEQ office
Baker, Crook, Deschutes, Gilliam, Grant, Harney, Hood River, Jefferson, Klamath, Lake, Malheur, Morrow, Sherman, Umatilla (including Milton-Freewater), Union, Wallowa, Wasco, Wheeler	<p>Eastern Region Materials Management Program 400 E Scenic Drive, Suite 307 The Dalles, OR 97058</p> <p>Phone: 541-298-7257 DEQER.SolidWastePermitCoordinator@deq.oregon.gov</p>
Clackamas, Clatsop, Columbia, Multnomah, Tillamook, Washington	<p>Northwest Region Environmental Partnerships 700 NE Multnomah St., Suite 600 Portland, OR 97232</p> <p>Phone: 503-229-5353 DEQNWR.SolidWastePermitCoordinator@deq.oregon.gov</p>
Benton, Coos, Curry, Douglas, Jackson, Josephine, Lane, Lincoln, Linn, Marion, Polk, Yamhill	<p>Western Region Materials Management Program 165 E Seventh Ave., Suite 100 Eugene, OR 97401</p> <p>Phone: 541-687-7465 DEQWR.SolidWastePermitCoordinator@deq.oregon.gov</p>

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