
EXHIBIT 13
NOVEMBER 19, 2021 MEMORANDUM FROM IAN MACNAB REGARDING ODOR, METHANE AND
HYDROGEN SULFIDE



Date: November 19, 2021

To: Benton County Planning Department

From: Ian Macnab, Environmental Manager, Coffin Butte Landfill

Re: Coffin Butte Landfill Conditional Use Permit Application LU-21-047 – Odor, Methane and Hydrogen Sulfide

The purpose of this memorandum is to provide additional information on how odor, methane and hydrogen sulfide are controlled at Coffin Butte Landfill. These three items are highly interconnected and to a large degree act as one. They are all different constituents of landfill gas and are primarily regulated by the site's Title V air permit. See attachment A for a copy of the permit.

Beginning at Table 1, the permit lists the emissions units that are regulated at the landfill. Nuisance conditions, including odors or offsite dust, are regulated on page 5 of the permit.

Table 3 conditions 13.4 – 13.12 and 13.24 are all requirements to ensure landfill gas (methane) is collected and odors (hydrogen sulfide) reduced. It includes requirements for:

- **Recordkeeping**
- **Installing a gas collection system sufficient for calculated gas flow rates**
- **Operation of the collection system**
- **Operation of the flare to destroy gas not utilized by the power plant**

For each permit condition the table also references the appropriate federal regulations (40 CFR 60.75X) the landfill is subject to.

Beginning on the bottom of page 15 and continuing through page 19 the permit describes the Plant Site Emission Limits (PSELs). PSELs regulate how much can be emitted, how emissions are calculated and how emissions are monitored. Hydrogen sulfide is included with other sulfur compounds in the SO₂ category.

Finally, starting on page 20, the permit lists reporting requirements to DEQ and EPA. The expansion area would have all the same air permit requirements and limitations.

Additionally, regarding hydrogen sulfide, we have laboratory data from 2019 showing very low to non-detect levels of this compound in Coffin Butte's landfill gas. See attachment B for the laboratory report. The three samples taken directly from our gas collection system infrastructure measured:

- **Sample 1 – 8.6 ppmv**
- **Sample 2 – non-detect**
- **Sample 3 – non-detect**

As reference, EPA AP-42 Compilation of Air Pollutant Emission Factors, which is used for calculating landfill hydrogen sulfide emissions for Title V air permits uses an assumed value of 36 ppmv. Our emissions were well below this assumed value. Additionally, these samples were taken directly from the landfill gas pipeline. Actual emissions to the air from the surface of the landfill will be much lower as they would be highly diluted by ambient air.

As far as reduction in odors from the use of cover, that is addressed in our DEQ solid waste permit. See attachment C. The permit references that the permit is in accordance with ORS 459 and OAR Chapter 340.

Section 9.5 address daily cover and states:

"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 DEQ-approved, alternative daily cover."

Section 9.6 addresses interim cover section and states:

"As specified in the DEQ-approved design and operation plans, the permittee must place and maintain interim cover over fill areas that will not receive additional waste for an extended period of time [i.e., greater than 120 days] and actively revegetate, in a DEQ-approved manner, any interim cover that will remain exposed for more than two years."

Coffin Butte is subject to regular DEQ inspections of the site and our compliance with permit conditions 9.5 and 9.6 are shown by our inspection

results. We have not been issued a violation for failure to properly cover with daily or intermediate cover.

Landfills are highly regulated by state and federal agencies. We submit reports on a monthly, quarterly, semi-annually, and annual basis depending on the permit requirements. Copies of these reports are provided to Benton County on a quarterly basis for their review.

Attachments:

A – Coffin Butte DEQ Title V Permit

B – 2019 Hydrogen Sulfide Test Report

C – Coffin Butte DEQ Solid Waste Permit

**OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
OREGON TITLE V OPERATING PERMIT**

Western Region-Salem Office
750 Front Street NE, Suite 120
Salem, OR 97301-1039
Telephone (503) 378-8240

Issued in accordance with the provisions of ORS 468A.040
and based on the land use compatibility findings included in the permit record.

ISSUED TO:

Valley Landfills, Inc.
28972 Coffin Butte Road
Corvallis, OR 97330

INFORMATION RELIED UPON:

Application Number: 23594
Received: 01/30/09

PLANT SITE LOCATION:

Coffin Butte Landfill
Highway 99 & Coffin Butte Road
Corvallis, OR 97330

LAND USE COMPATIBILITY STATEMENT:

Issued by: Benton County
Dated: 03/06/97

ISSUED BY THE DEPARTEMENT OF ENVIRONMENTAL QUALITY



Claudia Davis, Western Region Air Quality Manager

OCT 30 2009

Date

Nature of Business: Municipal Solid Waste Landfill

SIC: 4953

RESPONSIBLE OFFICIAL

Title: General Manager
Alternate: Vice President

FACILITY CONTACT PERSON

Name: Brian May
Title: General Manager
Phone: (541) 745-2018

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LIST OF ABBREVIATIONS THAT MAY BE USED IN THIS PERMIT

ACDP	Air Contaminant Discharge Permit	NA	Not applicable
Act	Federal Clean Air Act	NESHAP	National Emission Standard for
ASTM	American Society of Testing and		Hazardous Air Pollutants
	Materials	NMOC	Nonmethane organic compounds
Btu	British thermal unit	NO _x	Nitrogen oxides
CFR	Code of Federal Regulations	NSPS	New Source Performance
CO	Carbon monoxide		Standards
CPMS	Continuous parameter monitoring	O ₂	Oxygen
	system	OAR	Oregon Administrative Rules
DEQ	Department of Environmental	ODEQ	Oregon Department of
	Quality		Environmental Quality
dscf	Dry standard cubic feet	ORS	Oregon Revised Statutes
EF	Emission factor	O&M	Operation and maintenance
EPA	US Environmental Protection	Pb	Lead
	Agency	PCD	Pollution control device
EU	Emissions unit	PM	Particulate matter
FCAA	Federal Clean Air Act	PM ₁₀	Particulate matter less than 10
FSA	Fuel sampling and analysis		microns in size
gr/dscf	Grain per dry standard cubic feet (1	ppm	Parts per million
	pound = 7000 grains)	PSEL	Plant Site Emission Limit
HAP	Hazardous Air Pollutant as defined	SIP	State Implementation Plan
	by OAR 340-244-0040	SO ₂	Sulfur dioxide
HCFC	Halogenated Chloro-Fluoro-	SSM	Startup, shutdown, malfunction
	Carbons	ST	Source test
H ₂ S	Hydrogen sulfide	VE	Visible emissions
ID	Identification number or label	VMT	Vehicle miles traveled
I&M	Inspection and maintenance	VOC	Volatile organic compounds
LFG	Landfill gas		

Modified EPA Method 9: As used in this permit "Modified EPA Method 9" is defined as follows:

Opacity must be measured in accordance with EPA Method 9. For all standards, the minimum observation period must be six minutes, though longer periods may be required by a specific rule or permit condition. Aggregate times (e.g., 3 minutes in any one hour) consist of the total duration of all readings during the observation period that are equal to or greater than the opacity percentage in the standard, whether or not the readings are consecutive. Each EPA Method 9 reading represents 15 seconds of time. [See also the definition of "Opacity" in OAR 340-208-0010]

PERMITTED ACTIVITIES

1. Until such time as this permit expires or is modified or revoked, the permittee is allowed to discharge air contaminants from those processes and activities directly related to or associated with air contaminant source(s) in accordance with the requirements, limitations, and conditions of this permit. [OAR 340-218-0010 and 340-218-0120(2)]
2. All conditions in this permit are federally enforceable except as specified below:
 - 2.a. Conditions 6 through 12, G5, and G9 (OAR 340-248-0005 through 0180) are only enforceable by the state. [OAR 340-218-0060]

EMISSIONS UNIT (EU) AND POLLUTION CONTROL DEVICE (PCD) IDENTIFICATION

3. The emissions units regulated by this permit are the following [OAR 340-218-0040(3)]:

Table 1. EU and PCD IDENTIFICATION

Emission Unit Description	EU ID	Pollution Control Device Description	PCD ID
Landfill Gas Control System	Control	Open Flare	FL
Fugitive Landfill Gas, Cell 0	F-LFG1	None	NA
Fugitive Landfill Gas, Cells 1 to 4	F-LFG2	Landfill gas collection and extraction system	LFGCES-1
Vehicle traffic on paved roads	PIR	Water application	NA
Vehicle traffic on unpaved roads	UPR	Chemical suppressant and water application	NA
Tipper	TIP	None	NA
Petroleum contaminated soils	PCS	None	NA
Aggregate Insignificant activities:	AI		
Cell development, operation, and closing		None	NA
Wastewater treatment system operation		Baghouse	DC-1
Leachate collection and wastewater treatment		None	NA
Portable light plant		None	NA
Trash pumps		None	NA
Generator		None	NA

EMISSION LIMITS AND STANDARDS, TESTING, MONITORING, AND RECORDKEEPING REQUIREMENTS

The following tables and conditions contain the applicable requirements along with the testing, monitoring, and recordkeeping requirements for the emissions units to which those requirements apply.

Facility-wide Requirements**Table 2. Facility wide emission limits and standards**

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Averaging Time	Testing Condition	Monitoring Condition
340-208-0210(2)	4	Fugitive emissions	Minimize	NA	NA	5
340-208-0300	6	Air contaminants	No nuisance	NA	NA	8
340-208-0450	7	PM >250 μ	No fallout	NA	NA	8
340-248-0280(10)	9	Asbestos disposal	Handling procedures	Recordkeeping	NA	10
340-248-0280(11)	11	Asbestos cover	Maintain cover	Recordkeeping	NA	12

Fugitive Emissions

4. Applicable Requirement: The permittee must not allow or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished; or any equipment to be operated, without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions must include, but not be limited to the following: [OAR 340-208-0210(2)]
 - 4.a. use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
 - 4.b. application of asphalt, oil, water, or other suitable chemicals on unpaved roads, materials stockpiles, and other surfaces which can create airborne dusts;
 - 4.c. full or partial enclosure of materials stockpiles in cases where application of oil, water, or chemicals are not sufficient to prevent particulate matter from becoming airborne;
 - 4.d. installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
 - 4.e. adequate containment during sandblasting or other similar operations; and,
 - 4.f. covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne.
5. Monitoring Requirement: At least once each week for a minimum period of 30 minutes, the permittee must visually survey the plant for any sources of excess fugitive emissions using EPA Method 22. For the purpose of this survey, excess fugitive emissions are considered to be any visible emissions generated by fugitive sources that leave the plant site boundaries. The person conducting the observation does not have to be EPA Method 9 certified. However, the individual should be familiar with the procedures of EPA Method 9, including using the proper location to observe visible emissions. If sources of visible emissions are identified, the permittee must: [OAR 340-218-0050(3)(a)]
 - 5.a. immediately take corrective action to minimize the fugitive emissions, including but not limited to those actions identified in Condition 4; or,
 - 5.b. conduct a Modified EPA Method 9 test within 24 hours;
 - 5.c. Recordkeeping: The permittee must maintain records of the fugitive emissions surveys, corrective actions (if necessary), and/or the results of any modified EPA Method 9 tests.

Nuisance Conditions

6. Applicable Requirement: The permittee must not cause or allow air contaminants from any source to cause a nuisance. Nuisance conditions will be verified by Department personnel. [OAR 340-208-0300] This condition is enforceable only by the State.
7. Applicable Requirement: The permittee must not cause or permit the emission of any particulate matter larger than 250 microns in size at sufficient duration or quantity, as to create an observable deposition upon the real property of another person. The Department will verify that the deposition exists and will notify the permittee that the deposition must be controlled. [OAR 340-208-0450] This condition is enforceable only by the State.
8. Monitoring Requirement: The permittee must maintain a log of each air quality complaint received by the permittee during the operation of the facility and must provide the Western Region-Salem Office of the Department with written notification within 5 days of all nuisance complaints regarding fugitive dust, odors, or particulate deposition received. Documentation shall include date of contact, time of observed nuisance condition, description of nuisance condition, location of receptor, status of plant operation during the observed period, and time of response to complainant. A plant representative must immediately investigate the condition following the receipt of the nuisance complaint and a plant representative must provide a response to the complainant within 24 hours, if possible. This condition is only enforceable by the State. [OAR 340-218-0050(3)(a)]

Asbestos Disposal and Cover

9. Applicable Requirement: The permittee must meet the asbestos-containing material handling and disposal requirements and procedures specified in OAR 340-248-0280(10) for active waste disposal sites. This condition is only enforceable by the state.
10. Monitoring Requirement: The permittee must monitor the asbestos-containing material handling and disposal procedures, provide notifications, and record the information required as specified in OAR 340-248-0280(10) for active waste disposal sites. This condition is only enforceable by the State.
11. Applicable Requirement: The permittee must meet the asbestos-containing material disposal and cover standards specified in OAR 340-248-0280(11) for inactive waste disposal sites. This condition is only enforceable by the State.
12. Monitoring Requirement: The permittee must monitor the asbestos-containing disposal and cover requirements and provide notifications as specified in OAR 340-248-0280(11) for inactive waste disposal sites. This condition is only enforceable by the State.

Facility Wide Requirements

13. The following requirements apply facility wide, including, but not limited to, the solid municipal waste landfill, unless an alternate requirement is specifically stated for a particular emissions unit.

Table 3. Summary of NSPS and NESHAP requirements:

Condition	Applicable Requirement	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting Requirement
13.1	40 CFR 60.7(a)(4); 40 CFR 60.7(b); 40 CFR 60.7(f)	Notification and recordkeeping.	Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility. Maintain a file of all measurements and performance testing measurements and all other information required by this part recorded in a permanent form suitable for inspection.	Permittee shall furnish prior written or e-mail notification of any physical or operational change which may increase the emission rate of any air pollutant (such as taking operating gas collection wells off line) to which a standard applies to: ODEQ, Western Region – Salem Office 750 Front Street NE, Suite 120 Salem, OR 97301-1039 [40 CFR 60.4(a)]
13.2	40 CFR 60.11(d)	Maintain and operate any affected emission unit with good air pollution control practice for minimizing emissions.	None specified.	No additional monitoring required.
13.3	40 CFR 60.12	Circumvention.	None specified.	No additional monitoring required.
13.4	40 CFR 60.752(b)(2)(i); 40 CFR 60.753(a); 40 CFR 60.755(b) (Landfill NSPS Subpart WWW)	Install, within 60 days, and operate active collection system wells that collect gas from each area, cell, or group of cells in the landfill in which solid waste has been placed for: (1) 5 years or more if active, OR (2) 2 years or more if closed or at final grade.	None specified.	No additional monitoring required.

