



LANE REGIONAL AIR PROTECTION AGENCY
1010 Main Street, Springfield, Oregon 97477
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STANDARD AIR CONTAMINANT DISCHARGE PERMIT (ACDP)

Issued in accordance with provisions of Title 37, Lane Regional Air Protection Agency's Rules and Regulations, and based on the land use compatibility findings included in the permit record.

Issued To:
Delta Sand & Gravel
999 Division Avenue
Eugene, Oregon 97404

Information Relied Upon:
Application Number: 68748 & 69225
Dated: October 3, 2022 & January 30, 2023

Facility Location:
Delta Landfill
999 Division Avenue
Eugene, Oregon 97404

Land Use Compatibility Statement:
From: Lane County
Date: October 28, 1998

Permit Number: 202144
Permit Type: Standard
Primary SIC: 4953 – Refuse Systems
Secondary SIC: --
Issuance Date: April 7, 2023
Expiration Date: April 7, 2028

Fee Basis, OAR 340-216-8010 Table 1:
Part C:
8 – Landfills with more than 200,000 tons of waste in place and calculated methane generation rate is greater than or equal to 664 metric tons per year which are subject to the requirements in OAR 340 division 239.

Permitted Source
Construction and Demolition Landfill
Tire Shredder
Generator
Paved Industrial Roads
Unpaved Roads

Issued By: Steven A. Dietrich
Steven A. Dietrich, Director

Effective Date: 4-7-23

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Permitted Activities

1. Until this permit expires or is revoked, the permittee is herewith allowed to discharge air contaminants only in accordance with the permit application and the requirements, limitations, and conditions contained in this permit. This specific listing of requirements, limitations, and conditions does not relieve the permittee from complying with all other rules of Lane Regional Air Protection Agency (LRAPA).

Emission Unit Description

2. The emission units regulated by this permit are the following:

Emission Unit (EU) Description	EU ID	Pollution Control Devices (PCD) Description
Landfill Gas	LFG	Passive Collection System
Tire Shredder Generator: MagnaPlus Generator 250 kW-hr with a diesel-fired 465 horsepower Caterpillar engine	GEN	NA
Paved Industrial Roads	PIR	Water application and sweeping
Unpaved Roads	UPR	Water application, chemical suppressant, and/or gravel application (as applicable)
Aggregate Insignificant Emissions: • Tire Shredder	AIE	NA

Plant Site Emission Limits (PSELS)

3. The total emissions from all sources located at the facility must not exceed the PSELS below. The PSELS apply to any 12 consecutive calendar month period. [OAR 340-222-0035(2), LRAPA 42-0040, 42-0080(3) and 42-0080(4)(c)]

Annual PSELS

Pollutant	PSEL (tons/year)
PM	2.3
PM ₁₀	1.4
PM _{2.5}	1.2
CO	3.3
NO _x	15
SO ₂	1.0
VOC	1.8
GHG	36,000

4. Any changes in operation that may increase emissions above the PSEL must be approved by LRAPA. Failure to do so may result in enforcement actions being taken by LRAPA. [LRAPA 37-0020(7)]

PSEL Monitoring and Compliance

5. **By the 15th working day of each month**, the permittee must determine compliance with the previous consecutive 12 calendar month PSELs. Compliance with the PSELs is determined for each consecutive 12 calendar month period based on the following calculation for each pollutant, except for greenhouse gas (GHG): [LRAPA 34-016, 35-0270 and 42-0080(4)(c)]
- 5.a. The permittee must maintain hours of operation records of the Tire Shredder Generator (EU: GEN):

$$E = \sum_{i=1}^{12} \frac{P_i \cdot EF}{2000}$$

Where: E = Each individual pollutant emission (ton/year);
 ∑ = Symbol representing “summation of”;
 Pi = Hours of operation;
 i = Each calendar month;
 EF = Each pollutant emission factors in Condition 6; and
 2000 = Conversion from pounds to tons.

