

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:

Riverbend Landfill Co.
13469 S.W. Highway 18
McMinnville, OR 97128

INFORMATION RELIED UPON:

Application Number: 26034 R-01
Received: 04/11/11
Updated: 09/16/11, 09/30/11,
11/09/11, 02/5/12,
06/26/12, 06/28/12,
07/06/12, 08/07/12

PLANT SITE LOCATION:

Riverbend Landfill
13469 S.W. Highway 18
McMinnville, OR 97128

LAND USE COMPATIBILITY STATEMENT:

Issued by: Yamhill County
Dated: 04/01/04 and 04/14/08

ISSUED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY

Claudia Davis, Western Region Air Quality Manager

Date

Nature of Business: Municipal Solid Waste Landfill;
Electrical Power Generation from Combustion

SIC: 4953; 4911

NAICS: 562212; 221119

RESPONSIBLE OFFICIAL

Title: District Manager
Title: Director of Landfill Operations

FACILITY CONTACT PERSON

Name: Larry Pierce or William Carr
Title: District Manager or Senior District Manager
Phone: (503) 472-8788 or (541) 454-3307

Addendum Number 2
Significant Permit Modification

In accordance with OAR 340-218-0180, Title V Operating Permit No. 36-0011 is modified and reissued in its entirety and now reads as follows:

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LIST OF ABBREVIATIONS THAT MAY BE USED IN THIS PERMIT

ACDP	Air Contaminant Discharge Permit	N ₂ O	Nitrous oxide (greenhouse gas)
Act	Federal Clean Air Act	NA	Not applicable
ASTM	American Society of Testing and Materials	NESHAP	National Emission Standard for Hazardous Air Pollutants
Btu	British thermal unit	NMOC	Nonmethane organic compounds
CFR	Code of Federal Regulations	NO _x	Nitrogen oxides
CH ₄	Methane (greenhouse gas)	NSPS	New Source Performance Standards
CO	Carbon monoxide	O ₂	Oxygen
CO ₂ e	Carbon dioxide equivalent	OAR	Oregon Administrative Rules
CPMS	Continuous parameter monitoring system	ODEQ	Oregon Department of Environmental Quality
DEQ	Department of Environmental Quality	ORS	Oregon Revised Statutes
dscf	Dry standard cubic feet	O&M	Operation and maintenance
EF	Emission factor	Pb	Lead
EPA	US Environmental Protection Agency	PCD	Pollution control device
EU	Emissions unit	PM	Particulate matter
FCAA	Federal Clean Air Act	PM ₁₀	Particulate matter less than 10 microns in size
FSA	Fuel sampling and analysis	PM _{2.5}	Particulate matter less than 2.5 microns in size
GHG	Greenhouse gas	ppm	Parts per million
gr/dscf	Grain per dry standard cubic foot (1 pound = 7000 grains)	PSEL	Plant Site Emission Limit
HAP	Hazardous Air Pollutant as defined by OAR 340-244-0040	SIP	State Implementation Plan
HCFC	Halogenated Chloro-Fluoro-Carbons	SO ₂	Sulfur dioxide
H ₂ S	Hydrogen sulfide	SSM	Startup, shutdown, malfunction
ID	Identification number or label	ST	Source test
I&M	Inspection and maintenance	VE	Visible emissions
LFG	Landfill gas	VMT	Vehicle miles traveled
		VOC	Volatile organic compounds

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, 7, 8, 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
Vehicle traffic on unpaved roads	UPR	Water application	NA
Vehicle traffic on paved roads	PIR	Water application	NA
Fugitive landfill gas	LFG	Active LFG collection system	NA
Landfill gas enclosed flare (new)	FLRN	None	NA
Landfill gas candlestick flare	CFLR	None	NA
Landfill gas internal combustion engines (6)	ENG	None	NA
Tipper	TIP	None	NA
Aggregate Insignificant activities (all pollutants)	AI	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 particulate emissions	Minimize	NA	NA	5
340-208-0300	6	Air contaminants	No nuisance	NA	NA	8
340-208-0450	7	PM >250µ	No fallout	NA	NA	8

Fugitive Particulate 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 calendar month for a minimum period of 30 minutes, the permittee must visually survey the plant for any sources of excess fugitive particulate emissions. For the purpose of this survey, excess fugitive particulate 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 particulate 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 particulate 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 and Recordkeeping Requirement:** The permittee must maintain a log of each air quality complaint received by the permittee during the operation of the facility. 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)]
- 8.a. The permittee shall conduct an Odor Survey Program in accordance with a DEQ approved plan around the landfill using an appropriate direct reading olfactometer device from the time of permit issuance until at least one year after startup of the engines in emissions unit ENG. Results of the Odor Survey Program, if conducted, shall be submitted to the Department in the monthly report required by Condition 55.

- 8.b. The permittee must conduct quarterly sampling for hydrogen sulfide concentrations of the collected landfill gas prior to combustion in the flare or engines. On a quarterly basis a bag sample of inlet landfill gas must be taken and the sample analyzed for the concentrations of sulfur containing compounds, including hydrogen sulfide (H₂S), carbon disulfide, carbonyl sulfide, dimethyl sulfide, ethyl mercaptan, methyl mercaptan, and total reduced sulfur. Results of each quarterly analyses, including a tabulation of prior quarterly results, shall be submitted with the appropriate monthly report required by Condition 55.

Facility Wide Requirements

9. 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:

The table below represents a paraphrased summary of the NSPS and NESHAP requirements. However, the complete NSPS or NESHAP rule language takes precedent.