Condition	Applicable Requirement	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting Requirement
13.5	40 CFR 60.752(b)(2)(i)(A) (Landfill NSPS Subpart WWW)	Install an active collection system that is designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment.	To calculate maximum expected gas flow rate: $Q_m = \sum_{i=1}^n 2kL_o M_i (e^{-kt_i})$ where, Q_m = maximum expected gas generation flow rate, m ³ /yr k = methane generation rate constant, year ⁻¹ L_o = methane generation potential, m ³ /Mg solid waste M_i = mass of solid waste in the i^{th} section, Mg t_i = age of the i^{th} section, years [40 CFR 60.755(a)(1)(ii)]	Submit monthly report to: ODEQ, Western Region – Salem Office 750 Front Street NE, Suite 120 Salem, OR 97301-1039 Monthly report shall include the date of installation and the location of each well or collection system expansion added. [40 CFR 60.757(f)]
13.6	40 CFR 60.752(b); 40 CFR 60.754(a); 40 CFR 60.757(b); 40 CFR 60.4(a) (Landfill NSPS Subpart WWW)	Calculate the NMOC emission rate for the landfill. If the calculated NMOC emission rate is less than 50 Mg/yr, the permittee shall recalculate the NMOC emission rate and submit emission reports to the Department until such time as the calculated NMOC emission rate is ≥ 50 Mg/yr, or the landfill is closed.	Calculate the NMOC emission rate: $M_{NMOC} = \sum_{i=1}^n 2kL_o M_i (e^{-kt_i}) (C_{NMOC}) (3.6 \times 10^{-9})$ where, M_{NMOC} = Total NMOC emission rate from the landfill (Mg/yr) k = methane generation rate constant = 0.05 yr ⁻¹ or as determined using Tier 3 per 40 CFR 60.754 (a)(4) L_o = methane generation potential = 170 m ³ /Mg solid waste M_i = mass of solid waste in the i^{th} section (Mg) t_i = age of the i^{th} section (yr) C_{NMOC} = 4000 ppm per 40 CFR 60.754(a)(3) 3.6×10^{-9} = conversion factor The mass of the nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i if properly documented. [40 CFR 60.754(a)(1)(i)]	The permittee shall submit an NMOC emission rate report to: ODEQ, Western Region – Salem Office 750 Front Street NE, Suite 120 Salem, OR 97301-1039 (1) annually, OR (2) if the estimated NMOC emission rate as reported in the annual report is less than 50 Mg/yr in each of the next 5 consecutive years, the permittee may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. If option (2) is chosen, this estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to ODEQ at the address given above. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate. The NMOC emission rate report shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions. ODEQ may request such additional information as may be necessary to verify the reported NMOC emission rate. [40 CFR 60.4(a); 40 CFR 60.757(b)]
13.7	40 CFR 60.752(b)(2)(i)(A); 40 CFR 60.759(a); 40 CFR 60.759(b) (Landfill NSPS Subpart WWW)	Install an active collection system that is designed to collect gas at a sufficient extraction rate, sited at a sufficient density throughout all gas producing areas, and designed to minimize off-site migration of subsurface gas.	None specified.	Keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector. Keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors. [40 CFR 60.758(d)]

Condition	Applicable Requirement	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting Requirement
13.8	40 CFR 60.753(b) (Landfill NSPS Subpart WWW)	<p>Operate the LFG control system with negative pressure at each well-head except under the following conditions: (1) fire or increased well temperature; OR, (2) use of a geomembrane or synthetic cover; OR, (3) a decommissioned well.</p> <p>Passive gas collection wells do not have to meet this condition when approved in writing by the Department.</p> <p>Gas collection wells operating under an Alternative Operating and Monitoring Plan approved in writing by the Department do not have to meet this condition.</p>	None specified.	<p>Measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days. If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. [40 CFR 60.755(a)(3)]</p> <p>The annual report shall include record of instances when positive pressure occurred. [40 CFR 60.753(b)(1)]</p>
13.9	40 CFR 60.753(c) (Landfill NSPS Subpart WWW)	<p>Operate each interior wellhead in the LFG collection system with: (1) LFG temperature <55°C; AND, (2) either: (a) N₂ < 20%; OR, (b) O₂ < 5%.</p> <p>Passive gas collection wells do not have to meet this condition when approved in writing by the Department.</p> <p>Gas collection wells receiving a variance in writing from the Department concerning temperature do not have to meet this condition.</p> <p>Gas collection wells operating under an Alternative Operating and Monitoring Plan approved in writing by the Department do not have to meet this condition.</p>	<p>N₂ by RM 3C; O₂ by RM 3A, except that: (1) regulatory limit is between 20% and 50% of the span; AND, (2) data recorder not required; AND, (3) only 2 calibration gases are required; AND, (4) calibration error check not required; AND, (5) allowable sample bias, zero drift, and calibration draft are ±10%.</p> <p>Install a sampling port and a thermometer or other temperature measuring device at each wellhead. [40 CFR 60.756(a)]</p>	<p>Measure the N₂ or O₂ concentration in the LFG, and the temperature of the LFG at each individual well, on a monthly basis. If a well exceeds one of the operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. [40 CFR 60.756(a); 40 CFR 60.755(a)(5)]</p>

Condition	Applicable Requirement	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting Requirement
13.10	40 CFR 60.753(d) (Landfill NSPS Subpart WWW)	Operate LFG collection system so that the methane concentration is <500 ppm above background at the surface of the landfill.	<p>Conduct surface testing around the perimeter of the collection area along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of LFG, such as distressed vegetation and cracks or seeps in the cover per the surface monitoring design plan and topographical map of the monitoring route.</p> <p>Instrument specifications and procedures for surface monitoring devices: (1) portable analyzer shall meet the instrument specifications provided in section 3 of RM 21, except that "methane" shall replace all references to VOC; AND, (2) calibration gas shall be methane, diluted to a nominal concentration of 500 ppm in air; AND, (3) instrument evaluation procedures of section 4.4 of RM 21 shall be used; AND, (4) calibration procedures provided in section 4.2 of RM 21 shall be followed immediately before commencing a surface monitoring survey. [40 CFR 60.755(d)]</p> <p>Conduct surface monitoring with a portable monitor meeting the specifications provided. The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. Surface emission monitoring shall be performed in accordance with section 4.3.1 of RM 21, except that the probe inlet shall be placed within 5 to 10 cm of the ground. Monitoring shall be performed during typical meteorological conditions. [40 CFR 60.755(c)]</p>	<p>Monitor for cover integrity on a monthly basis. Implement cover repairs as necessary. [40 CFR 60.755(c)(5)]</p> <p>Conduct surface monitoring on a quarterly basis. Any reading of ≥ 500 ppm above background at any location shall be recorded as a monitored exceedance and actions below taken. As long as the specified actions are taken, the exceedance is not a violation of these operational requirements. The location of each monitored exceedance shall be marked and the location recorded. Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance. Any location that initially showed an exceedance but has a methane concentration <500 ppm methane above background at the 10-day re-monitoring, shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration <500 ppm above background, no further monitoring of that location is required until the next quarterly monitoring period. If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance, OR an alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval. No further monitoring of that location is required until remedy has been taken. [40 CFR 60.755(c)]</p> <p>Submit monthly report to:</p> <p style="padding-left: 40px;">ODEQ, Western Region – Salem Office 750 Front Street NE, Suite 120 Salem, OR 97301-1039</p> <p>Monthly report shall include the location of each exceedance of the 500 ppm methane concentration and the concentration recorded at each location for which an exceedance was recorded in the previous month. [40 CFR 60.757(f)]</p>
13.11	40 CFR 60.753(e) (Landfill NSPS Subpart WWW)	Operate the collection system such that all collected gases are vented to the control system. In the event the LFG collection and control is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour.	None specified.	Records shall be kept of all periods when the LFG collection and control system is inoperable, the gas mover system is shut down, or the valves in the collection and control system are closed.

Condition	Applicable Requirement	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting Requirement
13.12	40 CFR 60.753(f) (Landfill NSPS Subpart WWW)	Operate the LFG control and treatment system at all times when the collected gas is routed to the system.	None specified.	No additional monitoring required.
13.13	40 CFR 60.755(e) (Landfill NSPS Subpart WWW)	The provisions of the NSPS apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems.	None specified.	No additional monitoring required.
13.14	40 CFR 60.757(a)(3); 40 CFR 60.4(a) (Landfill NSPS Subpart WWW)	An amended design capacity report shall be submitted to the Department providing notification of any increase in the design capacity of the landfill.	None specified.	If triggered, the permittee shall submit an amended design capacity report to: ODEQ, Western Region – Salem Office 750 Front Street NE, Suite 120 Salem, OR 97301-1039 [40 CFR 60.4(a)]
13.15	40 CFR 60.758(a) (Landfill NSPS Subpart WWW)	Keep, for at least 5 years, up-to-date, readily accessible, on-site records of: (1) the maximum design capacity; AND, (2) the current amount of solid waste in-place; AND, (3) the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.	None specified.	No additional monitoring required.
13.16	40 CFR 60.758(b) (Landfill NSPS Subpart WWW)	Keep up-to-date, readily accessible records for the life of the control equipment of the following data, as measured during the initial performance test or compliance determination: (1) maximum expected gas generation flow rate as calculated in condition 15.5, AND, (2) the density of wells, horizontal collectors, surface collectors, or other gas extraction devices; And, (3) the average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test; AND, (4) the percent reduction of NMOC determined as specified in conditions 16 and 17. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removed.	None specified.	No additional monitoring required.
13.17	40 CFR 60.758(c) (Landfill NSPS Subpart WWW)	Keep for 5 years, up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in the NSPS as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.	None specified.	No additional monitoring required.

Condition	Applicable Requirement	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting Requirement								
13.18	40 CFR 61.154(a), (c), (d) (Asbestos NESHAP Subpart M)	In any active waste disposal site where asbestos-containing waste material has been deposited: (1) no visible emissions to the outside air; OR, (2) cover with ≥ 6 inches of compacted nonasbestos-containing material at the end of each operating day; OR, (3) cover with a chemical dust suppression agent (not to include any used, spent, or other waste oil) at the end of each operating day.	None specified.	No additional monitoring required.								
13.19	40 CFR 61.154(b) (Asbestos NESHAP Subpart M)	<p>Areas of disposal of asbestos-containing waste material must: (1) have a natural barrier that adequately deters access by the general public; OR, (2) cover with ≥ 6 inches of compacted nonasbestos-containing material at the end of each operating day; OR, (3) install warning signs and fencing that meet the following: (a) display signs at all entrances and at intervals of ≤ 330 feet; AND, (b) signs posted such that legend is easily read; AND, (c) 20" x 14" upright format signs; AND, (d) sign legend, size, and style at least equal to (spacing between lines must be at least equal to the height of the upper text line):</p> <table><tr><td>Legend</td><td>Notation</td></tr><tr><td>Asbestos Waste Disposal Site.</td><td>1 inch Sans Serif, Gothic, or Block</td></tr><tr><td>Do Not Create Dust</td><td>$\frac{3}{4}$ inch Sans Serif, Gothic, or Block</td></tr><tr><td>Breathing Asbestos is Hazardous to Your Health.</td><td>14 point Gothic</td></tr></table> <p>AND, (e) fenced in a manner adequate to deter access by the general public.</p>	Legend	Notation	Asbestos Waste Disposal Site.	1 inch Sans Serif, Gothic, or Block	Do Not Create Dust	$\frac{3}{4}$ inch Sans Serif, Gothic, or Block	Breathing Asbestos is Hazardous to Your Health.	14 point Gothic	None specified.	No additional monitoring required.
Legend	Notation											
Asbestos Waste Disposal Site.	1 inch Sans Serif, Gothic, or Block											
Do Not Create Dust	$\frac{3}{4}$ inch Sans Serif, Gothic, or Block											
Breathing Asbestos is Hazardous to Your Health.	14 point Gothic											

Condition	Applicable Requirement	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting Requirement
13.20	40 CFR 61.154(e) (Asbestos NESHAP Subpart M)	Maintain waste shipment records for all asbestos-containing waste material received.	None specified.	<p>Waste shipment records shall include: (1) name, address, and telephone number of the waste generator; AND, (2) name, address, and telephone number of the transporter(s); AND, (3) volume of waste; AND, (4) presence of improperly enclosed (leak-tight containers) or uncovered; AND, (5) date of waste receipt. Send a copy of the signed waste shipment record to the waste generator within 30 days of receipt of the waste.</p> <p>If significant amount of improperly enclosed or uncovered waste, report in writing (with copy of waste shipment record) to the Department for the waste generator (as indicated in the waste shipment record),</p> <p style="text-align: center;">ODEQ, Western Region – Salem Office 750 Front Street NE, Suite 120 Salem, OR 97301-1039</p> <p>by the following working day.</p> <p>Submit reports (with copy of waste shipment record) of unreconciled waste quantity discrepancies within 15 days of waste receipt to ODEQ, at the address listed above. [40 CFR 61.154(e)(1), (2)]</p>
13.21	40 CFR 61.154(f) (Asbestos NESHAP Subpart M)	Maintain, until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material within the disposal area on a map or diagram of the disposal area.	None specified.	No additional monitoring required.
13.22	40 CFR 61.154(i) (Asbestos NESHAP Subpart M)	Furnish upon request, and make available during normal business hours for inspection by ODEQ, all records required by the Asbestos NESHAP.	None specified.	No additional monitoring required.
13.23	40 CFR 61.154(j) (Asbestos NESHAP Subpart M)	Notify ODEQ in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at the site and is covered.	None specified.	Notification shall include: (1) scheduled starting and completion dates; AND, (2) reason for disturbing waste; AND, (3) emission control procedures to be implemented; AND, (4) location of any temporary storage site and the final disposal site. [40 CFR 61.154(j)]

Condition	Applicable Requirement	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting Requirement
13.24	40 CFR 60.752(b)(2)(i ii)(A) and 40 CFR 60.18 (Landfill NSPS Subpart WWW)	<ol style="list-style-type: none"> 1. Route excess landfill gas not utilized by IC engines to an open flare (Emissions Unit Control) designed and operated in accordance with 40 CFR 60.18. 2. The flare shall be designed for and operated with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [40 CFR 60.18(c)(1)] 3. The flare shall be operated with a flame present at all times. [40 CFR 60.18(c)(2)] 4. The flare shall be designed for and operated with an exit velocity less than 60 ft/sec. [40 CFR 60.18(c)(4)(i)] 5. The flare shall be operated at all times when excess landfill gas not utilized by IC engines is being vented to it. [40 CFR 60.18(e)] 	<p>Install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment: (1) a heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame; and (2) a device that records flow to or bypass of the flare. The owner or operator shall either: (i) install, calibrate, and maintain a gas flow measuring device that shall record the flow to the flare at least every 15 minutes; or (ii) secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. [40 CFR 60.756(c)]</p> <p>Reference Method 22 shall be used to determine the compliance with the visible emissions standard. The observation period is 2 hours. [40 CFR 60.18(f)(1)]</p> <p>The net heating value of the gas being combusted in the flare shall be calculated by the equation in 40 CFR 60.18 (f)(3).</p> <p>The actual exit velocity of the flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure) as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate by the unobstructed (free) cross sectional area of the flare tip. [40 CFR 60.18(f)(4)]</p>	<p>Monitoring</p> <ol style="list-style-type: none"> 1. Operate the heat sensing device or thermocouple. [40 CFR 60.756(c)(1)] 2. Record the gas flow to the flare at least every 15 minutes or visually inspect the seal or closure mechanism at least monthly. [40 CFR 60.756(c)(2)] <p>Recordkeeping</p> <ol style="list-style-type: none"> 1. Records of the flare vendor specifications until removal of the flare. [40 CFR 60.758(b)] 2. Up-to-date, readily accessible records for the life of the flare of: <ol style="list-style-type: none"> a. visible emissions readings b. heat content determinations c. flow rate or bypass flow rate measurements d. exit velocity determinations e. continuous records of the flare pilot flame or flare flame monitoring f. all periods of operations during which the pilot flame or the flare flame is absent [40 CFR 60.758(b)(4) and (c)(4)]