- 5.b. The permittee must maintain the vehicle miles traveled for the Paved Industrial Roads (EU: PIR) and the Unpaved Roads (EU: UPR).

$$E = \sum_{i=1}^{12} \frac{VMT_i \cdot EF}{2000}$$

Where: E = Each individual pollutant emission (ton/year);
 ∑ = Symbol representing “summation of”;
 Pi = Vehicle miles traveled;
 i = Each calendar month;
 EF = Each pollutant emission factors in Condition 6; and
 2000 = Conversion from pounds to tons.

6. The permittee must use the following emission factors to estimate combustion emissions in Conditions 5.a and 5.b. [LRAPA 42-0080(4)(C)]

Generator Emission Factors (EU: GEN)		
Pollutant	Emission Factor ⁽¹⁾	Units
PM	2.20E-03	lb/hp-hr
PM ₁₀	2.20E-03	lb/hp-hr
PM _{2.5}	2.20E-03	lb/hp-hr

CO	6.68E-03	lb/hp-hr
NO _x	3.10E-02	lb/hp-hr
SO ₂	2.05E-03	lb/hp-hr
VOC	2.51E-03	lb/hp-hr
Paved Industrial Roads (PIR)		
PM	0.162	lb/VMT
PM ₁₀	0.032	lb/VMT
PM _{2.5}	0.008	lb/VMT
Unpaved Roads (EU: UPR)		
PM	1.06	lb/VMT
PM ₁₀	0.33	lb/VMT
PM _{2.5}	0.033	lb/VMT

Emission factors for EU: GEN are based on EPA AP-42 Chapter 3.3, Table 3.3-1 and for EUs: PIR and UPR are based on EPA AP-42 Chapters 13.2.1 and 13.2.2, respectively.

7. The permittee must register and report in compliance with OAR chapter 340, division 215, if the source's direct greenhouse gas (GHGs) emission meets or exceed 2,500 metric tons CO₂e during the previous year. Once a source's direct GHGs emission meets or exceed 2,500 metric tons of CO₂e during a year, the permittee must annually register and report in each subsequent year, regardless of the amount of the source's direct GHG emission in future years, except as provided in OAR 340-215-0032 and OAR 340-215-0034. Air contamination sources required to register and report under OAR 340-215-0030(2) must register and submit annual emission data reports to LRAPA under OAR 340-215-0044 by the due date for the annual report for non-greenhouse gas emissions specified in Condition 92, or by March 31 of each year, whichever is later. [OAR 340-215-0030(2), 340-215-0046(1)(a) and LRAPA 34-016]

General Emission Limitations

8. The permittee must not cause, suffer, 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 are not limited to the following: [LRAPA 48-015(1)]
 - 8.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;
 - 8.b. Application of water or other suitable chemicals on unpaved roads, materials stockpiles, and other surfaces which can create airborne dusts;
 - 8.c. Full or partial enclosure of materials stockpiles in cases where application of water or other suitable chemicals is not sufficient to prevent particulate matter from becoming airborne;
 - 8.d. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
 - 8.e. Adequate containment during sandblasting or other similar operations;
 - 8.f. The covering of moving, open bodied trucks transporting materials likely to become airborne;

- 8.g. The prompt removal from paved streets of earth or other material which does or may become airborne.
9. At least monthly, for a minimum of 30 minutes, the permittee must visually survey the landfill for any sources of excess fugitive emissions. For the purpose of this survey, excess fugitive emissions are considered to be any visible emissions that leave the plant site boundaries for more than 18 seconds in a six-minute period. The person conducting the observation must follow the procedures of EPA Method 22. If sources of visible emissions are identified, the permittee must: [LRAPA 48-015(2) & (3), LRAPA 34-016(1)]
 - 9.a. Immediately take corrective action to minimize the fugitive emissions, including but not limited to those actions identified in Condition 8; and
 - 9.b. Develop an LRAPA-approved Fugitive Emission Control Plan upon request by LRAPA if the above precautions are not adequate and implement the plan whenever fugitive emissions leave the property for more than 18 seconds in a six (6) minute period.
10. The permittee must not cause, suffer, allow, or permit the emission of particulate matter in any one (1) hour from any process in excess of the amount shown in LRAPA Table 32-8010, for the process weight rate allocated to such process. [LRAPA 32-045]
11. The permittee is prohibited from conducting outdoor burning on the plant site, except as may be allowed by LRAPA title 47. [LRAPA 47-001]