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
9.1	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. This requirement does not apply to emissions unit ENG if the LFG burned in the engines has been processed by an approved LFG treatment system. 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 written notification according to Condition 9.5 of any physical or operational change which may increase the emission rate of any air pollutant to which a standard applies to: ODEQ, Western Region – Salem Office 750 Front Street NE, Suite 120 Salem, OR 97301-1039 [40 CFR 60.7(a)(4)]
9.2	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.
9.3	40 CFR 60.12	Circumvention.	None specified.	No additional monitoring required.
9.4	40 CFR 60.752(b)(2)(i i)(A); 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
9.5	40 CFR 60.752(b)(2)(i) 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: $Q_m = \sum_{i=1}^n 2kL_oM_i(e^{-kt_i})$ 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)(6)]
9.6	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 Administrator until such time as the calculated NMOC emission rate is ≥ 50 Mg/yr, or the landfill is closed.	Calculate the NMOC emission rate: $M_{NMOC} = \sum_{i=1}^n 2kL_oM_i(e^{-kt_i})(C_{NMOC})(3.6 \times 10^{-9})$ 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) 3.6x10 ⁻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 until NSPS GCCS requirements have been triggered, 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 and EPA at the addresses 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 or EPA 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)]
9.7	40 CFR 60.752(b)(2)(i) 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
9.8	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>Submit semi-annual report to:</p> <p style="text-align: center;">ODEQ, Western Region – Salem Office 750 Front Street NE, Suite 120 Salem, OR 97301-1039</p> <p>Semi-annual report shall include record of instances when positive pressure occurred. [40 CFR 60.753(b)(1)]</p>
9.9	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 and/or oxygen 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
9.10	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: 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>
9.11	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. This requirement does not apply to emissions unit ENG if the LFG burned in the engines has been processed by an approved LFG treatment system.	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
9.12	40 CFR 60.752(b)(2)(i ii); 40 CFR 60.759(c) (Landfill NSPS Subpart WWW)	Route all collected LFG to: (1) an enclosed combustor designed and operated to reduce NMOC: (a) by 98w%, OR (b) to an outlet concentration <20 ppm _v , dry basis as hexane at 3% O ₂ ; OR, (2) a treatment system that processes the collected gas for subsequent sale or use.	<p>RM 25 OR RM 18. If using RM 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42).</p> <p>The following equation shall be used to calculate the control efficiency of an enclosed combustor: Control Efficiency = $\frac{(\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}})}{\text{NMOC}_{\text{in}}}$</p> <p>Where, NMOC_{in} = mass of NMOC entering control device NMOC_{out} = mass of NMOC exiting control device [40 CFR 60.754(d)] Calibrate, maintain, and operate according to the manufacturer's specifications, the following enclosed combustor equipment: (1) temperature monitoring device equipped with a continuous recorder and having an accuracy of ±1% of the temperature being measured expressed in °C or ±0.5°C, whichever is greater; AND, (2) gas flow measuring device that provides a measurement of gas flow to or bypass of the control device, AND either, (a) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; OR, (b) Secure the bypass line valve in the closed position with a car-seal or lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and the gas flow is not diverted through the bypass line. [40 CFR 60.756(b)]</p>	<p>Keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines. [40 CFR 60.758(c)(2)]</p> <p>All 3-hour periods of operation during which the average combustion temperature was more than 28°C below the average combustion temperature during the most recent performance test constitute exceedences that shall be recorded and reported. [40 CFR 60.758(c)(1)]</p> <p>Submit semi-annual report to:</p> <p style="text-align: center;">ODEQ, Western Region—Salem Office 750 Front Street NE, Suite 120 Salem, OR 97301-1039</p> <p>Semi-annual report shall include: (1) value and length of time for exceedence of applicable parameters monitored; AND, (2) description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow; AND, (3) description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not in operation; AND, (4) all periods when the collection system was not operating in excess of 5 days. This requirement does not apply to emissions unit ENG if the LFG burned in the engines has been processed by an approved LFG treatment system. [40 CFR 60.757(f)]</p>
9.13	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.
9.14	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 and shall not exceed 1 hour for treatment or control devices.	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
9.15	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)]
9.16	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.
9.17	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.
9.18	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
9.19	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. If necessary, route excess landfill gas not utilized by IC engines or enclosed flare to an open flare (EU CFLR) designed and operated in accordance with 40 CFR 60.18. 2. The open 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 open flare shall be operated with a flame present at all times. [40 CFR 60.18(c)(2)] 4. The open 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 open 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 open 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
9.20	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.	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)] Recordkeeping 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)] Reporting 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 UPR AND PIR

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

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Averaging Time	Testing Condition	Monitoring Condition
340-208-0110(2)	10	Visible emissions	20% opacity	3 min. aggregate in 60 minutes	NA	11

VISIBLE EMISSIONS

10. 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 UPR and PIR. [OAR 340-208-0110(2) and 340-208-0110(3)(a)]

11. Monitoring Requirement: At least monthly, the permittee must visually survey the emissions units UPR and PIR using EPA Method 22 for any sources of excess fugitive emissions. In any instance where excess fugitive emissions are detected, the monitoring frequency shall convert to weekly. After weekly surveys for one year have been conducted, the monitoring frequency may be reduced to monthly if no excess fugitive emissions are detected. For the purpose of this survey, excess fugitive emissions are considered to be any visible emissions that leave the 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 must perform one of the following:
 - 11.a. immediately take corrective action to minimize the fugitive emissions; or
 - 11.b. conduct a Modified EPA Method 9 test on the device(s) causing the opacity problem within 24 hours.

