



SOLID WASTE DISPOSAL SITE CLOSURE PERMIT: Closed Municipal Solid Waste Landfill

Oregon Department of Environmental Quality
165 E. Seventh Ave., Suite 100
Eugene, OR 97401-3049
541-687-7465

Issued in accordance with the provisions of [Oregon Revised Statutes Chapter 459](#) and [Oregon Administrative Rules 340 Divisions, 64, 90, 93, 94, 95, 96](#) and [97](#); and subject to the Land Use Compatibility Statement referenced below.

Issued to:

Riverbend Landfill Co.
13469 SW Hwy 18
McMinnville, OR 97128
Telephone: 503-472-8788

Facility name and location:

Riverbend Landfill Co.
13469 SW Hwy 18
McMinnville, OR 97128
Telephone: 503-472-8788

Owner:

Riverbend Landfill Co.
13469 SW Hwy 18
McMinnville, OR 97128
Telephone: 503-472-8788

Operator:

Riverbend Landfill Co.

ISSUED IN RESPONSE TO:

- Solid waste permit renewal application received Aug. 19, 2009, and closure permit application received Jan. 27, 2022
- Land Use Compatibility Statements from Yamhill County Planning Department dated Nov. 16, 2016

The determination to issue this permit is based on findings and technical information included in the permit record.

ISSUED BY THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

A handwritten signature in black ink, appearing to read 'B. Fuller', is written over a horizontal line.

Brian Fuller, Materials Management Manager
Permitting and Compliance
Western Region

08/31/2022

Date

Permitted Activities

Until this permit expires or is modified or revoked, the permittee is authorized to operate, close, and maintain a solid waste land disposal site in conformance with the requirements, limitations and conditions set forth in this document, including all attachments.

TABLE OF CONTENTS

This document is a solid waste permit issued by the Oregon Department of Environmental Quality in accordance with Oregon Revised Statutes 459 and Oregon Administrative Rules Chapter 340.

Section	Topic	Page
PERMIT ADMINISTRATION		3
1	Permit Issuance	3
2	Disclaimers	4
3	Authority	4
4	Permit Modification	4
ALLOWABLE ACTIVITIES		5
5	Authorizations	5
6	Prohibitions	6
OPERATIONS AND DESIGN		8
7	Operations Plan	8
8	Record Keeping and Reporting – Operations and Post Closure	10
9	Specific Operating Conditions	11
10	Site Development and Design	15
SITE CLOSURE		17
11	Closure Construction and Maintenance	17
12	Financial Assurance	18
ENVIRONMENTAL MONITORING		19
13	Environmental Monitoring Plan	19
14	Environmental Sampling Requirements	20
15	Establishing Permit-Specific Concentration Limits, Action Limits, Concentration Limit Variances and Site-Specific Limits	21
16	Environmental Monitoring Standards	21
17	Record Keeping and Reporting – Environmental Monitoring	24
18	Environmental Monitoring Network	25
COMPLIANCE SCHEDULE		26
19	Summary of Due Dates	26
ATTACHMENT 31		
20	Attachment 1 Permit-Specific Concentration Limits, Action Limits, and Site-Specific Limits	31

PERMIT ADMINISTRATION

1 Permit Issuance

1.1 Permittee

This permit is issued to Riverbend Landfill Co.

1.2 Permit number

This permit will be referred to as Solid Waste Permit Number 345.

1.3 Permit term

The permit is issued on the date it is signed.

The permit's expiration date is June 30, 2032.

1.4 Facility type

The facility is permitted as a municipal solid waste closed landfill.

1.5 Facility owner / operator

The owner of this facility is Riverbend Landfill Co..

The operator of this facility is Riverbend Landfill Co.

1.6 Basis for permit issuance

This permit is issued based upon the following documents submitted by the permittee:

- Solid waste permit renewal application received Aug. 19, 2009, and closure permit application received Jan. 27, 2022
- Land Use Compatibility Statements from Yamhill County Planning Department dated Nov. 16, 2016

1.7 Definitions

Unless otherwise specified, all terms are as defined in [OAR 340-093-0030](#).

1.8 Legal control of property

The permittee must at all times maintain legal control of the disposal site property; including maintaining a current permit, contract or agreement that allows the operation of the facility if the site is not owned by the permittee.

1.9 Submittal & notification address.

Unless otherwise specified, all submittals and notifications to DEQ under this permit must be sent to:

Oregon Department of Environmental Quality
Manager, Solid Waste Program
165 E. Seventh Ave., Suite 100
Eugene, OR 97401-3049
Telephone: 541-687-7465

Schedule split sampling events and report all required split sampling information to DEQ's laboratory at:

Oregon Department of Environmental Quality
Laboratory, Groundwater Monitoring Section
3150 NW 229, Suite 150
Hillsboro, OR 97124

Phone: 503-693-5700
Fax: 503-693-4999

2 Disclaimers

2.1 Property rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights.

2.2 DEQ liability

DEQ, its officers, agents, or employees do not sustain any liability on account of the issuance of this permit or on account of the construction, maintenance, or operation of facilities pursuant to this permit.

3 Authority

3.1 Ten-year permit

This permit is issued for a maximum of 10 years as authorized by [Oregon Revised Statutes 459.245 \(2\)](#).

3.2 Documents superseded

This document is the primary solid waste permit for the facility, superseding all other solid waste permits issued for Riverbend Landfill by DEQ.

3.3 Permittee responsibility and liability

Conditions of this permit are binding upon the permittee. The permittee must conduct all facility activities in compliance with the provisions of the permit. The permittee is liable for all acts and omissions of the permittee's contractors and agents in carrying out the operations and other responsibilities pursuant to this permit.

3.4 Other compliance

This permit's issuance does not relieve the permittee from the responsibility to comply with all other applicable federal, state, or local laws or regulations, including the following solid waste requirements, and any future updates or additions to these requirements:

- Oregon Revised Statutes, Chapters [459](#) and [459A](#)
- [Oregon Administrative Rules Chapter 340](#)
- Any documents submitted by the permittee and approved by DEQ

3.5 DEQ access to disposal site

The permittee must allow representatives of DEQ access to the disposal facility at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data and carrying out other necessary functions related to this permit.

Reference: [OAR 340-093-0050\(6\)](#)

3.6 Penalties

Violation of permit conditions will subject the permittee to civil penalties of up to \$25,000 for each day of each violation.

Reference: [ORS 459.995\(1\)\(a\)](#)

4 Permit Modification

4.1 Permit review

During the permit's term, DEQ may review the permit and amend it if necessary. DEQ will consider the following factors in making this determination:

- Compliance history of the facility
- Changes in volume, waste composition or operations at the facility
- Changes in state or federal rules that should be incorporated into the permit
- A significant release of leachate or landfill gas to the environment from the facility
- Significant changes to a DEQ-approved site development plan, and/or conceptual design

- Closure and post-closure plans
- Other significant information or events

Reference: [OAR 340-093-0113](#)

4.2 Permit modification

DEQ or the permittee may, at any time during the permit's term, propose to change the permit.

Once approved by DEQ, any permit-required plans become part of the permit by reference.

Reference: [OAR 340-093-0070\(6\)](#) and [340-093-0100\(2\)](#) and [OAR 340-093-0105\(3\)](#).

4.3 Modification and revocation by DEQ

The director may, at any time before the expiration date, modify, suspend or revoke this permit in whole or in part, in accordance with [Oregon Revised Statutes 459.255](#), for reasons including but not limited to the following:

- Violation of any terms or conditions of this permit or any applicable statute, rule, standard or order of the Commission
- Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts
- A significant change in the quantity or character of solid waste received or in the operation of the disposal site

Reference: [OAR 340-093-0113](#), [110](#), and [0115](#)

4.4 Modification by permittee

The permittee must apply for a modification to this permit if there is a significant change in facility operations or a deviation from permitted activities.

Reference: [OAR 340-093-0070](#)

4.5 Public participation

DEQ will issue a public notice to inform the public of any significant changes to the permit.

Reference: [OAR 340-093-0100](#) and [OAR 340-093-0105](#)

4.6 Changes in ownership or address

At least 10 days in advance, the permittee must report to DEQ any change in the facility's ownership or the permittee's or operator's name and/or address.