Condition	Applicable Requirement	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting Requirement
13.25	40 CFR 63.6(e)(3) (Landfill NESHAP Subpart AAAA)	Develop and implement a written Startup, Shutdown, and Malfunction Plan (SSM Plan) by no later than January 16, 2004.	None specified.	<p>Maintain written SSM Plan on site. If the SSM Plan fails to address, or inadequately addresses, a malfunction, revise the SSM Plan within 45 days after the event to include procedures for operating and maintaining the source during similar malfunctions, and a program of corrective actions for similar malfunctions. [40 CFR 63.6(e)(3)(viii)]</p> <p>Recordkeeping</p> <ol style="list-style-type: none"> 1. Maintain records for each SSM Plan event which occurs. [40 CFR 63.10(b)(2)(i)] 2. Retain a copy of each previous (superceded) version of the SSM Plan for at least 5 years. [40 CFR 63.6(e)(3)(v)] <p>Reporting</p> <ol style="list-style-type: none"> 1. Report semiannually all SSM Plan actions that are consistent with the SSM Plan. [40 CFR 63.10(d)(5)(i)] 2. Notify DEQ within 2 days if an SSM event is not consistent with the SSM Plan and follow up with a letter within 7 days of the event. [40 CFR 63.6(e)(3)(iv)]

EMISSIONS UNITS PIR AND UPR

Table 4. Summary of requirements for Emissions Units PIR and UPR:

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Averaging Time	Testing Condition	Monitoring Condition
340-208-0110(2)	14	Visible emissions	20% opacity	3 min. aggregate in 60 minutes	NA	15

14. Applicable Requirement: The permittee must not cause or allow the emissions of any air contaminant into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is equal to or greater than 20% opacity, excluding uncombined water, from emissions units PIR and UPR. [OAR 340-208-0110(2) and 340-208-0110(3)(a)]
15. Monitoring Requirement: At least weekly, the permittee must visually survey the facility using EPA Method 22 for any sources of excess fugitive emissions. For the purpose of this survey, excess fugitive emissions are considered to be any visible emissions that leave the down wind plant site boundaries. The person conducting this survey does not have to be EPA Method 9 certified. However, the individual should be familiar with the procedures of EPA Method 9, including using the proper location to observe visible emissions. If sources of excess fugitive emissions are identified during the survey, the permittee shall perform one of the following:
- 15.a. immediately take corrective action to minimize the fugitive emissions; or,
 - 15.b. conduct a modified EPA Method 9 test on the device(s) causing the opacity problem within 24 hours.

- 15.c. Recordkeeping: The permittee must maintain records of all inspections and any corrective action performed.

EMISSIONS UNIT TIP

Table 5. Summary of requirements for Emissions Unit TIP:

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Averaging Time	Testing Condition	Monitoring Condition
340-208-0110(2)	16	Visible emissions	20% opacity	3 min. aggregate in 60 minutes	NA	20
340-226-0210(1)(b)	17	PM/PM ₁₀	0.1 gr/dscf	Avg. of 3 test runs	NA	20

16. Applicable Requirement: The permittee must not cause or allow the emissions of any air contaminant into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is equal to or greater than 20% opacity, excluding uncombined water, from emissions unit TIP. [OAR 340-208-0110(2) and 340-208-0110(3)(a)]
17. Applicable Requirement: The permittee must not cause or allow the emission of particulate matter in excess of 0.1 grain per standard cubic foot from emissions unit TIP. [OAR 340-226-0210(1)(b)]

Insignificant Activities Requirements

18. The Department acknowledges that insignificant emissions units (IEUs) identified by rule as either categorically insignificant activities or aggregate insignificant emissions as defined in OAR 340-200-0020 exist at facilities required to obtain an Oregon Title V Operating Permit. IEUs must comply with all applicable requirements. In general, the requirements that could apply to IEUs are incorporated as follows:
- 18.a. OAR 340-208-0110 (20% opacity)
 - 18.b. OAR 340-228-0210 (0.1 gr/dscf corrected to 12% CO₂ or 50% excess air for fuel burning equipment)
 - 18.c. OAR 340-226-0210 (0.1 gr/dscf for non-fugitive, non-fuel burning equipment)
 - 18.d. OAR 340-226-0310 (process weight limit for non-fugitive, non-fuel burning process equipment).

Unless otherwise specified in this permit or an applicable requirement, the Department is not requiring any testing, monitoring, recordkeeping, or reporting for the applicable emissions limits and standards that apply to IEUs. However, if testing were performed for compliance purposes, the permittee would be required to use the test methods identified in the definitions of "opacity" and "particulate matter" in OAR 340-208-0010 and perform the testing in accordance with the Department's Source Sampling Manual.

PLANT SITE EMISSION LIMITS

19. Applicable Requirement: The plant site emissions must not exceed the following limits for any 12 consecutive calendar month period: [OAR 340-222-0040 through OAR 340-222-0043]

Pollutant	Plant Site Emission Limit (Tons/yr)
PM	24
PM ₁₀	14
CO	99
NO _x	39
SO ₂	39
VOC	39
NMOC	49

19.a. The PSEL is based on the actual predicted emissions for the current operating conditions at the facility. A permit modification is required before the PSEL may be increased.

20. Monitoring Requirement: The permittee must determine compliance with the Plant Site Emission Limits established in Condition 19 of this permit by conducting monitoring in accordance with the following procedures, test methods, and frequencies: [OAR 340-218-0050(3)]

20.a. The permittee must monitor and maintain records of the following process parameters:

Table 6. PSEL Monitoring

Emissions Unit(s)	Process Parameter	Units	Measurement Frequency	Measurement Method
F-LFG1	Municipal solid waste in place in Cell 0	Mg or tons	Annually	Records
F-LFG2	Municipal solid waste in place in Cells 1, 2A/2B, 2C/2D, and 3	Mg or tons	Annually	Records
Landfill	Municipal solid waste accepted at landfill	Mg or tons	Annually	Records
F-LFG1 & F-LFG2	Landfill gas generated in each system	MMft ³ /month, MMft ³ /yr	Annually using EPA model calculation	Records
F-LFG2	Landfill gas collected and sent to IC engines and % methane	MMft ³ /month, MMft ³ /yr	Monthly/Annually	Records
PIR	Number of total vehicles on paved roads	Number	Monthly/Annually	Records
UPR 1	Number of total vehicles on unpaved road 1	Number	Monthly/Annually	Records
UPR 2	Number of commercial vehicles on unpaved road 2	Number	Monthly/Annually	Records
TIP	Number of hours operated	Hours	Monthly/Annually	Records
PCS	Petroleum contaminated soil received	Tons	Monthly/Annually	Records
Open Flare	Landfill gas collected and sent to open flare and % methane	MMft ³ /month, MMft ³ /yr	Monthly/Annually	Records

20.b. Emission factors for calculating pollutant emissions:

Table 7. Emission Factors

Emission Units(s)	Pollutant	Emission Factor	Emission Factor Units	Emission Factor Verification Testing	
				Yes/no	Test Method
F-LFG1	CO	10.3	lb/MMft ³ fugitive landfill gas	No	NA
	VOC	51.9	lb/MMft ³ fugitive landfill gas	No	NA
	NMOC	133.2	lb/MMft ³ fugitive landfill gas	No	NA
F-LFG2	CO	10.3	lb/MMft ³ fugitive landfill gas	No	NA
	VOC	51.9	lb/MMft ³ fugitive landfill gas	No	NA
	NMOC	133.2	lb/MMft ³ fugitive landfill gas	No	NA
PIR	PM	0.140	lb/vehicle	No	NA
	PM ₁₀	0.027	lb/vehicle	No	NA
UPR 1	PM	0.010	lb/vehicle	No	NA
	PM ₁₀	0.004	lb/vehicle	No	NA
UPR 2	PM	0.098	lb/vehicle	No	NA
	PM ₁₀	0.021	lb/vehicle	No	NA
Open Flare	PM/PM ₁₀	8.5	lb/MMft ³ combusted landfill gas	No	NA
	CO	110.0	lb/MMft ³ combusted landfill gas	No	NA
	NO _x	20.0	lb/MMft ³ combusted landfill gas	No	NA
	SO ₂	8.4	lb/MMft ³ combusted landfill gas	No	NA
	VOC	1.16	lb/MMft ³ combusted landfill gas	No	NA
	NMOC	2.71	lb/MMft ³ combusted landfill gas	No	NA
TIP	PM/PM ₁₀	0.253	lb/hr	No	NA
	CO	0.768	lb/hr	No	NA
	NO _x	3.57	lb/hr	No	NA
	SO ₂	0.236	lb/hr	No	NA
	VOC/ NMOC	0.289	lb/hr	No	NA
PCS	VOC/ NMOC	0.033	lb/ton PCS	No	NA

- 20.c. For the emissions unit F-LFG1 listed in Table 8, the permittee must determine monthly and 12-month rolling emissions by multiplying the Process Parameter by the emission factor listed above for each pollutant. Calculations must be completed within 30 days of the end of each month.

$$E = (\text{F-LFG1 generated}) * EF * K$$

where:

E = Emissions, tons

EF = Emission factor, pounds/units

K = conversion constant: 1 ton/2000 lbs

- 20.d. For the emissions unit F-LFG2 listed in Table 8, the permittee must determine monthly and 12-month rolling emissions by multiplying the Process Parameter by the emission factor listed above for each pollutant. Calculations must be completed within 30 days of the end of each month.

$$E = (F\text{-LFG2 generated} - F\text{-LFG2 collected to IC engines and flare}) * EF * K$$

where:

E = Emissions, tons
EF = Emission factor, pounds/units
K = conversion constant: 1 ton/2000 lbs

- 20.e. For the emissions unit Open Flare listed in Table 7, the permittee must determine monthly and 12-month rolling emissions by multiplying the Process Parameter by the emission factor listed above for each pollutant. Calculations must be completed within 30 days of the end of each month.

$$E = (\text{Open flare collected}) * EF * K$$

where:

E = Emissions, tons
EF = Emission factor, pounds/units
K = conversion constant: 1 ton/2000 lbs

- 20.f. For the emissions units PIR, UPR 1, UPR 2, TIP, and PCS listed in Table 7, the permittee must calculate monthly and 12-month rolling emission by multiplying the Process Parameter by the emission factor listed above for each pollutant. Calculations must be completed within 30 days of the end of each month.

$$E = MP * EF * K$$

where:

E = Emissions, tons
MP = Monitored parameter, units/month or units/year
EF = Emission factor, pounds/units
K = conversion constant: 1 ton/2000 lbs

- 20.g. The emission factors listed in Condition 20.b. are not enforceable limits unless otherwise specified in this permit. Compliance with PSEs must only be determined by the calculations contained in Conditions 20.c. through 20.f of this permit using the measured process parameters recorded during the reporting period and the emission factors contained in Condition 20.b.
21. The permittee must determine compliance with Condition 19 (Plant Site Emission Limits) by summing the emissions calculated in Condition 20 for each emissions unit for each month and each 12-month rolling period, and adding the Aggregate Insignificant emissions of 1 ton per year by pollutant, and comparing the resulting emissions to the Plant Site Emission Limits in Condition 19.

GENERAL TESTING REQUIREMENTS

22. Unless otherwise specified in this permit, the permittee must conduct all testing in accordance with the Department's Source Sampling Manual. [OAR 340-212-0120 and 40 CFR 60.8]
- 22.a. Unless otherwise specified by a state or federal regulation, the permittee must submit a source test plan to the Department at least 30 days prior to the date of the test. The test plan must be prepared in accordance with the Source Sampling Manual and address any planned variations or alternatives to prescribed test methods. The permittee should be aware that if significant variations are requested, it may require more than 30 days for the Department to grant approval and may require EPA approval in addition to approval by the Department.

- 22.b. Only regular operating staff may adjust the processes or emission control device parameters during a compliance source test and within two (2) hours prior to the tests. Any operating adjustments made during a compliance source test, which are a result of consultation during the tests with source testing personnel, equipment vendors, or consultants, may render the source test invalid.
- 22.c. Unless otherwise specified by permit condition or Department approved source test plan, all compliance source tests must be performed as follows:
- 22.c.i. at least 90% of the design capacity for new or modified equipment;
 - 22.c.ii at least 90% of the maximum operating rate for existing equipment; or
 - 22.c.iii. at 90 to 110% of the normal maximum operating rate for existing equipment. For purposes of this permit, the normal maximum operating rate is defined as the 90th percentile of the average hourly operating rates during a 12 month period immediately preceding the source test. Data supporting the normal maximum operating rate must be included with the source test report.
- 22.d. Each source test must consist of at least three (3) test runs and the emissions results must be reported as the arithmetic average of all valid test runs. If for reasons beyond the control of the permittee a test run is invalid, the Department may accept two (2) test runs for demonstrating compliance with the emission limit or standard.
- 22.e. Source test reports prepared in accordance with the Department's Source Sampling Manual must be submitted to the Department within 45 days of completing any required source test, unless a different time period is approved in the source test plan submitted prior to the source test.

GENERAL MONITORING AND RECORDKEEPING REQUIREMENTS

General Monitoring Requirements:

23. The permittee must not knowingly render inaccurate any required monitoring device or method. [OAR 340-218-0050(3)(a)(E)]
24. Methods used to determine actual emissions for fee purposes must also be used for compliance determination and can be no less rigorous than the requirements of OAR 340-218-0080. [OAR 340-218-0050(3)(a)(F)]
25. Monitoring requirements must commence on the date of permit issuance unless otherwise specified in the permit or an applicable requirement. [OAR 340-218-0050(3)(a)(G)]

General Recordkeeping Requirements

26. The permittee must maintain the following general records of testing and monitoring required by this permit: [OAR 340-218-0050(3)(b)(A)]
- 26.a. the date, place as defined in the permit, and time of sampling or measurements;
 - 26.b. the date(s) analyses were performed;
 - 26.c. the company or entity that performed the analyses;
 - 26.d. the analytical techniques or methods used;
 - 26.e. the results of such analyses;
 - 26.f. the operating conditions as existing at the time of sampling or measurement; and
 - 26.g. the records of quality assurance for continuous monitoring systems (including but not limited to quality control activities, audits, calibration drift checks).