General Emission Limitations for the Tire Shredder Generator (EU: GEN)

12. For sources, other than wood-fired boilers, the permittee must not emit or allow to be emitted any visible emissions that equal or exceed an average of 20 percent opacity for a period or periods aggregating more than three (3) minutes in any one (1) hour. [LRAPA 32-010(3)]
13. For sources other than fuel burning equipment, refuse burning equipment and fugitive emissions, the permittee must not cause, suffer, allow, or permit particulate matter emission from any air contaminant source installed, constructed or modified after June 1, 1970, but prior to April 16, 2015, in excess of 0.14 grains per standard dry cubic foot (dscf) if there are no representative compliance source test results. [LRAPA 32-015(2)(b)(B)]
14. The permittee must ensure that the tire shredder generator [EU: GEN] is operated and maintained at all times in a manner which minimize air contaminant discharges in accordance with LRAPA's highest and best requirements. [LRAPA 32-005]

OAR chapter 340 division 236: Landfill Gas Emission Requirements (EU: LFG)

Applicable Requirements

15. The permittee having a greater than or equal to 200,000 tons of waste-in-place must submit an annual Waste-in-Place Report to LRAPA pursuant to Condition 40.e and an annual Methane Generation Rate Report, pursuant to Condition 40.f, until the permittee submits a Closure Notification pursuant to Condition 40.a. [OAR 340-239-0100(4)]
16. If the methane generation rate reported by the permittee according to Condition 15 is greater than or equal to 664 metric tons (732 tons) per year but less than 7,755 metric tons (8,548 tons) per year, then the permittee must: [OAR 340-239-0100(6)]
 - 16.a. Comply with the requirements of Conditions 17 through 40. The permittee is subject to Conditions 17 through 40 at the time the permittee submitted the Methane Generation Rate Report that shows methane generation above 664 metric tons per year. [OAR 340-239-0100(6)(a)]

17. When required pursuant to Condition 16 or Condition 26, the permittee must comply with the gas collection and control system requirements, system operational standards, and well head sampling requirements in OAR chapter 340 division 239. [OAR 340-239-0110]

Design Plan and Installation Requirements [340-239-0110(1)]

18. If the permittee is modifying an existing gas collection and control system to meet the requirements of OAR chapter 340 division 239, the permittee must submit an amended Design Plan to LRAPA that includes any necessary updates or addenda, in accordance with Condition 40.h. The amended Design Plan must satisfy the requirements described in Condition 19. [OAR 340-239-0110(1)(b)]
19. At a minimum, the Design Plan must meet all of the following requirements: [OAR 340-239-0110(1)(c)]
 - 19.a. The Design Plan must be prepared and certified by a professional engineer. The following issues must be addressed in the design: Depths of solid waste, expandability, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, resistance to the solid waste decomposition heat, and ability to isolate individual components or sections for repair to troubleshooting without shutting down entire collection system. [OAR 340-239-0110(1)(c)(A)]
 - 19.b. The Design Plan must provide for the control of the collected gas through the use of a gas collection and control system meeting the requirements of Condition 22 or an alternative method approved pursuant to Condition 29. [OAR 340-239-0110(1)(c)(B)]
 - 19.c. The Design Plan must demonstrate that the gas collection and control system is designed to handle the maximum expected gas generation flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control system equipment. The maximum expected gas generation flow rate must be calculated using the method in Condition 36.e or an alternative method approved pursuant to Condition 29. [OAR 340-239-0110(1)(c)(C)]
 - 19.d. The Design Plan must include any proposed alternatives to the requirements, justification for the need for any proposed alternatives, test methods, procedures, compliance measures, monitoring, and recordkeeping or reporting requirements pursuant to Condition 29. [OAR 340-239-0110(1)(c)(D)]
 - 19.e. The Design Plan must include a description of potential mitigation measures to be used to prevent the release of methane or other pollutants into the atmosphere during the installation or preparation of wells, piping, or other equipment; during repairs or the temporary shutdown of gas collection system components; or, when solid waste is to be excavated and moved. [OAR 340-239-0110(1)(c)(E)]
 - 19.f. For active landfills, the Design Plan must identify areas of the landfill that are closed or inactive. [OAR 340-239-0110(1)(c)(F)]
 - 19.g. The gas collection and control system must be designed to collect gas at an extraction rate to comply with the surface methane emission limits in Conditions 23 and 24, component leak standard in Condition 33.a, and be sufficient to meet all operational and performance standards in this division. The expected gas generation flow rate from the landfill must be calculated pursuant to Condition 36.e. [OAR 340-239-0110(1)(c)(G)]
 - 19.h. The gas collection and control system must be designed to maintain a negative pressure at all wellheads in the collection system without causing air infiltration, including any wellheads connected to the system as a result of expansion or excess surface emissions. [OAR 340-239-0110(1)(c)(H)]
 - 19.i. Any areas of the landfill that contain only asbestos-containing waste or non-decomposable solid waste may be excluded from collection provided that the permittee submits documentation to LRAPA containing the nature of the waste, date of deposition, location and