Reference: [OAR 340-093-0070\(6\)\(a\)\(A\)](#)

ALLOWABLE ACTIVITIES

5 Authorizations

5.1 Waste authorized for receipt

This permit authorizes the facility to accept:

- Solid waste as defined in [OAR 340-93-030\(91\)](#)
- Waste requiring special management as defined in [OAR 340-093-190](#), according to the special waste management plan approved by DEQ.

5.2 Authorization of other waste

DEQ may authorize the permittee to accept other waste if:

- The permittee develops a Special Waste Management Plan and submits it to DEQ for review and approval
- DEQ approves the Special Waste Management Plan
- The permittee can demonstrate that the materials are not hazardous waste, as defined by state and federal regulations or otherwise a threat to human health or waters of the state

Reference: [OAR 340-094-0040\(11\)](#)

5.3 Tires for recycling

This permit authorizes the permittee to accept up to 100 whole tires at this facility for storage and removal.

This permit authorizes the permittee to accept up to 2,000 whole tires at this facility for storage and removal if the permittee maintains a continuous contract with a waste tire carrier to remove the tires from the site.

If waste tires are to be disposed of, they will meet [OAR 340-064-0052](#) disposal requirements for size reduction of tire chips for disposal.

Reference: [OAR 340-064-0015\(2\)](#) and [\(6\)](#) and [340-064-0052](#)

5.4 Salvaging and recycling

This permit authorizes the permittee to conduct salvaging and recycling in a controlled and orderly manner. The permittee must notify DEQ prior to changing salvaging and recycling operations.

Reference : [OAR 340-094-0040\(11\)\(k\)](#)

5.5 Closure and Post closure care

This permit authorizes the facility to conduct DEQ-approved closure activities and post-closure maintenance and monitoring at the facility.

5.6 Authorization of activities

All facility activities are to be conducted in accordance with the provisions of this permit. All plans required by this permit become part of the permit by reference once approved by DEQ.

Reference: [OAR 340-093-0090](#), [340-093-0110](#)

6 Prohibitions

6.1 Hazardous waste disposal

The permittee must not accept any regulated hazardous waste.

Reference: [40 CFR 258.20\(b\)](#)

In the event discovered waste is hazardous or suspected to be hazardous, the permittee must, within 24 hours, notify DEQ and initiate procedures to identify and remove the waste. Hazardous waste must be removed within 90 days, unless DEQ approves otherwise. The permittee's temporary storage and transportation practices must comply with DEQ rules.

6.2 Liquid waste disposal

The permittee must not accept liquid waste for disposal.

Definition: Liquid waste is waste that does not pass the paint filter test performed in accordance with EPA Method 9095B.

6.3 Vehicle disposal

The permittee must not knowingly accept discarded or abandoned motor vehicles, including trailers or mobile homes, for disposal.

Reference: [OAR 340-093-0040\(3\)\(b\)](#)

6.4 White goods disposal

The permittee must not knowingly accept discarded large metal-jacketed residential, commercial or industrial appliances such as refrigerators, washers, stoves and water heaters for disposal.

Reference: [OAR 340-093-0040\(3\)\(c\)](#)

6.5 Used oil disposal

The permittee must not knowingly accept used oil for disposal.

Reference: [OAR 340-093-0040\(3\)\(a\)](#)

6.6 Tire disposal

The permittee must not knowingly accept waste tires for disposal except those waste tires processed or chipped to meet [OAR 340-064-0052](#) or waste that does not meet the definition in [OAR 340-064-0010\(26\)](#).

6.7 Battery disposal

The permittee must not knowingly accept lead-acid batteries for disposal.

Reference: [OAR 340-093-0040\(3\)\(e\)](#)

6.8 Radioactive Material

The disposal of any materials that meet the definition of radioactive waste established in Oregon Administrative Rule 345 Division 50, enforced by the Oregon Department of Energy, is prohibited except as provided for at [ORS 469.525](#). Other legal prohibitions may apply.

Reference: [ORS 469.525](#) and OAR 345-050

6.9 Electronic waste disposal

The permittee must not knowingly accept the following covered electronic devices for disposal:

- Computer monitors having a viewable area greater than four inches diagonally
- Televisions
- Desktop computers
- Portable computers

Reference: [Oregon Revised Statutes 459.247](#) and [459A.300-365](#)

6.10 Recyclable material disposal

The permittee must not landfill or dispose of any source-separated recyclable material brought to the disposal site.

Exception: If the source-separated material is unusable or not recyclable, it may be landfilled. DEQ must agree to such disposal and pre-approve the identified sources of unusable source-separated material prior to its disposal.

6.11 Asbestos containing materials

The permittee must not accept any asbestos (friable or non-friable) containing materials for disposal.

6.12 Open burning

The permittee must not conduct any open burning at the site.

Reference: [OAR 340-093-0040\(2\)](#)

6.13 Infectious waste collection

The permittee must not accept infectious waste for disposal at the landfill except for waste that is prepared and managed per the requirements in the DEQ approved Special Waste Management Plan.

Reference: [OAR 340-093-0190\(1\)\(d\)](#)

6.14 Explosives collection

The permittee must not accept explosives for disposal at the landfill.

OPERATIONS AND DESIGN

7 Operations Plan

7.1 Operations plan submittal

Within 120 days of the permit issue date, the permittee must review and submit any necessary updates to the site Operations Plan to DEQ for review and approval. The updated plan must be consistent with the conditions of this permit. The DEQ-approved plan becomes an integral part of the permit.

7.2 Plan content

The Operations Plan must describe facility operations, including the elements listed below, and demonstrate how the facility will comply with all regulatory and permit requirements:

General Topics	Describe plans or procedures for:
General operations	<ul style="list-style-type: none"> • Screening incoming waste to detect unauthorized or prohibited waste as required by 40 CFR 258.20(a) and OAR 340-093-0040 • Handling and removing unauthorized waste discovered at the facility • Managing landfill gas • Managing landfill leachate in compliance with all permit conditions • Designing surface water and erosion control structures in compliance with all permit conditions • Responding to non-compliance events or situations
Disposal operations	<ul style="list-style-type: none"> • Waste unloading and handling • Placing daily and interim cover • Detecting and preventing the receipt and disposal of regulated hazardous waste, and any other DEQ-prohibited waste • Disposing of putrescible waste • Disposing of cleanup materials contaminated with hazardous substances • Waste unloading and handling • Managing and disposing of special waste • Using, stockpiling, and tracking the receipt & use of waste approved for use as alternative daily cover • Reducing and controlling the risk of a landfill fire • Fill progression and phasing that is consistent with stability recommendations, and considers other operational considerations
Special Waste Management Plan	<ul style="list-style-type: none"> • Identifying and characterizing special waste (for example: waste that requires special management or waste streams not otherwise authorized by this permit that are inadvertently received) • Identifying the source of all special waste

General Topics	Describe plans or procedures for:
	<ul style="list-style-type: none"> • Waste screening procedures to prevent unauthorized receipt of asbestos waste materials and procedures to isolate, wet, analyze, and properly dispose of suspected asbestos containing waste materials or known asbestos containing waste materials inadvertently received • Determining appropriate handling and disposal procedures • Documenting Special Waste Management Plan implementation, including waste characterization and location of waste disposition • References: OAR 340-93-0190, OAR 340-94-040[11][b][J]
Ancillary operations	<ul style="list-style-type: none"> • Handling and removal of waste tires • Managing transfer containers • Receipt and management of recyclable materials – recycling depot, sorting, and other recovery efforts
Inspection and maintenance	<ul style="list-style-type: none"> • Washing equipment • Maintaining leachate and gas collection systems • Maintaining monitoring stations and devices • Periodically inspecting the continuity and integrity of primary leachate collection pipes • Maintaining surface water control structures
Operating record	<ul style="list-style-type: none"> • Establishing and maintaining the operating record • Establishing and maintaining a complaint log and complaint response procedure
Contingency	<ul style="list-style-type: none"> • Backup methods for storing and/or disposing of leachate • Providing fire protection equipment, and arrangements made with local fire control agency • Notifying DEQ about emergencies and fires

7.3 Operations and Maintenance Manual

Within 60 days of approval of the Operations Plan, the permittee must prepare and submit an updated Operations and Maintenance Manual that includes detailed inspection and maintenance procedures and an associated schedule for all facility components that require periodic inspection. The Operation and Maintenance Manual must include specific procedures for routine preventative maintenance and repairs and for response to emergencies situations. The preventative inspection and maintenance program should address the following equipment and facilities:

- Personnel safety equipment
- Operating equipment
- Support facilities
- Environmental control systems
- Environmental monitoring systems
- The transportation system

The permittee must keep a copy of the Operations and Maintenance Manual with the operating record, readily available for DEQ inspection and review.