27. Unless otherwise specified by permit condition, the permittee must make every effort to maintain 100 percent of the records required by the permit. If information is not obtained or recorded for legitimate reasons (e.g., the monitor or data acquisition system malfunctions due to a power outage), the missing record(s) will not be considered a permit deviation provided the amount of data lost does not exceed 10% of the averaging periods in a reporting period or 10% of the total operating hours in a reporting period, if no averaging time is specified. Upon discovering that a required record is missing, the permittee must document the reason for the missing record. In addition, any missing record that can be recovered from other available information will not be considered a missing record. [OAR 340-214-0110, 340-212-0160, and 340-218-0050(3)(b)]
28. Recordkeeping requirements must commence on the date of permit issuance unless otherwise specified in the permit or an applicable requirement. [OAR 340-218-0050(3)(b)(C)]
29. Unless otherwise specified, the permittee must retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings (or other original data) for continuous monitoring instrumentation, and copies of all reports required by the permit. All existing records required by the previous Oregon Title V Operating Permit must also be retained for five (5) years from the date of the monitoring sample, measurement, report, or application. [OAR 340-218-0050(b)(B)]

REPORTING REQUIREMENTS

General Reporting Requirements

30. Excess Emissions Reporting The permittee must report all excess emissions as follows: [OAR 340-214-0300 through 340-214-0360]
- 30.a. Immediately (within 1 hour of the event) notify the Department of an excess emission event by phone, e-mail, or facsimile; and
- 30.b. Within 15 days of the excess emissions event, submit a written report that contains the following information: [OAR 340-214-0340(1)]
- 30.b.i. The date and time of the beginning of the excess emissions event and the duration or best estimate of the time until return to normal operation;
- 30.b.ii. The date and time the owner or operator notified the Department of the event;
- 30.b.iii. The equipment involved;
- 30.b.iv. Whether the event occurred during planned startup, planned shutdown, scheduled maintenance, or as a result of a breakdown, malfunction, or emergency;
- 30.b.v. Steps taken to mitigate emissions and corrective action taken, including whether the approved procedures for a planned startup, shutdown, or maintenance activity were followed;
- 30.b.vi. The magnitude and duration of each occurrence of excess emissions during the course of an event and the increase over normal rates or concentrations as determined by continuous monitoring or best estimate (supported by operating data and calculations);
- 30.b.vii. The final resolution of the cause of the excess emissions; and
- 30.b.viii. Where applicable, evidence supporting any claim that emissions in excess of technology-based limits were due to any emergency pursuant to OAR 340-214-0360.
- 30.c. In the event of any excess emissions which are of a nature that could endanger public health and occur during non-business hours, weekends, or holidays, the permittee must immediately notify the Department by calling the Oregon Accident Response System (OARS). The current number is 1-800-452-0311.
- 30.d. If startups, shutdowns, or scheduled maintenance may result in excess emissions, the permittee must submit startup, shutdown, or scheduled maintenance procedures used to minimize excess

emissions to the Department for prior authorization, as required in OAR 340-214-0310 and 340-214-0320. New or modified procedures must be received by the Department in writing at least 72 hours prior to the first occurrence of the excess emission event. The permittee must abide by the approved procedures and have a copy available at all times.

- 30.e. The permittee must notify the Department of planned startup/shutdown or scheduled maintenance events.
- 30.f. The permittee must continue to maintain a log of all excess emissions in accordance with OAR 340-214-0340(3). However, the permittee is not required to submit the detailed log with the semi-annual and annual monitoring reports. The permittee is only required to submit a brief summary listing the date, time, and the affected emissions units for each excess emission that occurred during the reporting period. [OAR 340-218-0050(3)(c)]
- 31. Permit Deviations Reporting: The permittee must promptly report deviations from permit requirements that do not cause excess emissions, including those attributable to upset conditions, as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. "Prompt" means within 15 days of the deviation. Deviations that cause excess emissions, as specified in OAR 340-214-0300 through 340-214-0360 must be reported in accordance with Condition 23.
- 32. All required reports must be certified by a responsible official consistent with OAR 340-218-0040(5);[OAR 340-218-0050(3)(c)(D)]
- 33. Reporting requirements must commence on the date of permit issuance unless otherwise specified in the permit. [OAR 340-218-0050(3)(c)(E)]

Addresses of regulatory agencies are the following, unless otherwise instructed:

DEQ – Western Region
750 Front Street NE, Suite 120
Salem, OR 97310
(503) 378-8240

DEQ – Air Quality Division
811 SW Sixth Avenue
Portland, OR 97204
(503) 229-5359

Air Operating Permits
US Environmental Protection Agency
Mail Stop OAQ-108
1200 Sixth Avenue
Seattle, WA 98101

Semi-annual and Annual Reports

- 34. The permittee must submit three (3) copies of reports of any required monitoring at least every 6 months, completed on forms approved by the Department. Six month periods are January 1 to June 30, and July 1 to December 31. One copy of the report must be submitted to the EPA and two copies to the DEQ regional office. All instances of deviations from permit requirements must be clearly identified in such reports: [OAR 340-218-0050(3)(c)(A) and 340-218-0080(6)(d)]
 - 34.a. The first semi-annual report is due on July 30 and must include the semi-annual compliance certification, OAR 340-218-0080.
 - 34.b. The annual report is due on February 15 and must consist of the following:
 - 34.b.i. the emission fee report; [OAR 340-220-0100]
 - 34.b.ii. a summary of the excess emissions upset log; [OAR 340-214-0340]
 - 34.b.iii. the second semi-annual compliance certification; [OAR 340-218-0080]
 - 34.b.iv. the annual emission inventory report for the prior calendar year;
 - 34.b.v. greenhouse gas emissions in accordance with Division 215 of OAR Chapter 340. [OAR 340-215-0040(3)(a)]
- 35. The semi-annual compliance certification must include the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable): [OAR 340-218-0080(6)(c)]

- 35.a. The identification of each term or condition of the permit that is the basis of the certification;
 - 35.b. The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means must include, at a minimum, the methods and means required under OAR 340-218-0050(3). *Note: Certification of compliance with the monitoring conditions in the permit is sufficient to meet this requirement, except when the permittee must certify compliance with new applicable requirements that are incorporated by reference into the permit. When certifying compliance with new applicable requirements that are not yet in the permit, the permittee must provide the information required by this condition.* If necessary, the owner or operator also must identify any other material information that must be included in the certification to comply with section 113(c)(2) of the FCAA, which prohibits knowingly making a false certification or omitting material information;
 - 35.c. The status of compliance with terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification must be based on the method or means designated in OAR 340-218-0040(6)(c)(B). The certification must identify each deviation and take it into account in the compliance certification. The certification must also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance, as defined under OAR 340-200-0020, occurred; and
 - 35.d. Such other facts as the Department may require to determine the compliance status of the source.
36. Notwithstanding any other provision contained in any applicable requirement, the owner or operator may use monitoring as required under OAR 340-218-0050(3) and incorporated into the permit, in addition to any specified compliance methods, for the purpose of submitting compliance certifications. [OAR 340-218-0080(6)(e)]

Monthly Reports

37. The permittee must report the following information for the preceding month within 30 days of the end of each calendar month to the Western Region-Salem office of the Department:
- 37.a. The cover integrity monitoring results and repairs, if necessary, as required by Condition 13.10;
 - 37.b. The results of the quarterly surface methane monitoring, if conducted during the month, and corrective actions taken as required by Condition 13.10;
 - 37.c. Any other information regarding upsets, maintenance required, or operational problems encountered during the month on the landfill gas collection or control systems;
 - 37.d. Information concerning the installation date and location of any newly installed wells or expansion of the landfill gas collection system as required by Condition 13.7;
 - 37.e. The amount of landfill gas collected and treated in both the IC engines and the flare;
 - 37.f. The total operating hours of the IC engines and flare during the month; and,
 - 37.g. Log of air quality complaints received during the month under Condition 8.

EMISSION FEES

38. Emission fees will be based on the Plant Site Emission Limits in Condition 19, unless the permittee elects to report actual emissions for one or more permitted processes/pollutants using the procedures in OAR 340 Division 220. If the permittee reports actual emissions for one or more permitted processes/pollutants, the permitted emissions for the remaining permitted processes/pollutants will be based on the following table: [OAR 340-220-0090]

Emission Source Description	Permitted Process Code (DEQ Codes)	PM ₁₀ (tons)	SO ₂ (tons)	NO _x (tons)	VOC (tons)
Roads	FS-1	3.1			
Open Flare	GS-1	2.2	2.2	5.2	0.3
Fugitive LFG	FS-2				11.0
Petroleum Cont. Soil	FS-2				0.8
Tipper	GS-1	0.3	0.2	3.6	0.3
AI	GS-1	1.0	1.0	1.0	1.0

NON-APPLICABLE REQUIREMENTS

39. State and Federal air quality requirements (e.g., rules and regulations) currently determined not applicable to the permittee are listed below along with the reason for the non-applicability: [OAR 340-218-0110]

<u>Applicable Requirement</u>	<u>Reason Code</u>	<u>Applicable Requirement</u>	<u>Reason Code</u>	<u>Applicable Requirement</u>	<u>Reason Code</u>	<u>Applicable Requirement</u>	<u>Reason Code</u>
OAR Chapter 340:		0250	I	All rules	C	0190	E
Division 202		Division 222		Division 242		Division 266	
All rules	I	0042	C	All rules	C	All rules	B
Division 204		0060	H	Division 248		40 CFR	
All rules	I	Division 224		0210 through 0230	B	Part 55	B
Division 206		0050	C	Division 250		Part 57	B
0050	C	0060	C	All rules	I	Part 60, except subparts A, WWW, and appendixes	B
0060 through 0070	I	Division 225		Division 252		Part 61, except subparts A, M, and appendixes	B
Division 208		0045	C	All rules	I	Part 63, except subparts A, AAAA, and appendixes	B
0500 through 0610	D	Division 226		Division 254		Part 68	B
Division 210		0400	H	All rules	E	Part 72 through 76	B
0100 through 0120	B	Division 228		Division 256		Part 77	B
Division 212		0100 through 0130	F	All rules	B	Part 78	B
0200 through 0280	J	0300 through 0530	B	Division 257		Part 82, except subpart F	B
Division 214		0600 through 0678	B	All rules	E	Part 85 through 89	B
0200 and 0220	C	Division 230		Division 258			
0400 through 0430	B	All rules	E	All rules	B		
Division 218		Division 232		Division 260			
0050(4)	B	All rules	C	All rules	B		
0050(8)	H	Division 234		Division 262			
0060	I	All rules	B	All rules	B		
0070	I	Division 236		Division 264			
0090	B	All rules	B	0100	D		
0100	B	Division 240		0120 through 0170	D		

Reason code definitions:

- A this pollutant is not emitted by the facility
 B the facility is not in this source category
 C the facility is not in a special control/nonattainment area
 D the facility is not in this county
 E the facility does not have this emissions unit
 F the facility does not use this fuel type

- G the rule does not apply because no changes have been made at the facility that would trigger these procedural requirements
- H this method/procedure is not used by the facility
- I this rule applies only to DEQ and regional authorities
- J there are no emissions units with add-on control devices or the pre-controlled potential emissions are less than 100 tons per year or the emissions units with add-on control devices and pre-controlled emissions greater than 100 tons per year are subject to emissions standards promulgated after November of 1990

GENERAL CONDITIONS

G1. General Provision

Terms not otherwise defined in this permit have the meaning assigned to such terms in the referenced regulation.

G2. Reference materials

Where referenced in this permit, the versions of the following materials are effective as of the dates noted unless otherwise specified in this permit:

- a. Source Sampling Manual; January 23, 1992 - State Implementation Plan Volume 3, Appendix A4;
- b. Continuous Monitoring Manual; January 23, 1992 - State Implementation Plan Volume 3, Appendix A6; and
- c. All state and federal regulations as in effect on the date of issuance of this permit.

G3. Applicable Requirements [OAR 340-218-0010(3)(b)]

Oregon Title V Operating Permits do not replace requirements in Air Contaminant Discharge Permits (ACDP) issued to the source even if the ACDP(s) have expired. For a source operating under a Title V permit, requirements established in an earlier ACDP remain in effect notwithstanding expiration of the ACDP or Title V permit, unless a provision expires by its terms or unless a provision is modified or terminated following the procedures used to establish the requirement initially. Source specific requirements, including, but not limited to TACT, RACT, BACT, and LAER requirements, established in an ACDP must be incorporated into the Oregon Title V Operating Permit and any revisions to those requirements must follow the procedures used to establish the requirement initially.

G4. Compliance [OAR 340-218-0040(3)(n)(C), 340-218-0050(6), and 340-218-0080(4)]

- a. The permittee must comply with all conditions of this permit. Any permit condition noncompliance constitutes a violation of the Federal Clean Air Act and/or state rules and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application. Any noncompliance with a permit condition specifically designated as enforceable only by the state constitutes a violation of state rules only and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application.
- b. Any schedule of compliance for applicable requirements with which the source is not in compliance at the time of permit issuance is supplemental to, and does not sanction noncompliance with the applicable requirements on which it is based.
- c. For applicable requirements that will become effective during the permit term, the source must meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement.

G5. Masking Emissions:

The permittee must not install or use any device or other means designed to mask the emission of an air contaminant that causes or is likely to cause detriment to health, safety, or welfare of any person or otherwise violate any other regulation or requirement. [OAR 340-208-0400] This condition is enforceable only by the State.

G6. Credible Evidence:

Notwithstanding any other provisions contained in any applicable requirement, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any such applicable requirements. [OAR 340-214-0120]

G7. Certification [OAR 340-214-0110, 340-218-0040(5), 340-218-0050(3)(c)(D), and 340-218-0080(2)]

Any document submitted to the Department or EPA pursuant to this permit must contain certification by a responsible official of truth, accuracy and completeness. All certifications must state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and, complete. The permittee must promptly, upon discovery, report to the Department a material error or omission in these records, reports, plans, or other documents.

G8. Open Burning [OAR Chapter 340, Division 264]

The permittee is prohibited from conducting open burning, except as may be allowed by OAR 340-264-0020 through 340-264-0200.

G9. Asbestos [40 CFR Part 61, Subpart M (federally enforceable), OAR Chapter 340-248-0005 through 340-248-0180 (state-only enforceable) and 340-248-0205 through 340-248-0280]

The permittee must comply with OAR Chapter 340, Division 248, and 40 CFR Part 61, Subpart M when conducting any renovation or demolition activities at the facility.

G10. Stratospheric Ozone and Climate Protection [40 CFR 82 Subpart F, OAR 340-260-0040]

The permittee must comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction.