- amount of asbestos or non-decomposable solid waste deposited in the area. This documentation may be included as part of the Design Plan. [OAR 340-239-0110(1)(c)(I)]
- 19.j. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices necessary to achieve compliance with Condition 22. [OAR 340-239-0110(1)(c)(J)]
20. The permittee of a controlled landfill must place each well or design component as specified in the approved Design Plan. Following initial construction, the permittee of a controlled landfill must install each new component no later than 60 days after the date on which the area controlled by the well is required to be controlled pursuant to this division. [OAR 340-239-0110(1)(e)]
21. The permittee of a landfill subject OAR chapter 340 division 239 must operate, maintain and expand the gas collection system in accordance with the procedures and schedules in the approved Design Plan. [OAR 340-239-0110(1)(f)]

Gas Collection and Control System Operational Standards [OAR 340-239-0110(2)]

22. The permittee subject to OAR chapter 340 division 239 must satisfy all of the following requirements when operating a gas collection and control system: [OAR 340-239-0110(2)(a)]
- 22.a. Route all collected gas to a gas control device or devices, and operate the gas collection and control system continuously except as provided in OAR 340-239-0110(4) and (5). [OAR 340-239-0110(2)(a)(A)]
- 22.b. Operate the gas collection and control system to comply with Condition 19.g. [OAR 340-239-0110(2)(a)(B)]
- 22.c. Design and operate the gas collection system to draw all the gas toward the gas control device or devices. [OAR 340-239-0110(2)(a)(C)]
- 22.d. Design and operate the gas collection system to minimize off-site and on-site migration of subsurface gas in compliance with OAR chapter 340, divisions 093, 094, and 095. [OAR 340-239-0110(2)(a)(D)]
- 22.e. In the event the collection or control system 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 one (1) hour of the collection or control system not operating. [OAR 340-239-0110(2)(a)(E)]
- 22.f. Efforts to repair the collection or control system must be initiated and completed in a manner such that downtime is kept to a minimum, and the collection and control system must be returned to operation. [OAR 340-239-0110(2)(a)(F)]
- 22.g. Any area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than one percent (1%) of the total amount of methane emissions from the landfill. The amount, location, and age of the material must be documented and provided to LRAPA. If data on actual amounts and age is not available, the permittee must estimate based on known information and provide all documentation used to make the estimates. A separate methane emissions estimate must be made for each section proposed for exclusion, and the sum of all such sections must be compared to the methane emissions estimate for the entire landfill, and all calculations, data and documentation used to perform the calculations must be submitted to LRAPA. The methane emissions from each section proposed for exclusion must be computed using the methods provided in Condition 36.e. [OAR 340-239-0110(2)(a)(H)]
- 22.h. The landfill gas extraction components must be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: Convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system must extend as necessary to comply with emission and migration