7.4 Plan and manual updates

The permittee must update and revise both the operations plan and the Operations and Maintenance Manual as necessary to reflect current and future facility conditions and procedures.

The permittee must submit any associated revisions or updates of the Operations Plan to DEQ for review and approval.

7.5 Plan and manual compliance

The permittee must operate the facility in accordance with the DEQ-approved Operations Plan, and any amendments.

7.6 Final Closure Plan and Post Closure Care Plan

Within 120 days of the permit issuance, the permittee must submit, for approval an updated Final Engineered Closure and Post Closure Care Plans. The permittee must revise the Post-Closure Plan as necessary to keep it reflective of current facility conditions and procedures. Plan revisions must be submitted to DEQ for approval. DEQ may require one or more paper copies of certain documents.

Reference: *Solid Waste Landfill Guidance*, September 1996, provides information on applicable elements of a Post-Closure Plan

7.7 Post-closure maintenance

The permittee must maintain the disposal site in accordance with the DEQ-approved Post-Closure Plan and any amendments to the plan approved in writing by DEQ.

8 Record Keeping and Reporting – Operations and Post Closure

8.1 Non-compliance reporting

The permittee must take immediate corrective action for any violations of permit conditions or DEQ rules and notify DEQ at 541-687-7465

DEQ may investigate the nature and extent of the compliance problem and evaluate the adequacy of the permittee’s corrective action plans.

8.2 Fees

The permittee must pay the solid waste fee each year this permit is in effect.

8.3 Permit display

The permittee must display this permit where operating personnel can easily refer to it.

8.4 Access to records

DEQ must have access, when requested, to all records and reports related to the permitted facility.

8.5 Procedures

The permittee’s recordkeeping and reporting procedures are as follows:

Step	Action
1	Keep the operating and post closure records at the facility or at another DEQ-approved location.
2	Place information required by 40 CFR 258.29 and this permit in the operating (post closure) record.
3	<p>During facility operations, record the quarterly amount of each waste type received and approved alternative daily cover-qualified waste used for daily cover. Report zero (0) for days waste is not received.</p> <p><i>Identify the following waste types received:</i></p> <ul style="list-style-type: none"> • Municipal solid waste • Construction and demolition waste • Waste tires • Asbestos • Approved alternative daily cover-qualified waste received and used • Approved special waste • Other (for example: specify any waste type not included in the above list)

Step	Action
4	If applicable, every quarter, record the amount of each material recovered for recycling or other beneficial purpose.
5	Submit the information collected in Step 3 above on the Solid Waste Disposal Report/Fee Calculation form provided by DEQ. Pay solid waste fees as required by OAR 340-097 . <u>Date due:</u> Last day of the month following the end of the calendar quarter if the facility receives more than 1,000 tons of waste per year. <u>Jan. 31 of each year if the facility receives 1,000 tons or less of waste per year.</u>
6	If the landfill is no longer accepting waste use: Pay solid waste fees as required by OAR 340-97 . <u>Date due:</u> Jan. 31 of each year.
6	Retain copies of all records and reports for 10 years after their creation.
7	Update all records to reflect current conditions at the facility.

9 Specific Operating Conditions

9.1 Discovery of prohibited waste

If the permittee discovers prohibited waste, the permittee must notify DEQ within 24 hours and begin to isolate or remove the waste. In addition, the permittee must take digital photos of the prohibited waste to document its quantity, nature, identity and source.

Within 60 days following the discovery, the permittee must transport non-putrescible, non-hazardous prohibited waste to a disposal or recycling facility authorized to accept such waste, unless otherwise approved or restricted by DEQ. The permittee must obtain DEQ's written approval to store putrescible, non-hazardous, prohibited waste.

9.2 Spills notification

[Oregon Revised Statute 466.635](#) and Oil and Hazardous Materials Emergency Response Requirements, Chapter 340, Division 142 require immediate notification to Oregon Emergency Response System after taking any required emergency actions to protect human health and the environment when oil or hazardous materials are spilled. The spill must be immediately reported to OERS at 1-800-452-0311 if the spill is of a reportable quantity. Reportable quantities include:

- Any amount of oil spilled to waters of the state or in a location from which it is likely to escape to waters of the state
- Oil spills on land in excess of 42 gallons
- 200 pounds, 25 gallons or more of spilled pesticide residue
- Spills of hazardous materials that are equal to, or greater than, the quantity listed in the Code of Federal Regulations, [40 CFR Part 302](#) (list of Hazardous Substances and Reportable Quantities) and amendments adopted before July 1, 2002

For a complete list of hazardous materials required to be reported, refer to [OAR 340-142-0050](#).

9.3 Access roads

The permittee must provide all-weather access roads from the landfill property line to the active operational area and the environmental monitoring stations and maintain them in a manner that prevents traffic hazards, dust and mud.

The permittee must use appropriate means, including truck washing, as needed to prevent haul trucks from tracking mud on external roadways outside the landfill boundaries or offsite. The permittee will properly dispose of wastewater from truck washing activities in a manner approved by DEQ.

Reference: [OAR 340-094-0040\(11\)\(e\)](#) and [340-094-0040\(11\)\(i\)](#)

9.4 Unloading area

The area(s) for unloading incoming waste must be clearly defined by signs, fences, barriers or other devices. The size of the working face must be minimized as described in the DEQ-approved Operations Plan.

Reference: [OAR 340-094-0040\(11\)\(b\)](#)

9.5 Daily cover

At the end of each working day the permittee must cover all solid waste with a six inch, or thicker, layer of compacted soil or with a DEQ-approved, alternative daily cover.

Reference: [OAR 340-094-0040](#)

9.6 Interim cover

As specified in DEQ-approved design and operations plans, the permittee must place and maintain interim cover over fill areas that will not receive additional waste for an extended period (for example: greater than 120 days) and actively revegetate, in a DEQ-approved manner, any interim cover that will remain exposed for more than two years.

Reference: [OAR 340-094-0040](#)

9.7 Surface water structures

The permittee must maintain all stormwater drainage structures in good functional condition, report to DEQ any significant malfunctions or damage and complete repairs within 60 days of discovering the problem.

Reference: [OAR 340-094-0040\(3\) and \(4\)](#)

9.8 Stormwater Discharges

The permittee must comply with applicable National Pollutant Discharge Elimination System stormwater discharge rules and permits. The permittee will comply with their 1200-Z NPDES industrial stormwater general permit, and apply for and obtain 1200-C NPDES construction stormwater general permit coverage prior to any construction related land disturbance outside the current landfill and borrow area footprint that requires permit coverage.

9.9 Asbestos waste management

The permittee must follow DEQ approved asbestos waste screening procedures for inadvertent receipt of asbestos waste materials.

9.10 Leachate management systems

The permittee must operate the disposal site in a manner that deters leachate production to the maximum extent practicable, and construct, operate and maintain in good functional condition all DEQ-approved leachate containment, collection, detection, removal, storage and treatment systems. The permittee must remove leachate from all landfill leachate collection systems, to minimize fluid buildup on the bottom liner and prevent the hydraulic head (fluid depth) from exceeding one foot. The permittee must notify DEQ within 24 hours if the maximum leachate depth is exceeded.

Reference: [OAR 340-094-0040\(11\)\(c\)](#)

9.11 Leachate surface impoundments

The permittee must:

- Completely contain leachate stored within lined surface impoundments
- Maintain a minimum dike freeboard of three feet above the maximum leachate level in those impoundments unless otherwise approved by DEQ
- Fence the impoundments to control public access
- Lock all gates when no attendant is on duty
- Post clearly legible, visible signs that describe the surface impoundment's contents and display the words "no trespassing"

9.12 Litter control

The permittee must at all times minimize windblown litter and collect it quickly and effectively to prevent scattering, nuisance conditions and unsightliness.