G11. Permit Shield [OAR 340-218-0110]

- a. Compliance with the conditions of the permit is deemed compliance with any applicable requirements as of the date of permit issuance provided that:
 - i. such applicable requirements are included and are specifically identified in the permit, or
 - ii. the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
- b. Nothing in this rule or in any federal operating permit alters or affects the following:
 - i. the provisions of ORS 468.115 (enforcement in cases of emergency) and ORS 468.035 (function of department);
 - ii. the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

- iii. the applicable requirements of the national acid rain program, consistent with section 408(a) of the FCAA; or
 - iv. the ability of the Department to obtain information from a source pursuant to ORS 468.095 (investigatory authority, entry on premises, status of records).
- c. Sources are not shielded from applicable requirements that are enacted during the permit term, unless such applicable requirements are incorporated into the permit by administrative amendment, as provided in OAR 340-218-0150(1)(h), significant permit modification, or reopening for cause by the Department.

G12. Inspection and Entry [OAR 340-218-0080(3)]

Upon presentation of credentials and other documents as may be required by law, the permittee must allow the Department of Environmental Quality, or an authorized representative (including an authorized contractor acting as a representative of the EPA Administrator), to perform the following:

- a. enter upon the permittee's premises where an Oregon Title V Operating Permit program source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- b. have access to and copy, at reasonable times, any records that must be kept under conditions of the permit;
- c. inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. as authorized by the FCAA or state rules, sample or monitor, at reasonable times, substances or parameters, for the purposes of assuring compliance with the permit or applicable requirements.

G13. Fee Payment [OAR 340-220-0010, and 340-220-0030 through 340-220-0190]

The permittee must pay an annual base fee and an annual emission fee for particulates, sulfur dioxide, nitrogen oxides, and volatile organic compounds. The permittee must submit payment to the Department of Environmental Quality, Business Office, 811 SW 6th Avenue, Portland, OR 97204, within 30 days of the date the Department mails the fee invoice or August 1 of the year following the calendar year for which emission fees are paid, whichever is later. Disputes must be submitted in writing to the Department of Environmental Quality. Payment must be made regardless of the dispute. User-based fees will be charged for specific activities (e.g., computer modeling review, ambient monitoring review, etc.) requested by the permittee.

G14. Off-Permit Changes to the Source [OAR 340-218-0140(2)]

- a. The permittee must monitor for, and record, any off-permit change to the source that:
 - i. is not addressed or prohibited by the permit;
 - ii. is not a Title I modification;
 - iii. is not subject to any requirements under Title IV of the FCAA;
 - iv. meets all applicable requirements;
 - v. does not violate any existing permit term or condition; and
 - vi. may result in emissions of regulated air pollutants subject to an applicable requirement but not otherwise regulated under this permit or may result in insignificant changes as defined in OAR 340-200-0020.
- b. A contemporaneous notification, if required under OAR 340-218-0140(2)(b), must be submitted to the Department and the EPA.

- c. The permittee must keep a record describing off-permit changes made at the facility that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those off-permit changes.
- d. The permit shield of Condition G9 does not extend to off-permit changes.

G15. Section 502(b)(10) Changes to the Source [OAR 340-218-0140(3)]

- a. The permittee must monitor for, and record, any section 502(b)(10) change to the source, which is defined as a change that would contravene an express permit term but would not:
 - i. violate an applicable requirement;
 - ii. contravene a federally enforceable permit term or condition that is a monitoring, recordkeeping, reporting, or compliance certification requirement; or
 - iii. be a Title I modification.
- b. A minimum 7-day advance notification must be submitted to the Department and the EPA in accordance with OAR 340-218-0140(3)(b).
- c. The permit shield of Condition G9 does not extend to section 502(b)(10) changes.

G16. Administrative Amendment [OAR 340-218-0150]

Administrative amendments to this permit must be requested and granted in accordance with OAR 340-218-0150. The permittee must promptly submit an application for the following types of administrative amendments upon becoming aware of the need for one, but no later than 60 days of such event:

- a. legal change of the registered name of the company with the Corporations Division of the State of Oregon, or
- b. sale or exchange of the activity or facility.

G17. Minor Permit Modification [OAR 340-218-0170]

The permittee must submit an application for a minor permit modification in accordance with OAR 340-218-0170.

G18. Significant Permit Modification [OAR 340-218-0180]

The permittee must submit an application for a significant permit modification in accordance with OAR 340-218-0180

G19. Staying Permit Conditions [OAR 340-218-0050(6)(c)]

Notwithstanding conditions G16 and G17, the filing of a request by the permittee for a permit modification, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

G20. Construction/Operation Modification [OAR 340-218-0190]

The permittee must obtain approval from the Department prior to construction or modification of any stationary source or air pollution control equipment in accordance with OAR 340-210-0200 through OAR 340-210-0250.

G21. New Source Review Modification [OAR 340-224-0010]

The permittee may not begin construction of a major source or a major modification of any stationary source without having received an air contaminant discharge permit (ACDP) from the Department and having satisfied the requirements of OAR 340, Division 224.

G22. Need to Halt or Reduce Activity Not a Defense [OAR 340-218-0050(6)(b)]

The need to halt or reduce activity will not be a defense. It will not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

G23. Duty to Provide Information [OAR 340-218-0050(6)(e) and OAR 340-214-0110]

The permittee must furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee must also furnish to the Department copies of records required to be retained by the permit or, for information claimed to be confidential, the permittee may furnish such records to the Department along with a claim of confidentiality.

G24. Reopening for Cause [OAR 340-218-0050(6)(c) and 340-218-0200]

- a. The permit may be modified, revoked, reopened and reissued, or terminated for cause as determined by the Department.
- b. A permit must be reopened and revised under any of the circumstances listed in OAR 340-218-0200(1)(a).
- c. Proceedings to reopen and reissue a permit must follow the same procedures as apply to initial permit issuance and affect only those parts of the permit for which cause to reopen exists.

G25. Severability Clause [OAR 340-218-0050(5)]

Upon any administrative or judicial challenge, all the emission limits, specific and general conditions, monitoring, recordkeeping, and reporting requirements of this permit, except those being challenged, remain valid and must be complied with.

G26. Permit Renewal and Expiration [OAR 340-218-0040(1)(a)(D) and 340-218-0130]

- a. This permit expires at the end of its term, unless a timely and complete renewal application is submitted as described below. Permit expiration terminates the permittee's right to operate.
- b. Applications for renewal must be submitted at least 12 months before the expiration of this permit, unless the Department requests an earlier submittal. If more than 12 months is required to process a permit renewal application, the Department must provide no less than six (6) months for the owner or operator to prepare an application.
- c. Provided the permittee submits a timely and complete renewal application, this permit will remain in effect until final action has been taken on the renewal application to issue or deny the permit.

G27. Permit Transference [OAR 340-218-0150(1)(d)]

The permit is not transferable to any person except as provided in OAR 340-218-0150(1)(d).

G28. Property Rights [OAR 340-200-0020 and 340-218-0050(6)(d)]

The 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, nor any infringement of federal, state, or local laws or regulations, except as provided in OAR 340-218-0110.

G29. Permit Availability [OAR 340-200-0020 and 340-218-0120(2)]

The permittee must have available at the facility at all times a copy of the Oregon Title V Operating Permit and must provide a copy of the permit to the Department or an authorized representative upon request.

ALL INQUIRIES SHOULD BE DIRECTED TO:

Department of Environmental Quality
Air Quality Division
Western Region-Salem Office
750 Front Street NE, Suite 120
Salem, OR 97301-1039
(503) 378-8240



September 18, 2019

Weaver Consultants Group
ATTN: Melissa Green
7340 E. Caley Ave., Ste. 110
Centennial, CO 80111



LA Cert #04140
EPA Methods TO3, TO14A, TO15, 25C/3C,
RSK-175

TX Cert T104704450-14-6
EPA Methods TO14A, TO15

UT Cert CA0133332015-3
EPA Methods TO3, TO14A, TO15, RSK-175

LABORATORY TEST RESULTS

Project Reference: Total Sulfur Content Composition and Heat Value Testing

Project Number: 0120-174-50-20-02

Lab Number: K080707-01/04

Enclosed are **revised** results for sample(s) received 8/07/19 by Air Technology Laboratories. This revision replaces the report dated 8/26/19 in its entirety. Samples were received intact. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

- Report revised to include a Level 4 raw data package, per client's request.
- Unless otherwise noted in the report, sample analyses were performed within method performance criteria and meet all requirements of the TNI Standards.
- The enclosed results relate only to the sample(s).

Preliminary results were e-mailed to Melissa Green on 8/22/19.

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

Sincerely,

A handwritten signature in blue ink, appearing to read "Mark Johnson", is written over a light blue horizontal line.

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Note: The cover letter is an integral part of this analytical report.



18501 E. Gale Ave., Suite 130
City of Industry, CA 91748
Ph: 626-964-4032
Fx: 626-964-5832

Project No.: 0120-174-50-20-02
Project Name: Total sulfur content, composition and heat value testing
Report To: Melissa Green
Company: Weaver Consultants Group
Street: 7340 Gentry Ave Suite 110
City/State/Zip: Centennial, CO 80111
Phone& Fax: 720-529-0132
e-mail: MGreen@WCGrp.com

LAB USE ONLY

SAMPLE IDENTIFICATION

K080707-61
1 canister 5948
2 " 5960
3 " 6010
4 " 7131

CHAIN OF CUSTODY RECORD

OF

PAGE:

TURNAROUND TIME

DELIVERABLES

Condition upon receipt:

Sealed Yes ☐ No ☐

Intact Yes ☐ No ☐

Chilled _____ deg C

Standard ☒

Same Day ☐

24 hours ☐

Other: _____

48 hours ☐

72 hours ☐

96 hours ☐

EDD ☐

EDF ☐

LEVEL 3 ☐

LEVEL 4 ☐

EDD ☐

EDF ☐

LEVEL 3 ☐

LEVEL 4 ☐

EDD ☐

EDF ☐

LEVEL 3 ☐

LEVEL 4 ☐

ANALYSIS REQUEST

BILLING

P.O. No.: same

Bill to:

Company: Weaver Consultants Group

Street: 7340 Gentry Ave Suite 110

City/State/Zip: Centennial, CO 80111

Phone& Fax: 720-529-0132

e-mail: MGreen@WCGrp.com

SAMPLE DATE
SAMPLE TIME
MATRIX
CONTAINER TYPE

8/6/19 12:35 4 C

8/6/19 12:45 4 C

8/6/19 1:02 4 C

8/6/19 1:15 4 C

COMMENTS

only test sample 4 as a back-up

DATE/TIME

8/6/19 11:00AM

DATE/TIME

8/6/19 12:35 PM

DATE/TIME

8/6/19 2:30 PM

DATE/TIME

8/7/19 0912

DATE/TIME

METHOD OF TRANSPORT (circle one): Walk-In FedEx UPS Courier ATLI Other

DISTRIBUTION: White & Yellow - Lab Copies / Pink - Customer Copy

Preservation: H=HCL N=None / Container: B=Bag C=Can V=VOA O=Other Rev. 03 - 5/7/09

Client: Weaver Consultants Group
 Attn: Melissa Green
 Project Name: Total Sulfur Content Composition and Heat Value Testing
 Project No.: 0120-174-50-20-02
 Date Received: 08/07/19
 Matrix: Air
 Reporting Units: ppmv

ASTM D5504							
Lab No.:	K080707-01		K080707-02		K080707-03		
Client Sample I.D.:	1		2		3		
Date/Time Sampled:	8/6/19 12:35		8/6/19 12:49		8/6/19 13:02		
Date/Time Analyzed:	8/8/19 14:54		8/8/19 15:12		8/8/19 15:29		
QC Batch No.:	190808GC3A1		190808GC3A1		190808GC3A1		
Analyst Initials:	CM/AS		CM/AS		CM/AS		
Dilution Factor:	4.2		4.6		4.6		
ANALYTE	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv	
Hydrogen Sulfide	8.6	0.84	ND	0.92	ND	0.92	
Sulfur Dioxide	ND	0.84	ND	0.92	ND	0.92	
Carbonyl Sulfide	ND	0.84	ND	0.92	ND	0.92	
Methyl Mercaptan	2.3	0.84	ND	0.92	ND	0.92	
Ethyl Mercaptan	ND	0.84	ND	0.92	ND	0.92	
Dimethyl Sulfide	2.1	0.84	2.5	0.92	2.4	0.92	
Carbon Disulfide	ND	0.84	ND	0.92	ND	0.92	
Isopropyl Mercaptan	2.5	0.84	ND	0.92	ND	0.92	
t-Butylmercaptan	ND	0.84	ND	0.92	ND	0.92	
n-Propyl Mercaptan	ND	0.84	ND	0.92	ND	0.92	
Ethyl Methyl Sulfide	ND	0.84	ND	0.92	ND	0.92	
sec-Butyl Mercaptan	ND	0.84	ND	0.92	ND	0.92	
Thiophene	ND	0.84	ND	0.92	ND	0.92	
Isobutyl Mercaptan	ND	0.84	ND	0.92	ND	0.92	
Diethyl Sulfide	ND	0.84	ND	0.92	ND	0.92	
n-Butyl Mercaptan	ND	0.84	ND	0.92	ND	0.92	
Dimethyl Disulfide	ND	0.84	ND	0.92	ND	0.92	
2-Methylthiophene	ND	0.84	ND	0.92	ND	0.92	
3-Methylthiophene	ND	0.84	ND	0.92	ND	0.92	
Tetrahydrothiophene	ND	0.84	ND	0.92	ND	0.92	
2-Ethylthiophene	ND	0.84	ND	0.92	ND	0.92	
2,5-Dimethylthiophene	ND	0.84	ND	0.92	ND	0.92	
Diethyl Disulfide	ND	0.84	ND	0.92	ND	0.92	
Dimethyl Trisulfide	ND	0.84	2.5	0.92	ND	0.92	
Total Reduced Sulfur	15	0.84	5.0	0.92	2.4	0.92	

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____


 Mark Johnson
 Operations Manager

Date: 8/22/19

The cover letter is an integral part of this analytical report.