- standards. Collection devices such as wells and horizontal collectors must be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations must be situated with regard to the need to prevent excessive air infiltration. [OAR 340-239-0110(2)(a)(I)]
- 22.i. Vertical wells must be placed so as not to endanger underlying liners and must address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors must be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices must be designed so as not to allow indirect short circuiting of air into the cover, into the solid waste, into the collection system, or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations. [OAR 340-239-0110(2)(a)(J)]
- 22.j. Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly must include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices must be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness. [OAR 340-239-0110(2)(a)(K)]
- 22.k. Landfill gas must be conveyed to a control system in compliance with Condition 22 through the collection header pipe(s). The gas mover equipment must be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures: [OAR 340-239-0110(2)(a)(L)]
- 22.k.i. For existing collection systems, the flow data must be used to project the maximum flow rate. If no flow data exists, the procedures in Condition 22.k.ii must be used. [OAR 340-239-0110(2)(a)(L)(i)]
- 22.k.ii. For new collection systems, the maximum flow rate must be determined in accordance with Condition 36.e. [OAR 340-239-0110(2)(a)(L)(ii)]

Compliance Standards

23. When required as provided in OAR 340-239-0100 through 340-239-0800, the permittee must comply with Conditions 24. [OAR 340-239-0200]
24. Surface Emission Methane Concentration Limits. Except as provided in OAR 340-239-0110(4) [well raising], OAR 340-239-0110(5) [repairs and temp shutdown of GCS components], Condition 25 [construction activities] and Condition 32 [surface emission monitoring requirements], beginning August 1, 2022, or upon commencing operation of a newly installed gas collection and control system or modification of an existing gas collection and control system pursuant to Conditions 18 through 21, whichever is later, no location on the landfill surface may exceed either of the following methane concentration limits: [OAR 340-239-0200(1)]
- 24.a. 500 ppmv, other than nonrepeatable, momentary readings, as determined by instantaneous surface emissions monitoring conducted in accordance with Condition 36.c.iv; [OAR 340-239-0200(1)(a)]
- 24.b. An average methane concentration limit of 25 ppmv as determined by integrated surface emissions monitoring conducted in accordance with Condition 36.c.v. [OAR 340-239-0200(1)(b)]

Construction Activities

25. The requirements of Conditions 23 and 24 do not apply to the working face of the landfill or to areas of the landfill surface where the landfill cover material has been removed and solid waste has been exposed for the purpose of installing, expanding, replacing, or repairing components of the landfill gas, leachate, or gas condensate collection and removal system, for conducting a remedial action, or for

law enforcement activities requiring excavation; as long as these areas are kept to the minimum size and time duration as possible. [OAR 340-239-0300]

Permanent Shutdown and Removal of the Gas Collection and Control System

26. When a permittee has installed a gas collection and control system pursuant to Conditions 17 through 21, the permittee may permanently shutdown and remove the system only as provided in Conditions 27 and 28. [OAR 340-239-0400]
27. The gas collection and control system at a closed landfill, or at a closed area of a landfill, may be capped or removed provided all of the following requirements are met: [OAR 340-239-0400(1)]
 - 27.a. The gas collection and control system was in operation for at least 15 years, unless the permittee can demonstrate to the satisfaction of LRAPA that due to declining methane rates the permittee will be unable to operate the gas collection and control system for a 15-year period. [OAR 340-239-0400(1)(a)]
 - 27.b. The calculated or measured methane generation rate at the landfill is less than 664 metric tons (732 tons) per year on three (3) successive test dates. For measured methane generation rates, the test dates must be no less than 90 days apart and no more than 180 days apart. The calculated methane generation rate must be calculated pursuant to Condition 36.b. [OAR 340-239-0400(1)(b)]
 - 27.c. Surface methane concentration measurements of methane do not exceed 200 ppmv. [OAR 340-239-0400(1)(c)]
 - 27.d. The permittee submits an Equipment Removal Report to LRAPA pursuant to Condition 40.b. [OAR 340-239-0400(1)(d)]
 - 27.e. The concentration of methane gas at the landfill does not exceed 25 percent of the lower explosive limit for methane concentration in facility structures (excluding gas collection and control system components) or the lower explosive limit for methane concentration at the property boundary. [OAR 340-239-0400(1)(e)]
28. The permittee that has capped or removed a gas collection and control system under Condition 27 must conduct surface methane concentration measurements over the portion of the landfill with the capped or removed gas collection and control system pursuant to Condition 36.c.v for at least eight (8) consecutive calendar quarters after the gas collection and control system is capped or removed. The measurements must comply with the following requirements: [OAR 340-239-0400(2)]
 - 28.a. The walking grid in Condition 36.c.iii may be reduced to 100-foot spacing so long as the walking grid is offset by 25-feet each quarter so that by the end of one year of monitoring, the entire surface area has been monitored every 25 feet; [OAR 340-239-0400(2)(a)]
 - 28.b. If there is no measured concentration of methane of 200 ppmv or greater from the surface of the closed landfill in any of these measurement events, the permittee must submit a final gas collection and control system Closure Notification to LRAPA pursuant to Condition 40.a; and [OAR 340-239-0400(2)(b)]
 - 28.c. If there is any measured concentration of methane of 200 ppmv or greater in any of these measurement events, other than nonrepeatable, momentary readings, as determined by instantaneous surface emissions monitoring, from the surface of the closed landfill, the permittee must comply with Conditions 17 through 40. [OAR 340-239-0400(2)(c)]