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

EMISSIONS UNIT FLRN

Table 5. Summary of requirements for Emissions Unit FLRN:

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Averaging Time	Testing Condition	Monitoring Condition
340-208-0110(2)	12	Visible emissions	20% opacity	3 min. aggregate in 60 minutes	NA	14
340-226-0210(1)(b)	13	PM	0.1 gr/dscf	avg. of 3 test runs	NA	14
40 CFR 60.752(b)(2)(iii)(b) & (c)	15	Flare temperature	98% destruction or <20 ppm NMOC outlet	Continuous	16.g	16

12. 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 FLRN. [OAR 340-208-0110(2) and 340-208-0110(3)(a)]
13. Applicable Requirement: The permittee must not cause or allow the emissions of particulate matter in excess of 0.1 gr/dscf from emissions unit FLRN. [OAR 340-226-0210(1)(b)]
14. Monitoring and Recordkeeping Requirements:
- 14.a. No visible emission monitoring is required for emissions unit FLRN while operating on landfill gas.
- 14.b. The permittee shall maintain emissions unit FLRN according to manufacturer specifications and keep air and landfill gas within the proper operational parameters. The permittee shall maintain records of all maintenance performed.
15. Applicable Requirement: The permittee must maintain a control system designed and operated to either reduce NMOC by 98 percent by weight, or reduce the outlet NMOC concentration to less than 20 parts per million hexane by volume dry basis at 3 percent oxygen. [40 CFR 60.752(b)(2)(iii)(b) and (c)]
16. Monitoring Requirement: The permittee must install, operate, maintain, calibrate, and record the output of continuous temperature monitoring system on emission unit FLRN as the following:
- 16.a. Calibrate, maintain, and operate according to the manufacturer's specifications, the following enclosed combustor equipment: (1) temperature monitoring device equipped with a continuous recorder and having an accuracy of $\pm 1\%$ of the temperature being measured expressed in $^{\circ}\text{C}$ or $\pm 0.5^{\circ}\text{C}$, whichever is greater; AND, (2) gas flow measuring device that provides a measurement of gas flow to or bypass of the control device, AND either, (a) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; OR, (b) Secure the bypass line valve in the closed position with a car-seal or lock-and-key type configuration. A visual inspection of the seal or closure mechanism must be performed at least once every month to ensure that the valve is maintained in the closed position and the gas flow is not diverted through the bypass line. [40 CFR 60.756(b)]

- 16.b. An Emission Action Level for emissions unit FLRN shall be established during each source test conducted on emissions unit FLRN of 20°C (as a 3-hour block average) below the average combustion temperature during the source test. If the temperature drops below the action level other than during startup, shutdown, or malfunction, the permittee must take corrective action to return the temperature level above the action level.
- 16.c. All 3-hour periods of operation during which the average combustion temperature of emissions unit FLRN is more than 28°C below the average combustion temperature during the most recent source test constitute exceedances that must be recorded and reported, except during periods of startup, shutdown, or malfunction. [40 CFR 60.758(c)(1)]
- 16.d. Recordkeeping: The permittee must maintain records of continuous temperature and any corrective actions taken to raise the temperature of emissions unit FLRN as required by Condition 16.c. above. The permittee must keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines. [40 CFR 60.758(c)(2)]
- 16.e. Testing Requirement: At least once prior to the expiration date of this permit, the permittee shall conduct a source test on emissions unit FLRN using either test method RM 25, TM 25C, TM 25A, or RM 18. If using test method RM 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollution Emission Factors (AP-42). During the source test, the permittee shall determine the NMOC emission rate and the temperature at which the control device either achieves 98% destruction efficiency on non-methane compounds, or the outlet concentration is less than 20 ppm. EPA test methods 3 or 3A shall be used to determine oxygen for correcting the NMOC concentration as hexane to 3 percent. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8 ppm NMOC as hexane), EPA test method 25A should be used in place of EPA test method 25. The following equation shall be used to calculate efficiency:

$$\text{Control Efficiency} = \frac{(\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}})}{\text{NMOC}_{\text{in}}}$$

Where, NMOC_{in} = mass of NMOC entering control device
 NMOC_{out} = mass of NMOC exiting control device [40 CFR 60.754(d)]

NMOC results are to be expressed as hexane in units of ppmv, ppmv @ 3% O₂, lb/hr, lb/MMcf of LFG, and lb/yr.

- 16.e.i. During the source test required by Condition 16.e, the permittee must also verify the emission factors for emissions unit FLRN by conducting source tests for NO_x, CO, and VOC emissions using the following test methods and procedures, unless other methods have been approved by the Department:

- 16.e.i.(1) EPA test method 7E shall be used for NO_x emissions;
 16.e.i.(2) EPA test method 10 shall be used for CO emissions; and
 16.e.i.(3) EPA test method 25 shall be used for VOC emissions.

Emission factor verification results are to be expressed in units of ppmvd, lb/hr, lb/MMcf of LFG, and lb/yr.

- 16.e.ii. During each test run the permittee must record the following information:

- 16.e.ii.(1) Visible emissions as measured by Modified EPA Method 9 for a period of at least six minutes during or within 30 minutes before or after each test run; and
- 16.e.ii.(2) Flare operating parameters including temperature and LFG flow to the flare.