AirTECHNOLOGY Laboratories, Inc.

page 1 of 1

Client: Weaver Consultants Group
 Attn: Melissa Green
 Project Name: Total Sulfur Content Composition and Heat Value Testing
 Project No.: 0120-174-50-20-02
 Date Received: 08/07/19
 Matrix: Air
 Reporting Units: ppmv

ASTM D5504							
Lab No.:	Method Blank						
Client Sample I.D.:	-						
Date/Time Sampled:	-						
Date/Time Analyzed:	8/8/19 10:57						
QC Batch No.:	190808GC3A1						
Analyst Initials:	CM/AS						
Dilution Factor:	1.0						
ANALYTE	Result ppmv	RL ppmv					
Hydrogen Sulfide	ND	0.20					
Sulfur Dioxide	ND	0.20					
Carbonyl Sulfide	ND	0.20					
Methyl Mercaptan	ND	0.20					
Ethyl Mercaptan	ND	0.20					
Dimethyl Sulfide	ND	0.20					
Carbon Disulfide	ND	0.20					
Isopropyl Mercaptan	ND	0.20					
t-Butylmercaptan	ND	0.20					
n-Propyl Mercaptan	ND	0.20					
Ethyl Methyl Sulfide	ND	0.20					
sec-Butyl Mercaptan	ND	0.20					
Thiophene	ND	0.20					
Isobutyl Mercaptan	ND	0.20					
Diethyl Sulfide	ND	0.20					
n-Butyl Mercaptan	ND	0.20					
Dimethyl Disulfide	ND	0.20					
2-Methylthiophene	ND	0.20					
3-Methylthiophene	ND	0.20					
Tetrahydrothiophene	ND	0.20					
2-Ethylthiophene	ND	0.20					
2,5-Dimethylthiophene	ND	0.20					
Diethyl Disulfide	ND	0.20					
Dimethyl Trisulfide	ND	0.20					
Total Reduced Sulfur	ND	0.20					

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: Mark Johnson
 Mark Johnson
 Operations Manager

Date: 8/22/19

The cover letter is an integral part of this analytical report



AirTECHNOLOGY Laboratories, Inc.

page 1 of 1

QC Batch No.: 190808GC3A1

Matrix: Air

Reporting Units: ppmv

ASTM D5504

Lab No.:	METHOD BLANK	LCS	LCSD					
Date/Time Analyzed:	8/8/19 10:57	8/8/19 10:22	8/8/19 10:40					
Analyst Initials:	CM/AS	CM/AS	CM/AS					
Date File:	08aug003	08aug001	08aug002					
Dilution Factor:	1.0	1.0	1.0					
ANALYTE	Result ppmv	RL ppmv	% Rec.	Criteria	% Rec.	Criteria	% RPD	Criteria
Hydrogen Sulfide	ND	0.20	73	70-130%	73	70-130%	0.2	<30
Carbonyl Sulfide	ND	0.20	102	70-130%	102	70-130%	0.1	<30
Methyl Mercaptan	ND	0.20	97	70-130%	99	70-130%	1.8	<30
Ethyl Mercaptan	ND	0.20	102	70-130%	103	70-130%	0.9	<30
Dimethyl Sulfide	ND	0.20	90	70-130%	90	70-130%	0.1	<30
Carbon Disulfide	ND	0.20	87	70-130%	86	70-130%	0.8	<30
Dimethyl Disulfide	ND	0.20	96	70-130%	94	70-130%	1.4	<30

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____


Mark Johnson
Operations Manager

Date _____

8/22/19

The cover letter is an integral part of this analytical report.



AirTECHNOLOGY Laboratories, Inc.

page 1 of 1

Client: Weaver Consultants Group
Attn: Melissa Green

Client's Project: Total Sulfur Content Composition and Heat Value Testing
Project Number: 0120-174-50-20-02
Date Received: 8/7/2019
Matrix: Vapor
Units: % v/v

Natural Gas Analysis by ASTM-D1945/3588

Lab No.:	K080707-01	K080707-02	K080707-03		
Client Sample I.D.:	1	2	3		
Date/Time Sampled:	8/6/19 12:35	8/6/19 12:49	8/6/19 13:02		
Fixed Gas Date/Time Analyzed:	8/15/19 11:39	8/15/19 11:58	8/15/19 12:21		
Hydrocarbon Date/Time Analyzed:	8/8/19 10:01	8/8/19 10:23	8/8/19 11:08		
Analyst Initials:	CM/AS	CM/AS	CM/AS		
QC Batch #:	190808GC11A1	190808GC11A1	190808GC11A1		
Dilution Factor:	4.2	4.6	4.6		
ANALYTE	PQL	Results	RL	Results	RL
Methane	0.0010	53	0.0042	53	0.0046
Ethylene	0.010	ND	0.042	ND	0.046
Ethane	0.010	ND	0.042	ND	0.046
Propane	0.010	ND	0.042	ND	0.046
Isobutane	0.010	ND	0.042	ND	0.046
n-Butane	0.010	ND	0.042	ND	0.046
Isopentane	0.010	ND	0.042	ND	0.046
n-Pentane	0.010	ND	0.042	ND	0.046
Hexanes	0.010	ND	0.042	ND	0.046
Heptanes	0.010	ND	0.042	ND	0.046
Oxygen/Argon	0.50	ND	2.1	ND	2.3
Nitrogen	1.0	8.4	4.2	9.0	4.6
Carbon Dioxide	0.010	37	0.042	37	0.046
Gross Heat of combustion (BTU/FT3)	1.0	540	4.2	534	4.6
Net Heat of combustion (BTU/FT3)	1.0	486	4.2	481	4.6

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL)

RL = PQL X Dilution Factor

Reviewed/Approved By:

Mark J. Johnson
Operations Manager

Date:

8/20/19

The cover letter is an integral part of this analytical report.



AirTECHNOLOGY Laboratories, Inc.

18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

Client: Weaver Consultants Group
Attn: Melissa Green

Client's Project: Total Sulfur Content Composition and Heat Value Testing
Project Number: 0120-174-50-20-02
Date Received: 8/7/2019
Matrix: Vapor
Units: % v/v

Natural Gas Analysis by ASTM-D1945/3588

Lab No.:	K080707-01	K080707-02	K080707-03		
Client Sample I.D.:	1	2	3		
Date/Time Sampled:	8/6/19 12:35	8/6/19 12:49	8/6/19 13:02		
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Hydrocarbon Date/Time Analyzed:	8/8/19 10:01	8/8/19 10:23	8/8/19 11:08		
Analyst Initials:	CM/AS	CM/AS	CM/AS		
QC Batch #:	190808GC11A1	190808GC11A1	190808GC11A1		
Dilution Factor:	4.2	4.6	4.6		
ANALYTE	PQL	Results	RL	Results	RL
Methane	0.0010	53	0.0042	53	0.0046
Ethylene	0.010	ND	0.042	ND	0.046
Ethane	0.010	ND	0.042	ND	0.046
Propane	0.010	ND	0.042	ND	0.046
Isobutane	0.010	ND	0.042	ND	0.046
n-Butane	0.010	ND	0.042	ND	0.046
Isopentane	0.010	ND	0.042	ND	0.046
n-Pentane	0.010	ND	0.042	ND	0.046
Hexanes	0.010	ND	0.042	ND	0.046
Heptanes	0.010	ND	0.042	ND	0.046
Oxygen/Argon	0.50	ND	2.1	ND	2.3
Nitrogen	1.0	8.4	4.2	9.0	4.6
Carbon Dioxide	0.010	37	0.042	37	0.046
Gross Heat of combustion (BTU/FT3)	1.0	540	4.2	535	4.6
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ND = Not Detected (Below RL)

RL = PQL X Dilution Factor

Reviewed/Approved By:

Mark J. Johnson
Operations Manager

Date:

8/22/19

The cover letter is an integral part of this analytical report.



AirTECHNOLOGY Laboratories, Inc.

18501 E. Gale Avenue, Suite 130 • City of Industry, CA 91748 • Ph: (626) 964-4032 • Fx: (626) 964-5832

QC Batch # 190808GC11A1
 Matrix: Air
 Units: % v/v

QC for Natural Gas Analysis by ASTM-D1945

Lab No.:	Blank		LCS		LCSD			
Fixed Gas Date/Time Analyzed:	8/15/19 9:56		8/15/19 10:16/15:40		8/15/19 10:35/15:55			
Hydrocarbon Date/Time Analyzed:	8/8/19 9:39		8/8/19 8:54		8/8/19 9:16			
Analyst Initials:	CM/AS		CM/AS		CM/AS			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	%Rec	Criteria	%Rec	Criteria	RPD	Criteria
Methane	ND	0.0010	102	70-130	101	70-130	0.6	<20
Ethane	ND	0.010	102	70-130	102	70-130	0.7	<20
Propane	ND	0.010	109	70-130	104	70-130	4.5	<20
Isobutane	ND	0.010	111	70-130	104	70-130	6.1	<20
n-Butane	ND	0.010	111	70-130	103	70-130	7.3	<20
Neopentane	ND	0.010	110	70-130	104	70-130	5.5	<20
Isopentane	ND	0.010	111	70-130	100	70-130	10.8	<20
n-Pentane	ND	0.010	110	70-130	100	70-130	9.8	<20
n-Hexane	ND	0.010	103	70-130	96	70-130	7.6	<20
n-Heptane	ND	0.010	113	70-130	88	70-130	25.0	<20
Oxygen/Argon	ND	0.50	101	70-130	100	70-130	0.8	<20
Nitrogen	ND	1.0	101	70-130	100	70-130	0.6	<20
Carbon Dioxide	ND	0.010	95	70-130	95	70-130	0.2	<20

ND = Not Detected (Below RL)

RL = PQL X Dilution Factor

Reviewed/Approved By:

Mark Johnson
 Operations Manager

Date:

8/22/19

The cover letter is an integral part of this analytical report.



AirTECHNOLOGY Laboratories, Inc.

18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832



SOLID WASTE DISPOSAL SITE PERMIT: Municipal Solid Waste Landfill

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

Issued as authorized by ORS 459.245 and in accordance with the provisions of [Oregon Revised Statutes Chapter 459, 459A, Oregon Administrative Rules 340 Divisions 64, 90, 93, 95, 96 and 97](#) and subject to the Land Use Compatibility Statement referenced below.

ISSUED TO:

Valley Landfills, Inc.
28972 Coffin Butte Road
Corvallis, OR 97330
541-745-5792

OWNER:

Valley Landfills, Inc.
28972 Coffin Butte Road
Corvallis, OR 97330
541-745-5792

FACILITY NAME AND LOCATION:

Coffin Butte Landfill
28972 Coffin Butte Road
Corvallis, OR 97330
Section 13&18, T10S, R5&4W, Benton County

OPERATOR:

Coffin Butte Landfill
28972 Coffin Butte Road
Corvallis, OR 97330
541-230-5546

ISSUED IN RESPONSE TO:

- Solid waste permit renewal application received Dec 6, 2019
- Land Use Compatibility Statement from Benton County dated Dec. 20, 2000.

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 blue ink, appearing to read 'B. Fuller', is written over a horizontal line.

Brian Fuller
Material Management Manager
Western Region

Date July 28, 2020

Permitted Activities

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

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INTRODUCTION

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

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PERMIT ADMINISTRATION

1.0 PERMIT ISSUANCE

1.1 Permittee

This permit is issued to Valley Landfills, Inc.

1.2 Permit number

This permit is DEQ Solid Waste Permit Number 306.

1.3 Permit term

The permit is issued on the date it is signed. The permit's expiration date is June 30, 2030.

1.4 Facility type

The facility is permitted as a municipal solid waste landfill.

1.5 Facility owner/ operator

The owner of this facility is:

Valley Landfills, Inc.
28972 Coffin Butte Road
Corvallis, OR 97330

The operator of this facility is:

Valley Landfills, Inc.
28972 Coffin Butte Road
Corvallis, OR 97330

1.6 Basis for permit issuance:

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

- Solid waste permit application received Dec. 6, 2019
- Land Use Compatibility Statements from Benton County dated Dec. 20, 2000

1.7 Definitions

Unless otherwise specified, all terms are as defined in OAR 340-093-0030.

1.8 Legal control of property

The permittee shall 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, Materials Management Program
165 E Seventh Ave., Suite 100
Eugene, OR 97401-3049
Telephone: 541-687-7465

All submittals must include, at a minimum, one paper copy and one electronic copy in a format that is approved by the DEQ project manager. Note that some submittals may require more paper copies. Therefore, the permittee must confirm with the permit manager how many copies are necessary prior to submittal of a document.

Note: Whenever possible, the permittee should submit two-sided paper copies of all reports. DEQ may accept electronic submittals for portions of some reports, as approved in the Environmental Monitoring Plan or by DEQ.

2.0 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 Department 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.

3.0 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 of other solid waste permits issued for Coffin Butte 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:

- Solid waste permit application received Dec. 6, 2019
- 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 shall 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)

4.0 PERMIT MODIFICATION

4.1 Five year review

In the permit's 4th to 6th year, DEQ will 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 which 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
- Other significant information or events

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. DEQ may provide notice and opportunity for review of permit-required plans.

4.3 Modification and revocation by DEQ

DEQ 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

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.

4.5 Public participation

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

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

5.0 AUTHORIZATIONS

5.1 Wastes authorized for receipt

This permit authorizes the facility to accept:

- Solid waste as defined in OAR 340-093-0030(91)
- The following waste, when special handling and management requirements for their disposal are included in a special waste management plan approved by DEQ:
 - Cleanup Materials Contaminated with Hazardous Substances as defined in OAR 340-093-0030(19), in accordance with OAR 340-093-0170
 - Waste requiring special management as defined in OAR 340-093-0190
 - Industrial solid wastes as defined in OAR 340-093-0030(53)

5.2 Authorization of other wastes

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.

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.

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. These operations must be described in the site Operations Plan.

6.0 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 accept discarded or abandoned motor vehicles, including trailers or mobile homes, for disposal.

6.4 Used oil disposal

The permittee must not accept used oil for disposal.

6.5 Battery disposal

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

6.6 Tire disposal

The permittee must not accept waste tires for disposal.

6.7 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.

6.8 Open burning

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

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 having a viewable area greater than four inches diagonally

- Desktop computers
- Portable computers

Reference: Oregon Revised Statutes 459.247 and 459A.300-365.

OPERATIONS AND DESIGN

7.0 OPERATIONS PLAN

7.1 Operations plan submittal

Within 270 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. A 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) • Handling and removing unauthorized wastes discovered at the facility • Managing landfill gas • Managing landfill leachate in compliance with Subsection 9.15 • Recirculating landfill leachate & gas condensate in compliance with Subsections 5.5 and 9.15 • Monitoring landslide stability in compliance with Subsection 9.22 • Designing surface water and erosion control structures • Responding to non-compliance events or situations
Disposal operations	<ul style="list-style-type: none"> • Placing daily and interim cover • Detecting and preventing the disposal of regulated hazardous waste, and any other DEQ-prohibited waste • Disposing of putrescible waste • Disposal, handling and recordkeeping of cleanup materials contaminated with hazardous substances • Waste unloading and handling • Disposing of special waste • Using, stockpiling and tracking the receipt and 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 landslide stability recommendations, and takes into account other operational considerations
Special Waste Management Plan	<ul style="list-style-type: none"> • Identifying and characterizing special waste (i.e., waste which requires special management or waste streams not otherwise authorized by this permit) • Identifying the source of all special waste • Determining appropriate handling and disposal procedures • Documenting plan implementation, including waste characterization and location of waste disposition <p><u>References:</u> OAR 340-093-0190, OAR 340-094-0040[11][b][J]</p>
Ancillary operations	<ul style="list-style-type: none"> • Waste unloading and handling • Solidifying liquid waste prior to disposal

General Topics	Describe plans or procedures for:
	<ul style="list-style-type: none"> • Handling and removal of waste tires • Placing and maintaining interim cover over inactive landfill areas • Managing transfer containers
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
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 the Operations Plan's approval the permittee must prepare and submit an updated Operations and Maintenance Manual which includes detailed inspection and maintenance procedures and an associated schedule for all facility components that require periodic inspection. The manual must include specific procedures for routine preventative maintenance and repairs and for response to emergency 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, and 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 to DEQ for review and approval.