Alternative Compliance Options

29. The permittee may request alternatives to the compliance measures, monitoring requirements, test methods and procedures of Conditions 17 through 21 and 31 through 36. Any alternatives requested by the permittee must be submitted in writing to LRAPA and receive written approval from LRAPA

before they may be implemented. Alternative compliance option requests may include, but are not limited to, the following: [OAR 340-239-0500(1)]

- 29.a. Semi-continuous (batch) operation of the gas collection and control system due to insufficient landfill gas flow rates; [OAR 340-239-0500(1)(a)]
 - 29.b. Alternative wind speed requirements for landfills consistently having winds in excess of the limits specified in this division; [OAR 340-239-0500(1)(b)]
 - 29.c. Alternative walking patterns to address potential safety and other issues, such as: steep or slippery slopes, monitoring instrument obstructions, and physical obstructions; [OAR 340-239-0500(1)(c)]
 - 29.d. Exclusion of construction areas and other dangerous areas from landfill surface inspection; and [OAR 340-239-0500(1)(d)]
 - 29.e. Exclusion of paved roads that do not have any cracks, pot holes, or other penetrations from landfill surface inspection. [OAR 340-239-0500(1)(e)]
30. The permittee seeking to use an alternative compliance option pursuant to this rule must provide information satisfactory to LRAPA demonstrating that: [OAR 340-239-0500(2)]
- 30.a. Off-site migration of landfill gas is being, and will be, effectively controlled; and [OAR 340-239-0500(2)(a)]
 - 30.b. The proposed alternatives provide an equivalent level of methane emission control, as compared with the methane controls that would have been required of the permittee under Conditions 17 through 21 and 31 through 36, as applicable. LRAPA may not approve use of an alternative compliance option unless it determines the proposed alternative will provide an equivalent level of methane emission control and effectively control off-site migration of landfill gas. [OAR 340-239-0500(2)(b)]

Monitoring Requirements

31. When required as provided in Conditions 15 through 40, the permittee must comply with the monitoring requirements in Conditions 31 through 35. [OAR 340-239-0600]
32. Surface Emissions Monitoring Requirements. The permittee with a gas collection and control system must conduct quarterly instantaneous and integrated surface monitoring of the landfill surface using the procedures specified in Condition 36.c.v. All of the following requirements apply to such monitoring: [OAR 340-239-0600(1)]
- 32.a. Instantaneous Surface Monitoring. Any reading exceeding a limit specified in Condition 28.c must be recorded as an exceedance and all of the following actions must be taken: [OAR 340-239-0600(1)(a)]
 - 32.a.i. The permittee must record the name of the individual that conducted SEM, date, location, and value of each exceedance, along with retest dates and results. The location of each exceedance must be clearly marked and identified on a topographic map of the landfill, drawn to scale with the location of both the grids and the gas collection system clearly identified. The documentation required under this subsection must be retained in the landfill's files and reported to LRAPA as provided in Conditions 37 through 40. [OAR 340-239-0600(1)(a)(A)]
 - 32.a.ii. The permittee must take corrective action such as, but not limited to, cover maintenance or repair, or well vacuum adjustments. [OAR 340-239-0600(1)(a)(B)]
 - 32.a.iii. The permittee must remonitor the location of the exceedance, and the location must be remonitored within ten (10) days of a measured exceedance. The permittee must comply with all of the following requirements: [OAR 340-239-0600(1)(a)(C)]