EMISSIONS UNIT ENG

Table 6. Summary of requirements for Emission Units ENG:

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Averaging Time	Testing Condition	Monitoring Condition
340-208-0110	17	Visible emissions	20% opacity	3 min. aggregate in 60 minutes	NA	19
340-226-0210(1)(b)	18	PM	0.1 gr/dscf	Avg. of 3 test runs	NA	19
340-226-0120(1)(a)	20	Treatment system and collection system	Collect 75% of landfill gas generated	Annual	None	21
40 CFR 60.4263(e) Table 1	22.a	NO _x	3.0 g/hp-hr or 220 ppmvd @ 15% O ₂	Avg. of 3 test runs	24.a or b	23
40 CFR 60.4263(e) Table 1	22.b	CO	5.0 g/hp-hr or 610 ppmvd @ 15% O ₂	Avg. of 3 test runs	24.a or b	23
40 CFR 60.4263(e) Table 1	22.c	VOC	1.0 g/hp-hr or 80 ppmvd @ 15% O ₂	Avg. of 3 test runs	24.a or b	23

17. **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 ENG. [OAR 340-208-0110(2) and 340-208-0110(3)(a)]
18. **Applicable Requirement:** The permittee must not cause or allow the emissions of particulate matter in excess of 0.1 gr/dscf from emissions unit ENG. [OAR 340-226-0210(1)(b)]
19. **Monitoring and Recordkeeping Requirements:**
- 19.a. No visible emission monitoring is required for emissions unit ENG while operating on landfill gas.
- 19.b. The permittee shall maintain the internal combustion engines of emissions unit ENG according to manufacturer specifications and keep air and fuel (landfill gas) within the proper engine operational parameters. The permittee shall maintain records of all maintenance performed.
20. **Applicable Requirement:** The permittee must operate and maintain a “treatment system”, as defined by EPA, on the collected landfill gas sent to EU ENG for combustion or otherwise operate the EUs ENG, FLRN, and/or CFLR as control devices in accordance with 40 CFR Part 60, Subpart WWW. The permittee must operate and maintain a landfill gas collection system designed to collect, at a minimum on a calendar year basis, 75% of the theoretical landfill gas generated as shown in the table below. If the permittee determines that the theoretical landfill gas generation rates listed below are not applicable due to changes in facility operation or waste acceptance rates at the facility, the permittee may submit a request to the Department to modify the values in the table below. The permittee may utilize an alternative method for determining a site-specific collection efficiency with the Department’s concurrence. [OAR 340-226-0120(1)(a)]

Year	Theoretical Landfill Gas Generation (ft ³ /min)	Required Landfill Gas Collection at 75% (ft ³ /min)
2012	3535	2651
2013	3696	2772
2014	3834	2876
2015	3964	2973
2016	4091	3068
2017	4211	3158
2018	4327	3245
2019	4439	3329
2020	4547	3410
2021	4651	3488

21. **Monitoring Requirement:** The permittee must install, operate, maintain, calibrate, and record the output of a monitoring system for landfill gas flow through the collection system and/or “treatment system” as follows:
- 21.a. Calibrate, maintain, and operate according to the manufacturer’s specifications a landfill gas flow measuring device that provides a measurement of landfill gas flow to or bypass of the “treatment system”, AND either, (a) Install, calibrate, and maintain a landfill gas flow rate measuring device that shall record the landfill gas flow through the collection system and/or “treatment system” at least every 15 minutes; OR, (b) Secure the bypass line valve in the closed position with a car-seal or lock-and-key type configuration. A visual inspection of the seal or closure mechanism must be performed at least once every month to ensure that the valve is maintained in the closed position and the gas flow is not diverted through the bypass line.
- 21.b. **Recordkeeping:** The permittee must keep up-to-date, readily accessible continuous records of the indication of landfill gas flow through the collection system and/or “treatment system” or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines.
22. **Applicable Requirement:** Any LFG engine manufactured after July 1, 2007 must not exceed the following emission standards: [40 CFR 60.4233(e)]
- 22.a. Emissions of NO_x must not exceed 3.0 g/HP-hr (220 ppmvd at 15% O₂).
- 22.b. Emissions of CO must not exceed 5.0 g/HP-hr (610 ppmvd at 15% O₂).
- 22.c. Emissions of VOC, excluding formaldehyde, must not exceed 1.0 g/HP-hr, as propane (80 ppmvd at 15% O₂).
- These limits do not apply to any engines that have been modified or reconstructed or to engines that have been removed from one location and reinstalled at a new location. [40 CFR 60.4236]
23. **Monitoring Requirement:** The permittee must demonstrate compliance with Condition 22 by either: [40 CFR 60.4243(b)]
- 23.a. Using engines certified in accordance with the procedures in 40 CFR Part 60 Subpart JJJJ and either:
- 23.a.i. Operating and maintaining the engines according to the manufacturer’s emissions-related written instruction; or

- 23.a.ii. Maintaining and operating the engine in a manner consistent with good air pollution control practice for minimizing emissions and conduct a source test within one year of startup in accordance with Condition 24.a.
- 23.b. Testing the non-certified engine in accordance with Condition 24.a. and maintaining and operating the engine in a manner consistent with good air pollution control practice for minimizing emissions.
24. Testing Requirements:
- 24.a. If an uncertified engine is installed, the permittee shall use the following test methods and procedures unless alternative methods are approved by the Department. [40 CFR 60.4244]
- 24.a.i. EPA Method 7E, 320, ASTM D6522-00, or D6348-03 to measure NO_x emissions;
- 24.a.ii. EPA Method 10, 320, ASTM D6522-00, or D6348-03 to measure CO emissions;
- 24.a.iii. EPA Method 25A with the use of a methane cutter as described in 40 CFR 1065.265, 18, 320, or ASTM D6348-03; and
- 24.a.iv. After the initial test, subsequent tests must be conducted every 8760 hours of engine operation or 3 years, whichever comes first.
- 24.b. During the source tests required by Condition 24.a.iv above, the permittee must verify the emission factors for emissions unit ENG when operating at its maximum operating capacity by conducting source tests for NO_x, CO, VOC, and NMOC emissions using the following test methods and procedures, unless other methods have been approved by the Department:
- 24.b.i. EPA test method 7E shall be used for NO_x emissions;
- 24.b.ii. EPA test method 10 shall be used for CO emissions;
- 24.b.iii. EPA test method 25 shall be used for VOC emissions; and
- 24.b.iv. EPA test method 18, 25, or 25C shall be used for NMOC emissions.
- Emission factor verification results are to be expressed in units of ppmvd, lb/hr, lb/MMcf of LFG, and lb/yr.
- Compliance testing results from Condition 24.a. can be used to satisfy the emission factor verification testing.
- 24.c. During each test run the permittee must record the following information:
- 24.c.i. Visible emissions as measured by Modified EPA Method 9 for a period of at least six minutes during or within 30 minutes before or after each test run; and
- 24.c.ii. Engine-generator operating parameters including engine temperature, electrical production rate, LFG flow to the engine, and engine load.