7.5 Plan and manual compliance

The permittee must operate the facility in accordance with the approved Operations Plan and Operations and Maintenance Manual, and any amendments to these documents.

8.0 RECORDKEEPING AND REPORTING – OPERATIONS

8.1 Non-compliance reporting

The permittee must take immediate corrective action for any violations of permit conditions or DEQ rules and notify DEQ.

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

8.2 Permit display

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

8.3 Access to records

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

8.4 Procedures

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

Step	Action
1	Keep the Operating Record at the facility or at another DEQ-approved location.
2	Place information required by 40 CFR 258.29 and this permit in the Operating Record.
3	<p>During facility operations, record the daily amount of each waste type received and approved alternative daily cover - qualified waste used for daily cover. Record 0 if the waste is not received.</p> <p><u>Identify the following waste types received and categorize them as either in- or out-of-state waste:</u></p> <ul style="list-style-type: none"> • Domestic solid waste and construction and demolition waste • Industrial solid waste • Asbestos • Contaminated cleanup materials (except materials counted as alternative daily cover qualified waste) • Approved alternative daily cover qualified waste received • Other (i.e., specify any waste type not included in the above list).
4	If applicable, every quarter, record the amount of each material recovered for recycling or other beneficial purpose.
5	<p>Submit the information collected in Step 3 above on the Solid Waste Disposal Report/Fee Calculation form provided by DEQ.</p> <p>Pay solid waste fees as required by OAR 340-097.</p> <p><u>Date due:</u> last day of the month following the end of the calendar quarter.</p>
6	<p>Submit the information collected in Steps 3 & 4 above to the Wasteshed Representative on DEQ provided or approved form.</p> <p><u>Date due:</u> Jan. 25 of each year.</p>
7	Retain copies of all records and reports for 10 years after their creation.
8	Update all records to reflect current conditions at the facility.

8.5 Submittal address

Send required submittals to:

Oregon Department of Environmental Quality
Materials Management Section
Environmental Solutions Division
700 NE Multnomah St., Suite 600
Portland OR 97232
503-229-5913

9.0 SPECIFIC OPERATING CONDITIONS

9.1 Discovery of prohibited waste

If the permittee discovers prohibited wastes, 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 Statue 466.635 and Oil and Hazardous Materials Emergency Response Requirements, Chapter 340, Division 142 require immediate notification to Oregon Emergency Response System (OERS) 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
- Oil spills on land in excess of 42 gallons
- Two hundred 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, please 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. Any truck washing activities must be conducted on a hard surface and any disposal of wastewater must be accomplished in a manner approved by DEQ.

9.4 Unloading area

The area(s) for unloading incoming waste must be clearly defined by signs, fences, barriers or other devices. The permittee must minimize width of the unloading area to the maximum extent practicable.

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.

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 of time [i.e., greater than 120 days] and actively revegetate, in a DEQ-approved manner, any interim cover that will remain exposed for more than two years.

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 discovery the problem.

9.8 Stormwater pollution control plan

The permittee must update and implement the Storm Water Pollution Control Plan consistent with site conditions and the stormwater permit requirements. Refer to the National Pollutant Discharge Elimination System Stormwater Discharge Permit No. 1200-Z. In addition, the permittee must keep a current copy of the permit in the facility Operating Record.

9.9 Asbestos waste management

The permittee must offload and dispose of friable asbestos-containing solid waste as specified in DEQ-approved Operations Plan, Operations & Maintenance Manual, and in OAR 340-248.

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 continuously 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.

9.11 Leachate surface impoundments

The permittee must: 1) completely contain leachate stored within lined surface impoundments; 2) maintain a minimum dike freeboard of two (2) feet above the maximum leachate level in those impoundments unless otherwise approved by DEQ; 3) fence the impoundments to control public access; and 4) lock all gates when no attendant is on duty. In addition, the permittee must 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.

9.13 Vector control

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

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 standards.

9.15 Access control

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

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
- The operator's address
- The consequences to haulers if they attempt to dispose of prohibited materials
- Any other information critical to the safe and efficient operation of the facility.

9.17 Fire protection and reporting

The permittee must provide complete and sufficient protection equipment and facilities in accordance with DEQ-approved Operations Plan.

Arrangements must be made 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.

Fires shall be reported to DEQ within 24 hours.

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).

9.20 Landfill gas control system operation and maintenance

The permittee must operate and maintain the landfill gas control and monitoring systems in good working order as required to prevent nuisance odors, air emissions and landfill gas migration (see methane compliance limits in Section 18).

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.

10.0 SITE DEVELOPMENT AND DESIGN

10.1 Site development plan

Within 360 days of the permit issue date, the permittee must submit any necessary update 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 Baseline design criteria

New municipal landfill waste landfill disposal units must include the following engineering controls:

- A composite liner system, including a DEQ-approved geomembrane liner (at least 60 mils thick for high density polyethylene, and at least 30 mils thick for approved alternative geomembranes) and at least two feet of compacted soil with an in-place permeability of 1×10^{-7} cm/sec or less, or a DEQ-approved alternative liner pursuant to 40 CFR Part 258.40(a)(1);
- A primary leachate collection and removal system (LCRS) which fully covers the liner system and maintains a leachate depth of less than a one foot above the liner, per 40 CFR 258.40(a)(2). All leachate collection pipes must be serviceable by clean outs;
- A secondary leachate collection and removal system(s) designed to effectively monitor the overlying composite-liner system's performance and (1) detect and collect leachate at locations of maximum leak probability; and (2) prevent groundwater intrusion and related monitoring biases;
- A leachate collection sump(s) with a double composite liner system and a leak detection and removal system. Each composite liner must meet the minimum design criteria previously cited in this subsection;
- An operations layer that covers and protects the primary LCRS and liner system from physical damage; and
- A leachate surface impoundment (if applicable) with a double liner and leak detection and removal system. One liner must meet the minimum composite liner criteria described above.

10.3 Design plans

At least six months prior to the anticipated construction date for new disposal units, 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

10.4 Construction requirements

The permittee must construct all improvements in accordance with:

- The approved plans and specifications
- Any DEQ imposed conditions of approval
- Any future DEQ approved amendments to the plans and specifications
- Construction work must begin within 18 months of plan approval

10.5 Construction documents

Prior to constructing 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 review of the construction documents.

10.6 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.

10.7 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.

10.8 Construction report content

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, designer, and facility owner. One of these representatives must be a professional engineer with current Oregon registration.

10.9 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.

11.0 RECYCLING REQUIREMENTS

11.1 Materials

The permittee must provide a place for receiving the following recyclable materials:

<input checked="" type="checkbox"/>	ferrous scrap metal	<input checked="" type="checkbox"/>	mixed paper
<input checked="" type="checkbox"/>	motor oil	<input checked="" type="checkbox"/>	non-ferrous scrap metal (including aluminum)

<input checked="" type="checkbox"/> newspaper <input checked="" type="checkbox"/> container glass	<input checked="" type="checkbox"/> corrugated cardboard and kraft paper (brown paper bags) <input checked="" type="checkbox"/> tin cans
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11.2 Receiving location

The place for receiving recyclable material must be located at the disposal site or at another location more convenient to the population served by the disposal site. The recycling center must be available to every person whose solid waste enters the disposal site.

11.3 Material use

All source separated recyclable materials must be reused or recycled.

11.4 Recycling information

The permittee must provide, to disposal site users, the following recycling information on printed handbills:

- The on-site or off-site location of the recycling center
- The recycling center's hours of operation
- A list of acceptable materials for recycling
- Instructions for preparing source separated recyclable material
- Reasons why people should recycle

11.5 Sign

A prominently displayed sign must indicate the following:

- The availability of recycling at the disposal site or another location

Note: The sign must indicate the recycling center location, if not at the disposal site

- The materials accepted at the recycling center
- The recycling center's hours of operation (if different than disposal site hours)

11.6 Storage

Unless DEQ approves otherwise, all recyclable materials, except car bodies, white goods and other bulky items must be stored in containers.

SITE CLOSURE

12.0 CLOSURE CONSTRUCTION AND MAINTENANCE

12.1 Worst-case closure plan development

Within 90 days of permit issuance, the permittee must develop a conceptual "worst-case" closure plan and a conceptual 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.

12.2 Notification

The permittee must notify DEQ and receive DEQ approval when the conceptual "worst-case" closure and conceptual post-closure care plans are updated and placed in the file.

12.3 Closure permit

In accordance with OAR 340-094-0100, the permittee must apply for a closure permit at least five years prior to the landfill's anticipated final closure.

12.4 Closure plan approval

At least six months prior to final closure of any portion of the landfill, the permittee must submit detailed engineering plans, specifications, and a closure schedule to DEQ for review and approval.

The 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.

12.5 Closure schedule

The permittee must initiate and complete closure of each landfill disposal unit in accordance with 40 CFR 258.60(f)&(g), or an alternate schedule approved by DEQ.

12.6 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 Part 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.

12.7 Vegetation

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.

12.8 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 shall be fertilized, re-seeded and maintained. Any damage repair or other reconstruction of a geomembrane barrier component in the final cover system shall be conducted in accordance with a construction quality assurance plan approved by the DEQ.

12.9 Slope stability

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

12.10 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.

13.0 FINANCIAL ASSURANCE

13.1 Financial assurance plan

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.

13.2 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(5)
- Be updated, annually, in accordance with OAR 340-094-0140(6)(e)
- Consist of a financial assurance mechanism complying with OAR 340-094-0145

13.3 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 1 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(6)(d).

13.4 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.

13.5 Continuous nature

The permittee must continuously maintain financial assurance for the facility until the permittee or other person owning or controlling the site is no longer required by DEQ to demonstrate financial responsibility for closure, post-closure care or corrective action.

ENVIRONMENTAL MONITORING

14.0 SITE CHARACTERIZATION

14.1 Workplan

At least 270 days prior to any new landfill construction or expansion beyond the currently characterized and approved footprint, the permittee must submit two (or more) copies of a detailed workplan to DEQ for review and approval. The workplan must summarize all site characterization completed to date, describe further site characterization that will be accomplished and include at least the following elements:

- A description of the landfill expansion
- A proposal for monitoring all relevant media within the expansion area
- An update to the Environmental Monitoring Plan that reflects all approved changes to the facility
- A detailed description of the planned investigation
- A detailed project schedule

14.2 Site characterization report

Within 180 days of DEQ's approval of the workplan, the permittee must submit at least two copies of the report to DEQ for review and approval. This report must be based on DEQ-approved workplan and any conditions of the approval. The report must be prepared and stamped an Oregon registered geologist or an Oregon registered engineering geologist. The permittee must submit the report and receive DEQ's approval before starting construction or operation of the new landfill area. Once approved, this report and any conditions of approval become an integral part of the permit.

Reference: The *Solid Waste Landfill Guidance, September 1996*, describes the applicable elements of a Site Characterization Report. Organizing the report in that manner will expedite DEQ's review of the plan.

15.0 ENVIRONMENTAL MONITORING PLAN

15.1 Environmental Monitoring Plan Submittal

Within 120 days when requested by DEQ, the permittee must submit an updated Environmental Monitoring Plan to DEQ for approval.

Major changes in updates to the original plan require that the entire plan be submitted as a stand-alone document; at a minimum, this must be done at least once every 10 years. The plan, or any updates to the plan, must be prepared and stamped by an Oregon registered geologist or an Oregon registered engineering geologist. Upon approval, this plan is incorporated into this permit by reference.

15.2 Environmental Monitoring Plan contents

The updated plan must include plans (other than monitoring that is already handled by an NPDES permit) implementing an environmental monitoring program that will characterize potential facility impacts, including leachate collection, containment, treatment and disposal. The updated plan may incorporate parts of the previous approved plan with any changes or additions since that time (i.e., approved permit-specific concentration limits, revised parameter lists, revised schedules and new wells).

The updated plan must include the following contents, as well as applicable elements from the reference document:

- Monitoring Network Design and Construction
- Sampling and Analysis Plan
- Field QA/QC Procedures
- Lab QA/QC Procedures
- Data Analysis and Evaluation
- Report Format and Executive Summary

Reference: The *Solid Waste Landfill Guidance, September 1996*, provides information on applicable elements of an Environmental Monitoring Plan. Following the organizational format provided in the Guidance will expedite DEQ review of the plan.

15.3 Environmental Monitoring Plan revisions and updates

The permittee must revise the current 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 plan revisions and submit two copies (one printed and one electronic) to DEQ for review and approval.

15.4 Environmental Monitoring Plan public comment period

Plan changes may require a public comment period.

15.5 Long-term monitoring plan

After DEQ approves any Risk-Based Concentration Limits (RBCs), Permit-Specific Concentration Limits (PSCLs), Concentration Limit Variances (CLVs), Action Limits (ALs), or Site-Specific Limits (SSLs), the permittee must update the EMP 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 PSCLs, ALs, or SSLs and OAR 340-040-0030(4) for procedures to establish CLVs.

15.6 Leak Detection System

Any significant increase in flow rate in the leak detection system (or degradation of water quality) that have not been corrected (or significant progress made) within two years, also require an updated plan submittal. This plan update is required if a statistical analysis indicates that normal monitoring of detection and compliance sampling points have shown a degradation of water quality. The analysis should cover the period of time from before the changes to after the increased leakage (or degradation of water quality) occurred. The updated plan submittal must detail any proposed increases in frequency or parameter monitoring, as well as any additional monitoring points.

15.7 Additional monitoring points

The permittee must incorporate any new or replacement monitoring point or device into the Environmental Monitoring Plan and submit the updated plan to DEQ for review and approval.

15.8 Environmental Monitoring Plan Compliance

The permittee must conduct all environmental monitoring at the facility in accordance with the approved plan, including any conditions of approval, amendments and updates.

16.0 ENVIRONMENTAL SAMPLING REQUIREMENTS

16.1 Notification of sampling events

The permittee must notify DEQ, in writing, at least 10 working days prior to a scheduled sampling event.

16.2 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.

Oregon Department of Environmental Quality
Laboratory, Groundwater Monitoring Section
7202 NE Evergreen Parkway, Suite 150
Hillsboro, OR 97124
Phone: 503-693-5700 Fax: 503-693-4999

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

Fall or Spring 2024 (TBD)
Fall or Spring 2029 (TBD)
Other sampling events if requested by DEQ

16.3 Monitoring schedule

The permittee must refer to the approved EMP for environmental monitoring procedures. 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

16.4 Monitoring after Environmental Monitoring Plan approval

The permittee must monitor the facility in accordance with: 1) the approved plan; 2) any conditions of DEQ's approval; and 3) any DEQ-approved amendments and updates.