- 32.a.iii.1. If the remonitoring of the location shows a second exceedance, the permittee must take additional corrective action and the location must be re-monitored again no later than 10 days after the second exceedance. [OAR 340-239-0600(1)(a)(C)(i)]
- 32.a.iii.2. If the remonitoring shows a third exceedance, the permittee must install a new or replacement collection device and must demonstrate compliance no later than 120 days after detecting the third exceedance. [OAR 340-239-0600(1)(a)(C)(ii)]
- 32.a.iii.3. Any location that initially showed an exceedance but has a methane concentration at the 10-day remonitoring of less than 500 ppmv methane, or 200 ppmv methane if this is to determine compliance with OAR 340-239-0100(6)(b), must be re-monitored one month from the initial exceedance. If the one-month re-monitoring shows a concentration less than 500 ppmv methane, or 200 ppmv methane if this is to determine compliance with OAR 340-239-0100(6)(b), no further monitoring of that location is required until the next quarterly monitoring period. If the one-month re-monitoring shows an exceedance, the permittee must install a new or replacement well to achieve compliance no later than 120 days after detecting the third exceedance. [OAR 340-239-0600(1)(a)(C)(iii)]
- 32.a.iii.4. For any location where monitored methane concentration equals or exceeds 500 ppmv, or 200 ppmv methane if this is to determine compliance with OAR 340-239-0100(6)(b), three (3) times within a quarterly period, a new well or other collection device must be installed within 120 days of the initial exceedance. 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 DEQ for approval pursuant to Conditions 29 and 30. [OAR 340-239-0600(1)(a)(C)(iv)]
- 32.a.iv. The permittee of a closed or inactive landfill, or of any closed or inactive areas on an active landfill that has no monitored exceedances of the limits specified in Condition 24.a after four (4) consecutive quarterly instantaneous surface monitoring periods, may shift to annual instantaneous surface monitoring. [OAR 340-239-0600(1)(a)(D)]
- 32.a.v. The permittee that has shifted to annual instantaneous surface monitoring under Condition 32.a.iii must return to quarterly instantaneous surface monitoring upon any exceedances of the limits specified in Condition 24.a that cannot be remediated within 10 days or upon any exceedances detected during an LRAPA inspection. [OAR 340-239-0600(1)(a)(E)]
- 32.b. Integrated Surface Monitoring. Any reading exceeding the limit specified in Condition 24.b must be recorded as an exceedance and all of the following actions must be taken: [OAR 340-239-0600(1)(b)]
 - 32.b.i. The permittee must record the average surface concentration measured as methane for each grid along with retest dates and results. The location of the grids and the gas collection system must be clearly marked and identified on a topographic map of the landfill drawn to scale. The documentation required under this subsection must be retained in the landfill's files and reported to LRAPA as provided in Conditions 37 through 40. [OAR 340-239-0600(1)(b)(A)]
 - 32.b.ii. Within 10 days of a measured exceedance, corrective action must be taken by the permittee such as, but not limited to; cover maintenance or repair, or well vacuum