EMISSIONS UNIT TIP

Table 7. 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)	25	Visible emissions	20% opacity	3 min. aggregate in 60 minutes	NA	27
340-226-0210(1)(b)	26	PM/PM ₁₀	0.1 gr/dscf	Avg. of 3 test runs	NA	27

25. 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)]
26. 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)]
27. Monitoring Requirement: At least monthly, the permittee must visually survey the emissions unit TIP using EPA Method 22 for any sources of excess fugitive emissions. In any instance where excess fugitive emissions are detected, the monitoring frequency shall convert to weekly. After weekly surveys for one year have been conducted, the monitoring frequency may be reduced to monthly if no excess fugitive emissions are detected. For the purpose of this survey, excess fugitive emissions are considered to be any visible emissions that leave the 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 must perform one of the following:
- 27.a. immediately take corrective action to minimize the fugitive emissions; or
 - 27.b. conduct a modified EPA Method 9 test on the device(s) causing the opacity problem within 24 hours.
 - 27.c. Recordkeeping: The permittee must maintain records of all inspections and any corrective action performed.

Insignificant Activities Requirements

28. 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:
- 28.a. OAR 340-208-0110 (20% opacity)
 - 28.b. OAR 340-228-0210 (0.1 gr/dscf corrected to 12% CO₂ or 50% excess air for fuel burning equipment)
 - 28.c. OAR 340-226-0210 (0.1 gr/dscf for non-fugitive, non-fuel burning equipment)
 - 28.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

29. 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
PM _{2.5} (direct)	9
CO	249
NO _x	146
SO ₂	204
H ₂ S	9
VOC	39
NMOC	58
GHG (CO ₂ e)	105,400 (97,600 metric tons)

29.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.

30. Monitoring Requirement: The permittee must determine compliance with the Plant Site Emission Limits, except for GHGs, established in Condition 29 of this permit by conducting monitoring in accordance with the following procedures, test methods, and frequencies: [OAR 340-218-0050(3) and 40 CFR63.6655(c)]

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

Table 8. PSEL Monitoring

Emissions Unit(s)	Process Parameter	Units	Measurement Frequency	Measurement Method
UPR-garbage trucks	Vehicles on unpaved roads	Number	Monthly/Annually	Records
PIR-garbage trucks	Vehicles on paved roads	Number	Monthly/Annually	Records
LFG	Municipal solid waste deposited	Mg, Tons	Monthly/Annually	Records
LFG	Municipal solid waste in place	Mg, Tons	Annually	Records
LFG	Landfill gas generated	MMft ³	Annually using EPA Model or similar calculation	Records
FLRN	Landfill gas flow to new enclosed flare	MMft ³	Monthly/Annually	Records
CFLR	Landfill gas flow to candlestick flare	MMft ³	Monthly/Annually	Records
ENG	Landfill gas flow to internal combustion engines	MMft ³	Daily/Monthly/Annually	Records
TIP	Operating time	Hours	Monthly/Annually	Records
	Oil combusted	gallons	Monthly/Annually	Records

30.b. Emission factors for calculating pollutant emissions:

Table 9. Emission Factors

Emission Units(s)	Pollutant	Emission Factor	Emission Factor Units
UPR –garbage trucks	PM	0.018	lbs/VMT
	PM ₁₀	0.0048	lbs/VMT
	PM _{2.5}	0.00048	lbs/VMT
UPR-on-site vehicles	PM	105	lbs/month
	PM ₁₀	28	lbs/month
	PM _{2.5}	2.8	lbs/month
PIR-garbage trucks	PM	0.501	lbs/VMT
	PM ₁₀	0.098	lbs/VMT
	PM _{2.5}	0.0245	lbs/VMT
LFG (fugitives)	CO	10.3	lbs/MMft ³ LFG
	H ₂ S	26.2	lbs/MMft ³ LFG
	VOC	51.9	lbs/MMft ³ LFG
	NMOC	133.2	lbs/MMft ³ LFG
FLRN	PM/ PM ₁₀ /PM _{2.5}	3.1	lbs/MMft ³ LFG
	SO ₂	98.2	lbs/MMft ³ LFG
	H ₂ S	0.532	lbs/MMft ³ LFG
	CO	19.9	lbs/MMft ³ LFG
	VOC	2.8	lbs/MMft ³ LFG
	NO _x	33.8	lbs/MMft ³ LFG
	NMOC	2.8	lbs/MMft ³ LFG
CFLR	PM/ PM ₁₀ /PM _{2.5}	3.1	lbs/MMft ³ LFG
	SO ₂	98.2	lbs/MMft ³ LFG
	H ₂ S	0.532	lbs/MMft ³ LFG
	CO	203.5	lbs/MMft ³ LFG
	VOC	2.7	lbs/MMft ³ LFG
	NO _x	37.4	lbs/MMft ³ LFG
	NMOC	2.7	lbs/MMft ³ LFG
ENG	PM/ PM ₁₀ /PM _{2.5}	5.6	lbs/MMft ³ LFG
	SO ₂	98.2	lbs/MMft ³ LFG
	H ₂ S	2.45	lbs/MMft ³ LFG
	CO	296.0	lbs/MMft ³ LFG
	VOC	23.94	lbs/MMft ³ LFG
	NO _x	154.3	lbs/MMft ³ LFG
	NMOC	23.94	lbs/MMft ³ LFG
TIP	PM/ PM ₁₀ /PM _{2.5}	0.253	lbs/hr
	SO ₂	0.236	lbs/hr
	CO	0.768	lbs/hr
	VOC	0.289	lbs/hr
	NO _x	3.57	lbs/hr
	NMOC	0.289	lbs/hr