16.5 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 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.

17.0 ESTABLISHING PERMIT-SPECIFIC CONCENTRATION LIMITS (PSCLs), ACTION LIMITS (ALs), CONCENTRATION LIMIT VARIANCES (CLVs) AND SITE-SPECIFIC LIMITS (SSLs)

17.1 Gathering data

The permittee must monitor the designated background wells in accordance with the approved Environmental Monitoring Plan or propose an alternative intrawell approach. Site specific limits (SSLs) exist for several parameters at two wells and remedial action concentration limits exist for additional parameters at some other wells. Background monitoring shall continue until all necessary data sets have been collected, and may be used for creation of additional PSCLs, ALs and/or SSLs for parameters of concern. The permittee then must demonstrate to DEQ's satisfaction that the selected background-data set is valid and unaffected by facility releases.

17.2 Future disposal units or cells

Before using a new landfill unit or cell for waste disposal, the permittee must collect enough samples to determine background groundwater quality. Alternatively, the permittee may develop a program, to be approved by DEQ, for determining background groundwater quality with wells installed at the time of landfill cell construction.

17.3 Statistical analysis

To establish compliance concentration limits (PSCLs, ALs, and SSLs), the permittee must perform statistical evaluations of the monitoring results for each sampling event.

Use methods outlined in 40 CFR 258.53 or other DEQ accepted statistical methods.

References:

The permittee should use methods outlined in Environmental Protection Agency's "Statistical Analysis of Groundwater Monitoring at RCRA facilities" (March 2009) or other DEQ accepted statistical methods. DEQ's 2011 Guidance Document "Developing Concentration Limits at Permitted Solid Waste Facilities" provides some examples of acceptable methods.

17.4 Proposing PSCLs, ALs, and/or SSLs

The permittee must propose for DEQ's review and approval, a PSCL, AL or SSL pursuant to the guidelines specified in OAR 340-040. The proposal must address all required parameters. Once a statistically valid data set (at least nine acceptable data points) are established from the appropriate background well(s), the permittee may generate a PSCL, AL, or SSL for each designated, long-term monitoring parameter.

17.5 Changing PSCLs, ALs, and/or SSLs

If the permittee demonstrates to DEQ's satisfaction that background groundwater quality has significantly changed since the PSCL, AL or SSL was 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 PSCL(s), AL(s) or SSL(s).

17.6 Establishing and changing CLVs

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 (CLVs).

18.0 ENVIRONMENTAL MONITORING STANDARDS

18.1 Applicable regulatory standard

The permittee must not allow the release of any substance from the landfill into groundwater, surface water, or any other media which 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. Refer to OAR 340-094-0080.

18.2 Compliance points

Compliance wells are defined in the most current site Environmental Monitoring Plan.

18.3 Review of results

The permittee must review the analytical results after each monitoring event according to the protocols established in the most currently approved site-specific Environmental Monitoring Plan.

18.4 Resampling results

Upon receipt of data from resampling, the permittee must review the analytical results according to the protocols established in the most currently approved site-specific Environmental Monitoring Plan.

18.5 Secondary leachate collection system (SLCS)

If the permittee observes liquids in the leak detection system, the permittee must respond in accordance with the approved 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.

18.6 Methane limits

The methane concentration must not exceed:

- Twenty-five 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.

18.7 Methane exceedance

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

1. Take immediate steps to protect human health and safety and notify DEQ within 24 hours
2. 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
3. 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.

18.8 Certified environmental laboratory data

To assure the best possible data quality, DEQ requests 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 every data submittal. Use of an ORELAP or NELAP approved lab will facilitate DEQ's future review of Environmental Monitoring Plan updates, Annual Environmental Monitoring Reports, and RI/FS documents.

19.0 RECORDKEEPING AND REPORTING – ENVIRONMENTAL MONITORING

19.1 Annual Environmental Monitoring Report (AEMR)

Prior to March 31 of each year, the permittee must submit to DEQ two copies (one paper copy and one electronic copy) of an annual monitoring report for the previous calendar year's monitoring period. The report must conform to the format detailed in the approved plan and be prepared and stamped by a geologist or a certified engineering geologist, with current Oregon registration. Extensive ancillary information such as laboratory reports, and the historical analytical database, may be provided only in the electronic copy and not in the printed copy.

Note: The permittee should submit two-sided copies of all reports and may submit electronic submittals of reports.

19.2 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 (RBCs, PSCLs, CLVs, ALs, or SSLs)
- 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

19.3 Annual Environmental Monitoring Report contents

The Annual Environmental Monitoring Report must reflect the facility's current conditions, present accurate data that correspond with the original field and lab data, and include the elements presented in the most recently approved plan.

19.4 Annual leachate treatment report

Prior to March 31 of each year, the permittee must submit an annual leachate monitoring report.

Reference: The report format should reflect DEQ's guidance: *Solid Waste Landfill Guidance*, September 1996, or the format presented in the most recently approved plan.

19.5 Annual leachate treatment report contents

This annual report must include the elements presented in the most recently approved plan.

Reference: The report format should reflect DEQ's guidance: *Solid Waste Landfill Guidance*, September 1996, or the format presented in the most recently approved plan.

19.6 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 Quality Assurance Quality Control reports
- A copy of the lab certification (ORLAP or NVLAP, see Certified Environmental Lab Data condition above)
- A hydrogeologic map of the site showing groundwater flow directions and water table contours
- Any other data or reports requested by DEQ

19.7 Lab address

Report all required split sampling information to:

Oregon Department of Environmental Quality
Laboratory, Groundwater Monitoring Section
7202 NE Evergreen Parkway, Suite 150
Hillsboro, OR 97124

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

19.8 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 QA/QC report
- The analytical report
- The field data sheets

20.0 ENVIRONMENTAL MONITORING NETWORK

20.1 Monitoring device installation

For future disposal units or cells, the permittee must install DEQ-approved background and detection and/or compliance wells at least 12 months before refuse disposal occurs in the new cells. A Site Characterization Report may also be required for any proposed new cell. DEQ may waive or modify this requirement if the permittee provides adequate justification for an alternative approach.

20.2 Monitoring stations and equipment

To assure 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.

20.3 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.

20.4 Reporting equipment damage

Within 14 days of discovering any damaged monitoring equipment or station, 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.

20.5 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, and with DEQ's *Guidelines for Groundwater Monitoring Well Drilling, Construction, and Decommissioning*, dated August 1992.

20.6 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.

20.7 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 stratas
- 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

21.0 SUMMARY OF DUE DATES

21.1 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 section...
120 days prior to new landfill construction or expansion	Submit updated Environmental Monitoring Plan	15.1 Environmental Monitoring Plan submittal
Within 90 days of permit issuance	Review and submit conceptual "worst-case" closure and post closure plan	12.1 Worst case closure plan development

April 1 st of each year	Submit financial assurance plan and mechanism	13.3 Recertification of financial assurance
Within 360 days of permit issuance	Review and submit site development plan update	10.1 Site development plan
Within 270 days of permit issuance	Submit updated Operations Plan	7.1 Operations plan submittal
Within 60 days of Operations Plan approval	Submit updated Operations and Maintenance Manual	7.3 Operations and Maintenance Manual
By March 31 for each year	Submit an Annual Environmental Monitoring Report	19.1 Annual Environmental Monitoring Plan
By March 31 for each year	Submit an Annual Leachate Treatment Report	19.4 Annual leachate treatment report
SAMPLING:		
At least 10 working days prior to scheduled sampling event	Notify DEQ	16.1 Notification of sampling events
At least 45 days prior to split sampling event	Schedule split sampling event with DEQ laboratory	16.2 Split sampling events
Within 90 days of split sampling event	Submit required data/documents to DEQ laboratory	19.6 Split sampling submittal
EVENTS:		
Within 30 days of DEQ notification of need to install monitoring well or probe	Install groundwater monitoring well and/or probe	20.1 Monitoring device Installation
Within 30 days of any well construction	Submit well construction report	20.6 Reporting well construction and repairs
At least 6 months before any new disposal unit and/or closure construction	Submit engineering design plans and, if applicable, closure schedule	10.3 Design plans 12.4 Closure plan approval
At least 270 days prior to new construction or expansion	Submit a Site Characterization Report Workplan	14.1 Workplan
Within 180 days of DEQ approval of SCR workplan	Submit a Site Characterization Report	14.2 Site characterization report
Within 90 days after completion of any major construction	Submit Construction Certification Report	10.7 Construction report submittal
Within 18 months of plan approval	Begin construction	10.4 Construction requirements

ATTACHMENTS

22.0 ATTACHMENT

Attachments to the permit include:

Number	Description
1	Parameter Groups
2	Permit-specific concentration limits

22.1 Attachment 1: Parameter Groups

Overview

This attachment describes the environmental-monitoring parameter groups and associated requirements

Due to the duration of this permit, suggested analytical methods may change. If that is the case, use the most currently promulgated EPA method or DEQ-approved equivalent.

Note: Method means EPA SW 846 Method [suggested methods are in square brackets].

Group 1a: Field indicators

The field indicators parameter group includes the following parameters:

Elevation of water level	Specific Conductance
pH	Dissolved Oxygen
Temperature	Eh

With instruments calibrated to relevant standards, measure these parameters in the field when collecting samples. Acceptable methods include:

- Down-hole in situ
- In a flow-through well
- Immediately following sample recovery

Group 1b: Leachate indicators

The laboratory indicators parameter group includes the following parameters:

Total Dissolved Solids (TDS)
Total Suspended Solids (TSS)
Total Organic Carbon (TOC)
Chemical Oxygen Demand (COD)

Proper techniques for sample handling, preservation, and analysis are specific to each individual analyte: Follow appropriate EPA techniques or AWWA Standard Methods.

Group 2a: Common anions and cations

The common anions and cations parameter group includes the following parameters:

Calcium (Ca)	Manganese (Mn)
Sulfate (SO ₄)	Magnesium (Mg)
Total Ammonia (NH ₃ +NH ₄)	Chloride (Cl)
Sodium (Na)	Carbonate (CO ₃)
Nitrate (NO ₃)	Potassium (K)
Silicon (Si)	Bicarbonate (HCO ₃)
Iron (Fe)	

Dissolved concentrations must be measured. Field-filter and field-preserve samples according to standard DEQ and/or EPA guidelines and analyze by appropriate EPA or AWWA Standard Methods techniques. Report results in mg/L and meq/L.

Group 2b: Trace metals

The trace metals parameter group includes the following parameters:

Antimony (Sb)	Chromium (Cr)	Selenium (Se)
Arsenic (As)	Cobalt (Co)	Silver (Ag)
Barium (Ba)	Copper (Cu)	Thallium (Tl)
Beryllium (Be)	Lead (Pb)	Vanadium (V)
Cadmium (Cd)	Nickel (Ni)	Zinc (Zn)

If the Total Suspended Solids concentration is...	analyze for...
less than or equal to 100.0 mg/L in the sample	total concentrations (unfiltered)
Greater than 100.0 mg/L in the sample	both total (unfiltered) and dissolved (field-filtered)

Field-preserve samples according to standard DEQ and/or EPA guidelines and analyze by EPA Method 6010C or DEQ-approved equivalent.

Group 3: Volatile organic constituents

Analyze for all compounds detectable by EPA Method 8260B (C- other method 8/06) or EPA Method 524.2, include a library search to identify any unknown compounds present. The volatile-organic-compounds parameter group is equivalent to the EPA Method 8260B list.

DEQ must pre-approve alternative methods like EPA Method 8021B

Group 4: Assessment monitoring

The assessment monitoring parameter group includes the following parameters:

Semi-volatile Organic Constituents, including Phenols, EPA Method 8270D
 Mercury, EPA Method 7470A
 Cyanide, EPA Method 9010C (manual distillation) or 9012B (automated distillation)
 Nitrite

All Method 8270D analyses must include a library search to identify any unknown compounds present.

Group 5: Surface water and leachate

The surface water parameter group includes the following parameters:

Total Kjeldahl Nitrogen (TKN)	Total Coliform Bacteria [EPA Method 9131]
Total Phosphorus (P)	Fecal Coliform Bacteria [EPA Method 9131]
Orthophosphate (PO ₄)	E. Coli
Biological Oxygen Demand (BOD)	

22.2 Attachment 2: Remedial Action Concentration Limits and Permit Specific Concentration Limits

In accordance with OAR 340-040-0050(2) and as defined in the site Record of Decision (dated October 2004); Remedial Action Concentration Limits are established for the "west side" monitoring points specified in Section 18.2 of this permit as follows:

Compound	RACL	Basis	COPC
Volatile Organic Compounds (µg/L)			
1,4-Dichlorobenzene (1,4-DCB)	75	MCL/RL	Yes
Tetrachloroethene (PCE)	5	MCL	Yes
Trichloroethene (TCE)	5	MCL/RL	Yes
Vinyl chloride	2	MCL/RL	Yes
Trace Metals (µg/L)			
Antimony	6	MCL	No
Arsenic	10	MCL	Yes
Barium	1,000	RL	No
Beryllium	4	MCL	No
Cadmium	5	MCL	Yes
Chromium	50	RL	No
Lead	50	RL	No
Nickel	100	MCL	No
Selenium	10	RL	No
Silver	50	RL	No
Thallium	2	MCL	No
Dissolved Metals (µg/L)			
Iron	300	SMCL	Yes
Manganese	50	SMCL	Yes
Inorganic Compounds (mg/L)			
Chloride	250	SMCL	Yes
Total Dissolved Solids (TDS)	500	SMCL	Yes
RACL: Remedial Action Concentration Limit			
Basis: The lower of either Federal primary Maximum Contaminant Level (MCL) or State Reference Level (OAR 340-040-0020, Tables 1 through 3).			
SMCL: Secondary MCL			
COPC: Chemical of Potential Concern			

In accordance with Section 17 of this permit, Permit-Specific Concentration Limits are established for the "east side" monitoring points specified in Section 18.2 of this permit as follows:

Site Specific Limits for MW 26 and 27
Assumes 2 Compliance Wells, 7 or 8 COCs, Semiannual Sampling

Indicator Parameters (Date set: 2011-2018)	Statistical Distribution	Prediction Limits (mg/L)		Retesting
		MW-26	MW-27	
Bicarbonate	Normal	175 ^a	495	1 of 2
Chloride	Normal	6.2	15.0	1 of 2
TDS	Normal	246 ^a	499	1 of 2
Calcium	Normal	32.0 ^a	100	1 of 2
Iron	NP/Normal	4.5	17.6	1 of 2
Magnesium	Normal	10.1	46.0	1 of 2
Manganese	Normal	0.74	8.9	1 of 2
Sodium	Normal	30.0	44.4	1 of 2
Note: ^a surrogate value calculated from MW-22. Retesting scenario achieves annual site wide false positive rate of 10% per EPA Unified guidance.				