Reference: [OAR 340-094-0040\(11\)\(l\)](#)

9.13 Vector control

The permittee must minimize vectors in the active disposal area, including insects, rodents, birds, or other animals.

Reference: [OAR 340-094-0040\(10\)](#)

9.14 Air emissions

The permittee must control air emissions, including dust, malodors, air toxics, etc. related to disposal site construction, operation, and other activities, and comply with DEQ air quality rules and requirements.

9.15 Access control

The permittee must control public access to the landfill as necessary to prevent unauthorized entry and dumping.

Reference: [OAR 340-094-0040\(9\)](#)

9.16 Landfill entrance sign

A prominently displayed sign must indicate the following:

- The name of facility
- The emergency telephone number
- The days and hours of operation
- The authorized and prohibited waste
- The solid waste permit number

Reference: [OAR 340-094-0040\(11\)\(h\)](#)

9.17 Fire protection and reporting

The permittee must provide complete and sufficient protection equipment and facilities in accordance with the DEQ-approved operations plan.

The permittee must make arrangements with the local fire control agency to immediately acquire their services when needed. The permittee must implement preventative measures to ensure adequate on-site fire control, as determined by the local fire control agency. Fires must be immediately and thoroughly extinguished.

The permittee must report fires to DEQ within 24 hours at: 541-687-7465.

Reference: [OAR 340-094-0040\(11\)\(g\)](#)

9.18 Water supply

The permittee must provide water in sufficient quantities for fire protection, dust suppression, establishment of vegetation and other site operations requiring water.

9.19 Landfill gas management

The permittee must control landfill gas in accordance with the requirements of [40 CFR Parts 51, 52 and 60](#) and [OAR 340-094-0060\(4\)](#). The permittee must ensure that methane concentrations do not exceed limits set forth in permit conditions Section 16.6 and if exceedances are noted follow guidance in Section 16.7.

9.20 Landfill gas control system operation and maintenance

The permittee must operate and maintain the landfill gas control and monitoring systems in good functional condition as required to prevent explosion concerns, environmental concerns, nuisance odors, air emissions and landfill gas migration.

If critical landfill gas equipment is significantly damaged or compromised, the permittee must replace or repair that equipment, within 60 days of discovering the problem, and submit a written inspection report to DEQ.

9.21 Inspection

The permittee must physically inspect the entire disposal site at least monthly to determine compliance with this permit and DEQ rules. The permittee must record any post-closure repairs performed. Inspection records must be made available to DEQ upon request.

9.22 Cover system

The permittee must monitor and maintain the cover system including cover thickness. The permittee must repair the cover with approved soil in all areas damaged by erosion, settlement, or cracking; and fertilize, re-seed and maintain sparsely vegetated areas. Any construction or re-development proposals involving the landfill must include an evaluation of potential impacts to the cover system and a plan to restore the cover in the event that construction activities disturb the cover.

9.23 Vegetation

The permittee must establish and maintain a dense, healthy growth of vegetation on the landfill cover except for areas occupied by structures or pavement associated with the site.

Reference: [OAR 340-094-0130\(1\)\(b\)\(B\)](#)

9.24 Surface contour maintenance

The permittee must maintain the final surface contours of the landfill cover in accordance with the following criteria:

- Erosion and ponding of water is prevented to the maximum extent practicable
- Erosion damage (cuts) must be repaired and seeded so that all waste remains covered
- The permittee must refill with soil, re-grade, and seed all areas that have settled or where water ponds, and all areas where the cover soil has been damaged by cracking or erosion.
- Areas where vegetation has not been fully established must be improved so that vegetation is established and maintained in a healthy condition to protect the cover and minimize runoff or leachate creation.

Reference: [OAR 340-094-0040 \(3 and 4\)](#) and [340-094-0130\(1\)](#)

9.25 Future use

Any future use, activity, or construction of buildings, structures, or utilities on or within 200 feet of the waste footprint of this disposal site must have DEQ's prior written approval and must be done in a manner that protects the integrity of the final cover system, landfill stability, gas monitoring devices, and surface water control systems.

Reference: [OAR 340-094-0115\(3\)\(a\)\(F\)](#), [0115\(3\)\(c\)\(C\)](#)

9.26 Complaint log

The permittee must maintain a log recording all complaints received in writing (including email), via telephone, or in person by the facility operator or staff that specifically refer to dust, odor or other nuisance conditions caused by this landfill. The log must also record the permittee's actions to investigate, make a determination as to the validity of the complaint, and resolve the nuisance problem, if possible, within two working days, but no longer than 10 working days after receiving the complaint.

9.27 Alternative Daily Cover (ADC)

Alternative daily cover usage must be measured and documented in accordance with the DEQ-approved Operations Plan. The permittee must not claim Alternative Daily cover usage of the greater of 10 percent of "Total Tons Received in Reporting Period," or 15 percent of "counting waste" (i.e., residential and commercial domestic solid waste, and construction and demolition waste) on the Solid Waste Disposal Report/Fee Calculation form without first obtaining written DEQ approval. To obtain DEQ approval, submit an update to

the alternative daily cover usage section of the Operations Plan that includes detailed methodology of the facility alternative daily cover usage including: descriptions of all alternative daily cover qualified material accepted, typical daily disposal cell construction dimensions, daily cover procedures, operational procedures for measuring and documenting daily alternative daily cover usage, conversion factors with supporting documentation and examples of daily reporting forms and calculations.

Once DEQ has approved the update to the Operations Plan described above, the permittee may claim future alternative daily cover usage in excess of the 10 percent or 15 percent limit described provided that detailed documentation of daily alternative daily cover usage is included with each corresponding Solid Waste Disposal Report/Fee Calculation form in a reporting format acceptable to DEQ.

Note: The language does not supersede other requirements for pre-authorization to accept petroleum contaminated solids for use as alternative daily cover and/or completion of an alternative daily cover trial period for any new waste derived types.

Reference: [OAR 340-094-0040\(7\) and \(8\)](#)

10 Site Development and Design

10.1 Site development plan

Within 180 days of the permit issue date, the permittee must review and submit any necessary updates to the long-term site development plan to DEQ for review and approval. Once approved, the plan becomes an integral part of this permit.

Reference: *The Solid Waste Landfill Guidance, September 1996*, describes the basic elements of a site development plan. Organizing the plan in accordance with the Guidance will expedite DEQ's review.

10.2 Design plans

At least six months prior to the anticipated construction date for closure of existing units or development of other ancillary facilities, the permittee must submit engineering design plans to DEQ for review and approval. The design plans must be prepared and stamped by a qualified professional engineer with current Oregon registration and specify and/or provide the following:

- All applicable performance criteria, construction material properties and characteristics, dimensions and slopes
- The design basis and all relevant engineering analyses and calculations

10.3 Construction requirements

The permittee must construct all improvements in accordance with:

- DEQ-approved plans and specifications
- Any DEQ imposed conditions of approval
- Any future DEQ-approved amendments to the plans and specifications

Reference: [OAR 340-093-0150](#)

10.4 Construction documents

Prior to construction of any landfill engineering controls (e.g., final cover, new disposal unit, or other waste containment facilities or improvements), the permittee must submit complete construction documents and receive DEQ's written approval. The construction documents must:

- Define the construction project team
- Specify material and workmanship requirements to guide the constructor in executing work and furnishing products

- Include a construction quality assurance plan that describes how the project team will monitor the quality of materials and the constructor's work performance and assure compliance with project specifications and contract requirements.

Reference: Follow the current *Solid Waste Guidance* to expedite DEQ's review of the construction documents.

10.5 Construction inspection

During construction of a new landfill disposal unit, final cover system, or any other landfill controls or engineered features, the permittee must provide DEQ with a summary and schedule of planned construction activities to facilitate DEQ's inspection and oversight.