30.c. For the emissions units and devices listed in Table 9 except LFG, 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.

$$E = MP * EF * K + AI$$

where:

E = Emissions, tons/year
MP = Monitored parameter, units/year
EF = Emission factor, pounds/units

K = Conversion constant: 1 ton/2000 lbs.
 AI = Aggregate insignificant (1 ton/yr for PM, PM₁₀, PM_{2.5}, CO, SO₂, NO_x,
 VOC, and NMOC)

- 30.d. For the emissions unit LFG listed in Table 9, 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.

$E = (\text{LFG generated (from Condition 20)} - \text{LFG collected to engines and flares}) * EF * K$
 where:

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

- 30.e. The emission factors listed in Condition 30.b. are not enforceable limits unless otherwise specified in this permit. Compliance with PSELs must only be determined by the calculations contained in Conditions 30.c. and 30.d. of this permit using the measured process parameters recorded during the reporting period and the emission factors contained in Condition 30.b. unless alternative emission factors are approved by the Department. The permittee may request or the Department may require using alternative emission factors provided they are based on actual test data or other documentation (e.g., AP-42 Compilation of Emission Factors) that has been reviewed and approved by the Department.
- 30.f. If the permittee elects to pay emission fees based on actual emissions using a verified emission factor, the verified emission factor must be used for determining compliance with the PSEL in accordance with Condition 34.
31. The permittee must determine compliance with Condition 29 (Plant Site Emission Limits) by summing the emissions calculated in Condition 30 for each emissions unit for each month and each 12-month rolling period, and adding the Aggregate Insignificant emissions as appropriate for each pollutant, and comparing the resulting emissions to the Plant Site Emission Limits in Condition 29.

GENERAL TESTING REQUIREMENTS

32. Unless otherwise specified in this permit, the permittee must conduct all testing in accordance with the Department's Source Sampling Manual and NSPS Part 60, Subparts WWW and JJJJ. [OAR 340-212-0120 and 40 CFR 60.8]
- 32.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.
- 32.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.
- 32.c. Unless otherwise specified by permit condition or Department approved source test plan, all compliance source tests must be performed as follows:

- 32.c.i. at least 90% of the design capacity for new or modified equipment;
 - 32.c.ii at least 90% of the maximum operating rate for existing equipment; or
 - 32.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.
 - 32.c.iv. if the above conditions cannot be met due to limited gas flow in the LFG collection system, the LFG control devices will be allowed to perform testing at a minimum of 90% of the capacity of the LFG collection system.
- 32.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.
- 32.e. Source test reports prepared in accordance with the Department's Source Sampling Manual must be submitted to the Department within 60 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:

- 33. The permittee must not knowingly render inaccurate any required monitoring device or method. [OAR 340-218-0050(3)(a)(E)]
- 34. 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)]
- 35. 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)]
 - 35.a. Monitoring is not required for facility wide or specific emissions units that are not in operation during the applicable period. [OAR 340-218-0050(3)(a)(A)]

General Recordkeeping Requirements

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

- 36.b. Specific records:
- 36.b.i. Monthly and annual records of the number of vehicles traveling on paved roads and the associated monthly and annual miles traveled by these vehicles;
 - 36.b.ii. Monthly and annual records of the number of vehicles traveling on unpaved roads and the associated monthly and annual miles traveled by these vehicles;
 - 36.b.iii. Annual records of the quantity of refuse in place in the landfill cells;
 - 36.b.iv. Annual amount of landfill gas generated (as calculated);
 - 36.b.v. Monthly and annual amount of landfill gas collected;
 - 36.b.vi. Monthly and annual hours of operation for the flares CFLO and FLRN;
 - 36.b.vii. Monthly and annual hours of operation for the engines (ENG);
 - 36.b.viii. Facility visible emission observations and/or surveys;
 - 36.b.ix. Continuous temperature data for emission unit FLRN, and any corrective action taken;
 - 36.b.x. Complaint log and investigation reports;
 - 36.b.xi. Monthly amount of operating hours for emission unit TIP;
 - 36.b.xii. Excess emission event log;
 - 36.b.xiii. 12-month rolling and annual emission calculations
37. 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)]
38. 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)]
- 38.a. Recordkeeping is not required for facility wide or specific emissions units that are not in operation during the applicable period. [OAR 340-218-0050(3)(b)(A)]
39. 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)]

NSPS Recordkeeping Requirements

40. The permittee must maintain records of all NSPS notifications required to comply with the LFG engine requirements and all documentation supporting any notification.
41. The permittee must maintain records of all maintenance on the LFG engines.

42. If the LFG engine is certified, the permittee must maintain documentation from the manufacturer that the engine is certified to meet the emission standards as required in 40 CFR 90 and 1048.
43. If the LFG engine is not certified or is being operated in a non-certified manner, the permittee must maintain documentation that the engine meets the emission standards in Condition 23.