10.6 Construction report submittal

Within 90 days of completing construction of a new landfill disposal unit, a final cover system, or other engineering controls, the permittee must submit to DEQ a construction certification report prepared by a qualified independent party. The report must document and certify that the construction of all required components and structures complies with this permit and DEQ-approved design specifications.

Reference: [OAR 340-093-0150](#)

10.7 Construction report contents

The construction report must include:

- An executive summary describing the construction project and any major problems encountered
- A list of the governing construction documents
- A summary of all construction and construction quality assurance activities
- The manufacturer's written certifications that all geosynthetic materials conform with project specifications
- Test data documenting that soil materials conform with project specifications
- A summary of all construction quality assurance observations, including daily inspection records and test data sheets documenting that materials deployment and installation conform with project specifications
- A description of the problems encountered and the corrective measures implemented
- The designer's acceptance reports for errors and inconsistencies
- A list/description of any deviations from the design and material specifications, including justification for the deviations, copies of change orders and recorded field adjustments, and copies of DEQ's written approvals for deviations and change orders
- Signed certificates for subgrade acceptance prior to placement of soil liner and for acceptance of the soil liner prior to deployment of geomembrane liner
- Photographs and as-constructed drawings, including record surveys of the subgrade, soil liner, granular drainage layer and protective soil layer
- The certification statement(s) and signatures of the construction quality assurance consultant. This representative must be a professional engineer with current Oregon registration.

10.8 Approval to use new disposal units

The permittee must not dispose of solid waste in newly constructed disposal units until DEQ has accepted the Construction Certification. If DEQ does not respond to the Construction Certification Report within 30 days of its receipt, the permittee may place waste in the unit.

Reference: [OAR 340-093-0150\(3\)](#)

10.9 Submittal address

Send all required submittals to:

Oregon Department of Environmental Quality
Materials Management Program
165 E. 7th Ave., Suite 100
Eugene, OR 97401-3049
Telephone: 541-687-7465

SITE CLOSURE

11 Closure Construction and Maintenance

11.1 Final engineered site closure plan development

Within 120 days of the permit issue date, the permittee must prepare and submit a final engineered site closure plan and post closure plan. The permittee must develop a final engineered closure plan and a post-closure plan(s), obtain DEQ approval of the plan(s), and maintain up-to-date copies of these plan(s) in the facility file.

Reference: The plans must comply with [40 CFR, Part 258, Subpart F](#) and [OAR 340-094-0110](#)

11.2 Engineering design plans

At least 180 days prior to final closure of any portion of the landfill, the permittee must submit detailed engineering design plans and specifications to DEQ for review and approval.

The engineering design plans must be prepared and stamped by a qualified professional engineer with a current Oregon registration and specify and/or provide the following:

- * All applicable performance criteria, construction material properties and characteristics, dimensions and slopes
- * The design basis and all relevant engineering analyses and calculations

Reference: The *Solid Waste Landfill Guidance, September 1996*, describes Closure Plan preparation. Following that format will expedite DEQ review of the plan.

11.3 Plan compliance

Riverbend Landfill must be closed and maintained in accordance with the approved Final Engineered Closure/Post-Closure Plan(s), and any amendments approved in writing by DEQ.

11.4 Notification

The permittee must notify DEQ and receive DEQ approval for any changes or updates to the closure and post-closure care plans.

11.5 Closure schedule

The permittee must initiate and complete closure of each landfill disposal unit in accordance with [40 CFR 258.60](#), or in accordance with a description of how and when the facility will be closed, or an alternative schedule approved by DEQ. In addition, there are requirements for DEQ approval of a schedule for preparation of the final engineered post closure care plans that are often submitted with the Final Engineered Closure Plans. **Final closure of the landfill shall be no later than 8 years after date of closure permit issuance.**

Reference: [OAR 340-094-0110\(2\)\(b\)\(B\)](#) and [OAR 340-094-0115\(2\)\(b\)](#)

11.6 Final cover

Unless DEQ approves otherwise, the final landfill cover must be:

- At least three feet thick [\[OAR 340-094-0120\(2\)\(a\)\]](#)
- Designed to minimize infiltration of precipitation as required by [40 CFR 258.60](#)
- Graded to compensate for estimated differential settlement and maintain positive drainage. Final (post-settlement) slopes must range between two percent and 30 percent.

Reference: [OAR 340-094-0120\(2\)\(a\)](#) and [OAR 340-094-0110\(2\)\(a\)\(B\)](#)

11.7 Vegetation

Unless otherwise approved by DEQ, the permittee must establish and maintain a dense, healthy growth of native vegetation over the closed areas of the landfill consistent with the proposed final use.

Reference: [OAR 340-094-0130\(1\)\(b\)\(C\)](#)

11.8 Final cover maintenance

The permittee must maintain the final surface contours of the landfill cover such that:

- Erosion is minimized and ponding of water is prevented
- The integrity of the cover system is preserved in accordance with the approved plans

The permittee must reconstruct the cover system with approved materials and grade and seed all areas that have settled or where water ponds, and all areas where the cover soil has been damaged or thinned by cracking or erosion. Areas where vegetation has not been fully established must be fertilized, re-seeded and maintained. Any damage repair or other reconstruction of a geomembrane barrier component in the final cover system must be conducted in accordance with a construction quality assurance plan approved by DEQ.

11.9 Surface water

The permittee must divert surface water drainage around or away from the landfills at all times. The permittee must maintain surface water diversion ditches or structures free of obstructions and debris at all times.

11.10 Evaluation

Prior to Sept. 30 of each year, the permittee must conduct and submit to DEQ an evaluation of the facility's status, including:

- A discussion of the implementation of all post-closure plans and required groundwater/leachate/surface water projects
- A description of unanticipated occurrences and any changes to the post-closure plans

11.11 Slope stability

The permittee must maintain the stability of the landfill slopes and the overall structural integrity of the landfill.

11.12 Deed record

Within 30 days after the disposal site's final closure, the permittee must record a notation on the deed to the facility property as required by [40 CFR 258.60\(i\)](#) and [OAR 340-094-0130\(1\)\(a\)](#) and submit a copy of the notation on the deed to DEQ.

12 Financial Assurance

12.1 Financial assurance plan

Within 90 days after closure of any landfill cell or initiation of a new cell, the permittee must submit an updated financial assurance plan to the DEQ for review and approval and provide financial assurance for the costs of site closure, post-closure care, and potential corrective action. In addition, the permittee must place the plan in the facility file.

Reference: The plan must be prepared in accordance with [OAR 340-094-0140](#). Acceptable mechanisms are described in [OAR 340-094-0145](#).

12.2 Financial assurance required.

The permittee must comply with applicable financial assurance criteria requirements prescribed by OAR 340-094-0140. The permittee must maintain an up-to-date Financial Assurance Plan in the facility Operating Record, and provide financial assurance for landfill closure, post-closure care and, if required, corrective action. The financial assurance provided must:

- Be in the amount required by [OAR 340-094-0140](#)
- Be updated, annually, in accordance with [OAR 340-094-0140\(6\)\(e\)](#)
- Consist of a financial assurance mechanism complying with [OAR 340-094-0145](#)

12.3 Cost estimate

The cost estimate for post-closure care must be calculated based on the amount of years remaining in the 30-year post-closure care period for the landfill. The cost estimate must be updated annually.

Reference: The cost estimate must be prepared in accordance with DEQ guidance and [OAR 340-094-0140](#).

12.4 Recertification of financial assurance

The permittee must annually review and update their financial assurance in accordance with [OAR 340-094-0140\(6\)\(e\)](#).

By April 8 of each year, a notarized annual recertification of financial assurance must be submitted to DEQ demonstrating that this review has been completed. If a discount rate is used to estimate costs, the annual update must also include the certifications listed in [OAR 340-094-0140](#).

12.5 Use of financial assurance

The permittee must not use the financial assurance for any purpose other than to finance the permitted facility's approved closure, post-closure and corrective action activities or to guarantee that those activities will be completed.

12.6 Continuous nature

The permittee must continuously maintain financial assurance for the facility until DEQ no longer requires that the permittee or other person owning or controlling the site demonstrates financial responsibility for closure, post-closure care or corrective action.

ENVIRONMENTAL MONITORING

13 Environmental Monitoring Plan

13.1 Environmental monitoring plan submittal

Within 90 days of the permit issue date, the permittee must submit one copy of an updated environmental monitoring plan to DEQ for review and approval. The plan must be prepared and stamped by a geologist or a certified engineering geologist with current Oregon registration. Once approved, this plan will become an integral part of the permit.

13.2 Environmental monitoring plan contents

The updated environmental monitoring plan must establish an environmental monitoring program that will characterize potential facility impacts. The updated plan may consist of the previous approved environmental monitoring plan with any subsequent changes or additions. At a minimum, the updated environmental monitoring plan should address the issues and topics found in Section 10 of DEQ's Solid Waste Guidance dated Sept. 1, 1996.

13.3 Environmental monitoring plan revisions and updates

The permittee must revise the current environmental monitoring plan as necessary to reflect current and future environmental conditions, facility development and regulatory requirements. A geologist or certified engineering geologist, with current Oregon registration, must prepare and stamp the environmental monitoring plan revisions and submit to DEQ for review and approval.

13.4 Long-term monitoring plan

After DEQ approves any risk-based concentration limits, permit-specific concentration limits (PSCLs), concentration limit variances (CLVs), action limits or site-specific limits (SSLs), the permittee must update the environmental monitoring plan to reflect the long-term monitoring program and submit the updated plan for DEQ review and approval.

Note: Also see this permit’s requirements for establishing permit-specific concentration limits, action limits, or site-specific limits and [OAR 340-040-0030\(4\)](#) for procedures to establish concentration limit variances.

13.5 Modifications to monitoring points

The permittee must incorporate any new or replacement or removal of a monitoring point or device into the environmental monitoring plan and submit the updated environmental monitoring plan to DEQ for review and approval.

14 Environmental Sampling Requirements

14.1 Notification of sampling events

The permittee must notify DEQ, via letter or email, at least 10 working days prior to a scheduled sampling event.

14.2 Split sampling events

The permittee must split samples with DEQ at DEQ’s request, and schedule split-sampling events with DEQ’s laboratory at least 45 days ahead of time.

The permittee must conduct the following split sampling events with DEQ:

- Spring 2023 and every five years thereafter.

14.3 Monitoring schedule

The permittee must refer to the approved environmental monitoring plan for environmental monitoring procedures and schedules. Where applicable quarterly monitoring benchmarks are defined below:

If sampling in the...	Schedule the sampling event	
	On, or after...	But on, or before...
Winter	Jan. 1	Feb. 28
Spring	April 1	May 31
Summer	July 1	Aug. 31
Fall	Oct. 1	Nov. 30

14.4 Monitoring after environmental monitoring plan approval

The permittee must monitor the facility in accordance with:

- The approved environmental monitoring plan
- Any conditions of DEQ’s approval
- Any DEQ-approved amendments and updates

14.5 Changes in sampling or split sampling

The permittee must submit a written request and obtain DEQ’s written approval before changing the sampling program, including sampling frequency, parameters, or locations. Approved changes will become an integral part of the environmental monitoring plan.

DEQ reserves the right to add to or delete from the list of scheduled sampling events, sampling locations, and sampling parameters, and to conduct unscheduled sampling or split sampling events.

If the split-sampling schedule changes, DEQ will try to notify the permittee at least 30 days prior to the next scheduled event.

15 Establishing Permit-Specific Concentration Limits, Action Limits, Concentration Limit Variances and Site-Specific Limits

15.1 Gathering data

The permittee must monitor the designated background wells in accordance with the approved environmental monitoring plan. Background monitoring must continue until all necessary data sets have been collected and permit-specific concentration limits, action limits, and/or site-specific limits are proposed for each parameter of concern. The permittee then must demonstrate to DEQ's satisfaction that the selected background-data set is valid and unaffected by facility releases.

15.2 Statistical analysis

To establish compliance concentration limits (permit-specific concentration limits, action limits, and site-specific limits), the permittee must perform statistical evaluations of the monitoring results for each sampling event.

Once a statistically valid data set (at least nine acceptable data points) is established from the appropriate background well(s), the permittee may generate permit-specific concentration limits, action limits, or site-specific limits for each designated, long-term monitoring parameter.

The permittee must propose for DEQ's review and approval, permit-specific concentration limits, action limits, or site-specific limits pursuant to DEQ guidelines. The proposal must address all required parameters.

References: Use methods outlined in [40 CFR 258.53](#), [OAR 340-040](#) or DEQ's Internal Management Directive *Developing Concentration Limits at Permitted Solid Waste Facilities*, Feb. 2011; available at: <https://www.oregon.gov/deq/Filtered%20Library/IMD-DevConLimitsFacilities.pdf>

15.3 Changing permit-specific concentration limits, action limits, and/or site-specific limits

If the permittee demonstrates to DEQ's satisfaction that groundwater quality has changed since the permit-specific concentration limits, action limits, or site-specific limits were established, and if the change is unrelated to the permitted facility's influence, the permittee can propose to DEQ a revised level for the affected permit-specific concentration limit(s), action limit(s), or site-specific limit(s).

15.4 Establishing and changing concentration limit variances

The permittee should refer to DEQ's Groundwater Quality Protection Rules [\[OAR 340-040-0030\(4\)\]](#) for guidance in establishing and changing Concentration Limit Variances.

16 Environmental Monitoring Standards

16.1 Applicable regulatory standard

The permittee must not allow the release of any substance from the landfill into groundwater, surface water, or any other media that will result in a violation of any applicable federal or state air or water limit, drinking water rules, or regulations, beyond the solid waste boundary of the disposal site or an alternative boundary specified by DEQ.

Reference: [OAR 340-094-0080](#).

16.2 Compliance points

This permit establishes compliance points as outlined in Attachment 1.

16.3 Review of results

After each monitoring event, the permittee must review the analytical results according to the following table.

If monitoring results are...	Then...
<p>Above any permit-specific concentration limits, concentration limit variances or action limits, or more than two site-specific limits (if established), or if data indicate a significant change in water quality at any monitoring point</p> <p><u>Note:</u> Examples of significant changes:</p> <ul style="list-style-type: none"> • Detection of a volatile organic compound or other hazardous constituent that is absent in background water quality • Exceedance of a Table 1, 2 or 3 value listed in OAR 340-040 unless the background water quality is above these numerical limits • Exceedance of a safe drinking water standard or • Exceedance, by an order of magnitude or more, of any compound's background concentration 	<ol style="list-style-type: none"> 1. Notify DEQ in writing within 10 days of receipt of laboratory results 2. Perform resampling immediately and evaluate results as described below <p><u>Note:</u> Re-sampling is not required for a known condition, previously confirmed in writing to DEQ.</p>
<p>None of the above</p>	<p>Continue routine groundwater monitoring with next scheduled sampling event.</p>
<p><u>Note:</u> Established permit-specific concentration limits, concentration limit variances, action limits, and site-specific limits are listed in the approved environmental monitoring plan.</p>	

16.4 Resampling results

The permittee must review resampling results according to the following table.

If resampling results ...	then ...
<p>Confirm the exceedance of at least one permit-specific concentration limit or a table 1 or 2 value as listed in OAR 340-040 or concentration limit variance.</p>	<ol style="list-style-type: none"> 1. Notify DEQ in writing within 10 days of receipt of laboratory data, or within 60 days of the sample date (whichever occurs first) 2. Submit, within 90 days of the date of re-sampling, a preliminary assessment work plan for DEQ's review and approval. The work plan must specify how the investigation will meet OAR 340-040 objectives.

<p>Confirm the significant change in water quality results noted in the routine sampling event or confirm that at least one action limits or more than two site-specific limits were exceeded.</p>	<p>Notify DEQ in writing within 10 days of receipt of laboratory data, or within 60 days of the sample date (whichever occurs first)</p> <p>Submit an investigation plan within 30 days (unless another time period is authorized).</p>
<p>Do not confirm the routine sampling results.</p>	<ol style="list-style-type: none"> 1. Continue with routine monitoring 2. Discuss the results of the routine sampling and resampling in the next annual environmental monitoring report.