NESHAP Recordkeeping Requirements [40 CFR 63.10(b)(2)(i) through (v)]

44. The permittee must maintain records of the occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment).
45. The permittee must maintain records of the occurrence and duration of each malfunction of the required air pollution control and monitoring equipment.
46. The permittee must maintain records of all required maintenance performed on the air pollution control and monitoring equipment.
47. The permit must maintain records of all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the permittee's startup, shutdown, and malfunction plan (SSM plan).
48. The permittee must maintain records of all information necessary to demonstrate conformance with the permittee's SSM plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures in the plan. The information needed to demonstrate conformance with the SSM plan may be recorded using a "checklist" or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events. This requirement does not apply to emissions unit ENG if the LFG burned in the engines has been processed by an approved LFG treatment system.

REPORTING REQUIREMENTS

General Reporting Requirements

49. Excess Emissions Reporting The permittee must report all excess emissions as follows: [OAR 340-214-0300 through 340-214-0360]
 - 49.a. Immediately (within 1 hour of the event) notify the Department of an excess emission event by phone, e-mail, or facsimile; and
 - 49.b. Within 15 days of the excess emissions event, submit a written report that contains the following information: [OAR 340-214-0340(1)]
 - 49.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;
 - 49.b.ii. The date and time the owner or operator notified the Department of the event;
 - 49.b.iii. The equipment involved;
 - 49.b.iv. Whether the event occurred during planned startup, planned shutdown, scheduled maintenance, or as a result of a breakdown, malfunction, or emergency;
 - 49.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;

- 49.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);
- 49.b.vii. The final resolution of the cause of the excess emissions; and
- 49.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.
- 49.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.
- 49.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.
- 49.e. The permittee must notify the Department of planned startup/shutdown or scheduled maintenance events.
- 49.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)]
50. 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 49.
51. All required reports must be certified by a responsible official consistent with OAR 340-218-0040(5);[OAR 340-218-0050(3)(c)(D)]
52. 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-Salem
Office
750 Front Street NE, Suite 120
Salem, OR 97301-1039
(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

53. 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. Two copies of the report must be submitted to the DEQ regional office and one copy to the EPA. All instances of deviations from permit requirements must be clearly identified in such reports. The LFG engines (ENG) are not subject to portions of the semi-annual report if a LFG "treatment system"

is approved and operating. [OAR 340-218-0050(3)(c)(A) and 340-218-0080(6)(d)]

53.a. The first semi-annual report is due on or before August 15 and must include:

- 53.a.i. The first semi-annual compliance certification; [OAR 340-218-0080]
- 53.a.ii. The semi-annual startup, shutdown, and malfunction reports; and [40 CFR 63.10(d)(5)(i) and 40 CFR 63.1980(a) and (b)]
- 53.a.iii. The information required by 40 CFR 63.1980(a)
 - 53.a.iii.(1) Value and length of time for exceedance of applicable parameters monitored in Conditions 9.8, 9.9, and 9.12;
 - 53.a.iii.(2) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line;
 - 53.a.iii.(3) Description and duration of all periods when the control device does not operate for a period exceeding 1 hour;
 - 53.a.iii.(4) All periods when the collection system is not operating in excess of 5 days;
 - 53.a.iii.(5) The location of each exceedance of the 500 ppm methane concentration monitored in Condition 9.10, and the concentration recorded at each location for which an exceedance was recorded in the previous month;
 - 53.a.iii.(6) The date of installation and the location of each well or collection system expansion added pursuant to Conditions 9.4, 9.8, and 9.10.

53.b. The annual report is due on or before March 15 and must consist of the following:

- 53.b.i. The emission fee report; [OAR 340-220-0100]
- 53.b.ii. The excess emissions upset log; [OAR 340-214-0340]
- 53.b.iii. The second semi-annual compliance certification; [OAR 340-218-0080]
- 53.b.iv. Process and operational information required by Condition 30;
- 53.b.v. Annual and 12-month rolling emission calculations;
- 53.b.vi. Annual amounts of gas generated (as calculated) as required by Conditions 30.a. and 36.b.iv;
- 53.b.vii. Annual amounts of gas collected as required by Condition 36.b.v and 40 CFR 60.754(b)(1) or (3);
- 53.b.viii. Annual hours of operation of the flares and engines as required by Condition 36.b.vi;
- 53.b.ix. Annual records of in-place refuse quantities as required by Conditions 30.a. and 36.b.iii;
- 53.b.x. Vehicle information identified in Conditions 30.a, 36.b.i and 36.b.ii ;
- 53.b.xi. The semi-annual startup, shutdown, and malfunction reports; [40 CFR 63.10(d)(5)(i) and 40 CFR 63.1980(a) and (b)]
- 53.b.xii. The information required by 40 CFR 63.1980(a):
 - 53.b.xiii.(1) Value and length of time for exceedance of applicable parameters monitored in Conditions 9.8, 9.9, and 9.12;
 - 53.b.xiii.(2) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line;
 - 53.b.xiii.(3) Description and duration of all periods when the control device does not operate for a period exceeding 1 hour;
 - 53.b.xiii.(4) All periods when the collection system is not operating in excess of 5 days;
 - 53.b.xiii.(5) The location of each exceedance of the 500 ppm methane concentration monitored in Condition 9.10, and the concentration recorded at each location for which an exceedance was recorded in the previous month;

- 53.b.xiii.(6) The date of installation and the location of each well or collection system expansion added pursuant to Conditions 9.4, 9.8, and 9.10.
54. 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)]
- 54.a. The identification of each term or condition of the permit that is the basis of the certification; 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 conditions that are not yet in the permit. When certifying compliance with new applicable conditions that are not yet in the permit, the permittee must provide the information required by this condition.*
- 54.b. 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;
- 54.c. The status of compliance with terms and conditions of the permit for the period covered by the certification, 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,
- 54.d. Such other facts as the Department may require to determine the compliance status of the source.
- 54.e. 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

55. 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:
- 55.a. The cover integrity monitoring results and repairs, if necessary, as required by Condition 9.10;
- 55.b. The results of the quarterly surface methane monitoring, if conducted during the month, and corrective actions taken as required by Condition 9.10;
- 55.c. Any other information regarding upsets, maintenance required, or operational problems encountered during the month on the landfill gas collection or control systems which may be in the form of an SSM Plan log and/or forms;
- 55.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 9.5;
- 55.e. The amount of landfill gas collected and treated in both the IC engines and the flares;
- 55.f. The total operating hours of the IC engines and flares during the month;
- 55.g. Log of air quality complaints received during the month under Condition 8;
- 55.h. Results of the Odor Survey Program if conducted during the month under Condition 8.a.; and
- 55.i. Results of the inlet landfill gas sulfur analyses once available conducted under Condition 8.b.