16.5 Secondary leachate collection system

If the permittee observes liquids in the secondary leachate collection system, the permittee must respond in accordance with the approved environmental monitoring plan procedures for sampling, analysis and reporting. If testing confirms landfill impacts in the leak detection or secondary leachate collection system, and that system is compromised as a compliance point, DEQ may require the permittee to install additional detection or compliance wells and conduct further investigations.

The permittee must design each secondary leachate collection system-equipped landfill cell or sub-unit to allow for discrete sampling of the secondary leachate collection system without mixing, co-mingling or compositing of samples with other leachate sources.

16.6 Methane limits

The methane concentration must not exceed:

- 25 percent of methane's lower explosive limit in onsite structures (excluding gas control structures or gas recovery system components)
- Methane's lower explosive limit at the facility property boundary

Note: Methane's lower explosive limit is equal to a concentration of five percent by volume in air.

16.7 Methane exceedance

If methane levels exceed the specified limits, the permittee must:

- Take immediate steps to protect human health and safety and notify DEQ within 24 hours
- Within seven days of detection, confirm the measures taken to protect human health and safety (unless DEQ approves an alternative schedule), and describe the methane test results and response measures in the facility operating record
- Within 60 days of the methane exceedance, develop and implement a remediation plan, incorporate the plan into the monitoring records, and submit a progress report to DEQ

16.8 Certified environmental laboratory data

To assure the best possible data quality, DEQ suggests that the permittee contract with environmental labs certified under the Oregon Environmental Laboratory Accredited Program (ORELAP) or the National Environmental Laboratory Accreditation Program (NELAP). The permittee should include a copy of the lab's certification with the annual environmental monitoring report data submittal, and with other documents if requested by DEQ. Use of an ORELAP or NELAP approved lab will facilitate DEQ's future review of Environmental Monitoring Plan or associated updates, the Annual Environmental Monitoring Reports (AEMRs), and any other required documents.

If the permittee chooses to use a non-ORELAP or non-NELAP laboratory, then that lab must provide their quality assurance and control plan to the DEQ laboratory for review and approval. Any analyses from this non-accredited laboratory will need to conform to the conditions of DEQ's approval.

17 Record Keeping and Reporting – Environmental Monitoring

17.1 Annual environmental monitoring report

Prior to April 30 of each year, the permittee must submit to DEQ one copy of an annual environmental monitoring report (AEMR) for the past year's monitoring period (Jan. 1 to Dec. 31). The report must conform to the approved environmental monitoring plan format and be prepared and stamped by a geologist or a Certified Engineering Geologist, with current Oregon registration.

As part of the annual environmental monitoring report, submit an annual leachate management report including:

- Monthly and annual volumes (in gallons) of leachate from the primary and secondary leachate collection systems and the leachate pond
- Monthly and annual volumes (in gallons) of leachate/gas condensate from the gas collection and control system
- Monthly and annual precipitation (in inches)
- A summary of key measures conducted each month related to maintenance and inspection of the leachate management system
- Monthly and annual volumes of leachate shipped to off-site treatment facility
- Minimum freeboard each month at the leachate pond
- Instances when leachate levels exceeded 12 inches above the primary liner.

17.2 Statement of compliance

The annual environmental monitoring report must include a brief (approximately one-page) cover letter that:

- Compares the analytical results with the relevant monitoring standards (risk-based concentrations, permit-specific concentration limits, concentration limit variances, action limits, or site-specific limits)
- Documents any exceedances of or federal or state standards for relevant media
- Documents any significant change in water quality, land quality, air quality or methane levels in monitored media

17.3 Annual Environmental Monitoring Report contents

The annual environmental monitoring report must reflect the facility's current conditions and present accurate data that corresponds with the original field and lab data. In addition to the leachate management items mentioned above, the annual environmental monitoring report must include the following elements:

- A review of the past year's significant events at the site
- An evaluation of the monitoring network performance and a summary of any recommended changes
- A summary of all the past year's sampling data for, but not limited to groundwater, surface water, leachate, landfill gas and soil
- A summary of any data quality problems (e.g., quality assurance/quality control failures, flagged data, switched samples, etc.)
- Piezometric maps for each sampling event and each groundwater bearing zone monitored
- Time history plots for field specific conductivity, dissolved oxygen, and all group 1b and group 2a and 2b parameters. (Note: Parameter groups are identified here: <https://www.oregon.gov/deq/Filtered%20Library/IMD-DevConLimitsFacilities.pdf>.)
- An anion-cation balance for each sample event at all monitoring points for which there is adequate data. Include an additional explanation for any balance outside of $\pm 10\%$ in error
- A copy of all the past year's field and lab data, including all chain of custody forms

- The historical monitoring database for the site shall be included with each annual environmental monitoring report

Reference: The report format should reflect DEQ's guidance: *Solid Waste Landfill Guidance*, September 1996.

17.4 Split sampling submittal

Within 90 days of any split sampling event, the permittee must submit the following information to DEQ's laboratory:

- A copy of all information pertinent to the sample collection handling, transport and storage, including field notes
- Copies of all laboratory analytical reports
- Copies of all laboratory QA/QC reports
- A copy of the lab certification (Oregon Environmental Laboratory Accredited Program (ORELAP) or the National Environmental Laboratory Accreditation Program, see Certified Environmental Lab Data condition 16.8 of this permit)
- Any other data or reports requested by DEQ

17.5 DEQ response to split samples

If the permittee submits all required split sampling data and requests DEQ's results, DEQ's lab may provide, to the permittee, copies of the following information:

- DEQ's analysis of the split sample
- The quality assurance/quality control report
- The analytical report
- The field data sheets

18 Environmental Monitoring Network

18.1 Monitoring device installation

The permittee must install additional groundwater monitoring wells, landfill gas monitoring probes or other monitoring devices required by DEQ no later than 90 days after permit issuance or DEQ notification. Well locations and construction methods must comply with DEQ's requirements.

18.2 Monitoring stations and equipment

To ensure that every sample is representative of the site's environmental conditions, the permittee must protect, operate, and maintain all environmental monitoring stations and equipment in accordance with DEQ's requirements.

18.3 Access to monitoring stations and equipment

To facilitate sample collection and/or inspection and maintenance activities, the permittee must maintain reasonable all-weather access to all monitoring stations and associated equipment.

18.4 Reporting equipment damage

Within 14 days of discovering any damaged groundwater and perimeter probe monitoring equipment, the permittee must submit to DEQ a report describing the damage, the proposed repair or replacement measures, and the schedule to complete this work.

Example: A well's impaired function or altered position/location.

18.5 Monitoring well construction

The permittee must complete any monitoring well or gas monitoring probe abandonment (decommissioning), replacement, repair, or installation in a manner that complies with the Water Resources Rules, [OAR 690-240](#).

18.6 Reporting well construction and repairs

The permittee must document all monitoring well or gas probe repair and construction activities, including driller’s logs, well location information, and construction information in a report prepared and stamped by a geologist or certified engineering geologist, with current Oregon registration. The permittee must submit the report to DEQ within 30 days of the action and include this documentation in the next annual environmental monitoring report.

18.7 Well decommissioning or replacement

The permittee must submit a written recommendation to DEQ prior to decommissioning or replacing any well or gas monitoring probe in the monitoring network. After receiving DEQ’s approval, the permittee must decommission or replace any well or gas probe that meets the following criteria:

- The well or gas probe was installed in a borehole that hydraulically intersects two saturated strata
- The permittee lacks supporting documentation demonstrating that the well or gas probe was properly installed and constructed
- The well or gas probe was damaged beyond repair or destroyed
- Other reasons as determined by either the permittee or DEQ

COMPLIANCE SCHEDULE

19 Summary of Due Dates

19.1 Summary

The permittee must comply with the event-driven schedule shown below. This compliance schedule does not apply to many of the routine reporting requirements specified in other sections of the permit.

Due Date	Activity	See subsection...
Within 120 days of permit issuance	Submit updated operations plan	7.1 Operations plan submittal
Within 60 days of operations plan approval	Update the operations and maintenance manual	7.3 Operations and maintenance manual
Within 180 days of permit issuance	Review and submit site development plan update	10.1 Site development plan
Within 120 days of permit issuance	Review and submit final engineered closure and post-closure care plan	11.1 Final engineered site closure plan development
Prior to 180 days of final closure of any portion of the landfill	Submit design plans	11.2 Design Plans
8 years after date of closure permit issuance	Completed landfill closure	11.5 Closure Schedule
Within 90 days of permit issuance	If not already submitted for the year, submit financial assurance plan and mechanism	12.1 Financial assurance plan

Due Date	Activity	See subsection...
Within 90 days of permit issuance	Submit updated environmental monitoring plan	13.1 Environmental monitoring plan submittal
EMERGENT:		
Within 24 hours of discovery of hazardous or suspected hazardous waste	Notify DEQ, initiate procedures to identify and remove the hazardous waste	6.1 Hazardous waste disposal
Within 90 days of discovery of hazardous or suspected hazardous waste	Remove hazardous waste	6.1 Hazardous waste disposal
Immediately upon identification of permit violation	Take corrective action for permit condition violation and notify DEQ	8.1 Non-compliance reporting
Within 24 hours of discovery of prohibited waste	Notify DEQ of prohibited waste and take digital photos. For non-hazardous prohibited waste, begin to isolate or remove.	9.1 Discovery of prohibited waste
Within 60 days of discovery of non-hazardous prohibited waste	Transport non-hazardous prohibited waste to authorized facility	9.1 Discovery of prohibited waste
Immediately	Oregon Emergency Response System notification of reportable spill	9.2 Spills notification
Within 60 days of discovery of surface water structural damage/malfunction	Notify DEQ and complete repairs	9.7 Surface water structures
Within 24 hours of when the liquid depth in a leachate collection and removal system exceeds 12 inches on the primary liner	Notify DEQ	9.10 Leachate management systems
Discovery of fire	Immediately and thoroughly extinguish fire. Notify DEQ within 24 hours of discovery.	9.17 Fire protection and reporting
Within 60 days of discovery of landfill gas equipment damage/compromise	Replace or repair equipment, submit written inspection report to DEQ	9.20 Landfill gas control system operation and maintenance

Due Date	Activity	See subsection...
Within 10 days of receipt of lab results with exceedance(s)	Notify DEQ of monitoring exceedance(s)	16.3 Review of results 16.4 Resampling results
Within 90 days of resampling date	Submit preliminary assessment work plan to DEQ	16.4 Resampling results
Within 30 days of confirmed significant change in water quality results	Submit assessment plan to DEQ	16.4 Resampling results
Immediately upon methane exceedance identification	Take steps to protect human health and safety, notify DEQ within 24 hours	16.7 Methane exceedance
Within seven days of methane exceedance	Confirm protective measures, describe results and measures in facility operating record	16.7 Methane exceedance
Within 60 days of methane exceedance	Develop and implement remediation plan, submit progress report to DEQ	16.7 Methane exceedance
Within 14 days of discovery of monitoring equipment or station damage	Submit report to DEQ	18.4 Reporting equipment damage
RECURRENT:		
Last day of month following end of calendar quarter	Submit solid waste disposal report/fee calculation form to DEQ	8.5.5 Procedure
Every quarter if applicable	Submit amount of material recovered for recycling/other beneficial purposes to DEQ waste shed representative	8.5.4 Procedure
By April 8 of each year	Submit annual financial assurance recertification	12.4 Recertification of financial assurance
By April 30 of each year	Submit an annual environmental monitoring report	17.1, 17.3 Annual environmental monitoring report

Due Date	Activity	See subsection...
By April 30 of each year	Submit with the annual environmental monitoring report an annual leachate treatment report including annual leachate from the primary liners sumps and secondary liner flows and monthly inventory of leachate pond, local precipitation, annual and monthly, daily and reporting on leachate sump performance and inspection and cleaning the leachate collection piping system along with annual volume shipped to off-site treatment and disposal and evaporation estimates along with inventory as of Jan. 1 and leachate pond storage capacity volume availability and reporting of more than 12 inches of leachate above the sump area head.	17.1 Annual environmental monitoring report contents
SAMPLING:		
At least 10 working days prior to scheduled sampling event	Notify DEQ	14.1 Notification of sampling events
At least 45 days prior to split sampling event	Schedule split sampling event with DEQ laboratory	14.2 Split sampling events
Within 90 days of split sampling event	Submit required data/documents to DEQ laboratory	17.4 Split sampling submittal
EVENTS:		
At least six months before any new disposal unit construction	Submit design plans	10.2 Design plans
Within 90 days after completion of any major construction	Submit construction certification report	10.6 Construction report submittal
At least six months prior to closing any portion of the landfill	Submit design plans	11.2 Closure plan approval
Within 30 days of any well, gas probe, or inclinometer construction or repair	Submit construction/repair report	18.6 Reporting monitoring devise construction and repairs

Due Date	Activity	See subsection...
SELDOM:		
At least 10 days in advance of ownership or operator change	Notify DEQ	4.6 Changes in ownership or address
Within 30 days of final site closure	Modify property deed record	11.12 Deed record

ATTACHMENT

20 Attachment 1 Permit-Specific Concentration Limits, Action Limits, and Site-Specific Limits

Permit-specific concentration limits, concentration limit variances, action limits, and site-specific limits for Riverbend Landfill were proposed on Dec. 29, 2021, as described in Section 15 of this permit. These values are appropriate to identify groundwater impacts from the facility unless or until new values are determined as described in Section 15 of this permit, the EMP, [OAR 340-040](#), and associated DEQ guidance.

Monitoring Well	PSCL	AL	SSLs							Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
	Vinyl Chloride ^a (mg/L)	VOCs ^b	Bicarbonate Alkalinity (mg/L)	Chloride (mg/L)	Magnesium Dissolved (mg/L)	Potassium Dissolved (mg/L)	Sodium Dissolved (mg/L)	Sulfate (mg/L)			
MW-12A	0.002	(see Note 1)	86.3	64.3	12.4	0.88	27.2	---	248	2.8	
MW-12B	0.002	(see Note 1)	295	---	37.6	0.92	67.7	6.8	970	1.9	
MW-14A	0.002	(see Note 1)	155	31.4	17.4	0.50	15.3	---	269	2.3	
MW-14B	0.002	(see Note 1)	237	---	16.9	0.85	45.0	12.2	340	2.5	
MW-15A	0.002	(see Note 1)	109	16.1	12.2	1.00	29.6	---	400	2.2	
MW-15B	0.002	(see Note 1)	372	---	36.0	0.68	42.0	10.9	538	2.1	
MW-16A	0.002	(see Note 1)	459	14.6	44.9	0.88	58.6	---	503	4.5	
MW-16B	0.002	(see Note 1)	396	---	43.7	0.93	81.1	7.6	770	2.8	
MW-21A	0.002	(see Note 1)	203	16.0	19.0	0.91	60.9	---	486	2.4	
MW-21B	0.002	(see Note 1)	314	---	25.6	1.10	48.1	21.2	424	5.4	

NOTE:
 mg/L = milligrams per liter; --- = not applicable; VOCs = volatile organic compounds.
 Note 1: Detection of a VOC above the laboratory derived practical quantitation limit (PQL).
 PSCL: Permit-Specific Concentration Limit; exceedance of a single PSCL not previously reported and explained to the DEQ will trigger verification resampling. Verification of a PSCL exceedance would require follow-up actions, consistent with Section 11.5.3 of this Environmental Monitoring Plan (EMP).
 AL: Action Limit; exceedance of a single AL not previously reported and explained to the DEQ will trigger verification resampling. Verification of an AL exceedance would require follow-up actions, consistent with Section 11.5.3 of this EMP.
 SSL: Site-Specific Limit (statistically-derived); exceedance of three or more SSLs in a single compliance monitoring well during a monitoring event not previously reported and explained to the DEQ will trigger verification resampling. Verification of three or more SSL exceedances would require follow-up actions consistent with Section 11.5.3 of this EMP.
^a PSCL for vinyl chloride in all compliance wells established at the numerical groundwater quality reference level (NGWQRL) of 0.002 mg/L (specified in Table 2 of the Oregon Administrative Rule [OAR] 340-40).
^b VOCs by U.S. Environmental Protection Agency (EPA) Method 8260B and 8011 except for vinyl chloride which was defined as a PSCL.