Semi-annual Community Meetings

56. The permittee shall schedule and provide public notice of semi-annual community meetings to be held at a local location during the months of April and November each year this permit is in effect. At these meetings the company shall describe what has been done in the preceding six months regarding odor control at the landfill, plans for future odor control and gas collection system improvements during the next six months, and receive feedback from citizens as to the current magnitude of any offsite odors. As a result of these meetings, the Department may modify the permit as deemed necessary.

NSPS Notifications

57. The permittee must notify the Department in writing of the date any new enclosed flare or any new LFG engine is started up. The notification must be submitted no later than seven (7) days after startup.
58. If a non-certified LFG engine is installed, the permittee must submit an initial notification to the Department which includes the following information:
- 58.a. Name and address of the permittee;
 - 58.b. Address of the facility;
 - 58.c. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
 - 58.d. Emission control equipment; and
 - 58.e. Fuel used.
59. The permittee must submit notification at least 60 days prior to any physical or operational change which may increase the emission rate of any air pollutant to which a NSPS standard applies in accordance with 40 CFR 60.7(a)(4). [OAR 340-218-0190(1)]

NESHAP Reporting

60. Notwithstanding the allowance to reduce the frequency of reporting for periodic startup, shutdown, and malfunction reports under 40 CFR 63.10(d)(5)(i), any time an action taken by the permittee during a startup, shutdown or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the permittee's startup, shutdown, and malfunction plan, and the permittee exceeds any applicable emission limitation in the relevant emission standard, the permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report shall consist of a telephone call (or facsimile (FAX) transmission) to the Department within 2 working days after commencing action inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and describing all excess emission and/or parameter monitoring exceedances which are believed to have occurred. Notwithstanding the requirements of the previous sentence, the owner or operator may make alternative reporting arrangements in advance, with the Department. Procedures governing the arrangement of alternative reporting requirements are specified in 40 CFR 63.9(i). This requirement does not apply to emissions unit ENG if the LFG burned in the engines has been processed by an approved LFG treatment system.

Greenhouse Gas Reporting

61. If the calendar year emission rate of greenhouse gases (CO₂e) is greater than or equal to 2,756 tons (2,500 metric tons), the permittee must register and report its greenhouse gas emissions with DEQ in accordance with OAR 340-215. The greenhouse gas report must be certified by the responsible official consistent with OAR 340218-0040(5).

EMISSION FEES

62. Emission fees will be based on the Plant Site Emission Limits in Condition 29, 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	1.1	---	---	---
Enclosed Flare	GS-1	3.7	116.2	40.0	3.3
Fugitive LFG	FS-2	---	---	---	15.9
LFG Engines	PS-1	2.9	51.5	81.0	12.6
Tipper	GS-1	0.3	0.3	4.5	0.4
AI	GS-1	1.0	1.0	1.0	1.0

NON-APPLICABLE REQUIREMENTS

63. 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>Rule</u>	<u>Reason Code</u>	<u>Rule</u>	<u>Reason Code</u>	<u>Rule</u>	<u>Reason Code</u>	<u>Rule</u>	<u>Reason Code</u>
OAR Chapter 340:		Division 218		0400	H	Division 242	
Division 202		0050(4)	B	Division 228		All rules	C
All rules	I	0050(8)	H	0100 through 0130	F	Division 244	
Division 204		0060	I	0300 through 0530	B	0110 through 0180	H
All rules	I	0070	I	0600 through 0678	B	Division 248	
Division 206		0090	B	Division 230		0210 through 0230	B
0050	C	0100	B	All rules	E	Division 250	
0060 through 0070	I	0250	I	Division 232		All rules	I
Division 208		Division 222		All rules	C	Division 252	
0500 through 0610	D	0042	C	Division 234		All rules	I
Division 210		0060	H	All rules	B	Division 254	
0100 through 0120	B	Division 224		Division 236		All rules	E
Division 212		0050	C	All rules	B	Division 256	
0200 through 0280	H	0060	C	Division 238		All rules	B
Division 214		Division 225		0100	E	Division 257	
0200 and 0220	C	0045	C	Division 240		All rules	E
0400 through 0430	B	Division 226		All rules	C	Division 258	

<u>Rule</u>	<u>Reason Code</u>	<u>Rule</u>	<u>Reason Code</u>	<u>Rule</u>	<u>Reason Code</u>	<u>Rule</u>	<u>Reason Code</u>
	All rules	B	0120 through 0170	D	Part 60, except subparts A, WWW, JJJ, and appendixes	B	appendices
Division 260			0190	E			Part 68
	All rules	B	Division 266				Part 72 through 76
Division 262			All rules	B	Part 61, except subparts A, M, and appendixes	B	Part 77
	All rules	B	40 CFR				Part 78
Division 264			Part 55	B	Part 63, except subparts A, AAAA, ZZZZ, and	B	Part 82, except subpart F
	0100	D	Part 57	B			Part 85 through 89

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 these rules applied in the past and the fees have been paid

GENERAL CONDITIONSG1. 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:

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