- adjustments and the grid must be remonitored. The permittee must comply with all of the following requirements: [OAR 340-239-0600(1)(b)(B)]
- 32.b.ii.1. If the remonitoring of the grid shows a second exceedance, additional corrective action must be taken and the location must be re-monitored again no later than 10 days after the second exceedance. [OAR 340-239-0600(1)(b)(B)(i)]
 - 32.b.ii.2. If the remonitoring in Condition 32.b.ii.1 shows a third exceedance, the permittee must install a new or replacement well to achieve compliance no later than 120 days after detecting the third exceedance. [OAR 340-239-0600(1)(b)(B)(ii)]
 - 32.b.iii. The permittee of a closed or inactive landfill, or of any closed or inactive areas on an active landfill that has no monitored exceedances of the limits specified in Condition 24.b after four (4) consecutive quarterly integrated surface monitoring periods, may shift to annual integrated surface monitoring. [OAR 340-239-0600(1)(b)(C)]
 - 32.b.iv. The permittee that has shifted to annual integrated surface monitoring under Condition 32.b.iii must return to quarterly integrated surface monitoring upon the occurrence of any exceedances of the limits specified in Condition 24.b during annual monitoring or detected during any LRAPA inspection. [OAR 340-239-0600(1)(b)(D)]
33. Gas Control System Equipment Monitoring. The permittee must monitor the gas control system using the following procedures: [OAR 340-239-0600(2)]
- 33.a. Components containing landfill gas and under positive pressure must be monitored quarterly for leaks. Any component leak over 500 ppmv methane must be tagged and repaired within 10 days. Any component leak over 250 ppmv must be recorded pursuant to Condition 38.j. [OAR 340-239-0600(2)(c)]
34. Cover integrity. The permittee must implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis. The cover must conform with requirements in OAR chapter 340, divisions 094 and 095. [OAR 340-239-0600(4)]
35. The monitoring requirements of OAR chapter 340 division 239 apply at all times, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. Monitoring system repairs completed in response to monitoring system malfunctions to return the monitoring system to operation must be completed as expeditiously as practicable. [OAR 340-239-0600(5)]

Test Methods and Procedures Requirements

36. When required as provided in Conditions 15 through 35 and 37 through 40, the permittee must comply with the test methods and procedures for monitoring and measurements OAR chapter 340 division 239. [OAR 340-239-0800]
- 36.a. Hydrocarbon Detector Specifications. Any instrument used for the measurement of methane must be a gas detector, or other equivalent instrument approved by LRAPA, that meets the calibration, specifications, and performance criteria of EPA Reference Method 21, Determination of Volatile Organic Compound Leaks, 40 CFR part 60, Appendix A, except that those rules must be applied with the following adjustments: [OAR 340-239-0800(1)]
 - 36.a.i. “Methane” replaces all references to volatile organic compounds (VOC); [OAR 340-239-0800(1)(a)]

- 36.a.ii. The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air; [OAR 340-239-0800(1)(b)]
- 36.a.iii. To meet the performance evaluation requirements in section 8.1 of EPA Method 21 of 40 CFR part 60, appendix A, the instrument evaluation procedures of section 8.1 of EPA Method 21 of 40 CFR part 60, appendix A must be used; and [OAR 340-239-0800(1)(c)]
- 36.a.iv. The calibration procedures provided in sections 8 and 10 of EPA Method 21 of 40 CFR part 60, appendix A must be followed immediately before commencing a surface monitoring survey. [OAR 340-239-0800(1)(d)]
- 36.b. Determination of methane generation rate. The methane generation rate must include wastes received up to December 31 of the previous year. The methane generation rate must be determined as follows, as applicable: [OAR 340-239-0800(2)]
 - 36.b.i. For landfills with Passive Venting Systems, the methane generation rate must be determined pursuant to both of the following and is the higher of these determined values: [OAR 340-239-0800(2)(c)]
 - 36.b.i.1. The permittee must measure actual landfill gas flow rates (in units of standard cubic feet per minute (scfm)) by using a flow measuring device such as a standard pitot tube and methane concentration (percent by volume) using a hydrocarbon detector meeting the requirements of Condition 36.a from each venting pipe that is within the waste mass. Each gas flow rate must then be multiplied by its corresponding methane concentration to obtain the individual methane flow rate. The individual methane flow rates must be added together to determine the methane generation rate. [OAR 340-239-0800(2)(c)(B)]
- 36.c. Surface Emissions Monitoring Procedures. The permittee must measure the landfill surface concentration of methane using a hydrocarbon detector meeting the requirements of Condition 36.a. The landfill surface must be inspected and monitored quarterly using all of the following procedures: [OAR 340-239-0800(3)]
 - 36.c.i. Monitoring Area. The entire landfill surface must be divided into individually identified 50,000 square foot grids and include the entire perimeter of the collection area. The grids must be used for both instantaneous and integrated surface emissions monitoring. The monitoring must comply with all of the following requirements: [OAR 340-239-0800(3)(a)]
 - 36.c.ii. Surface monitoring must be performed in accordance with section 8.3.1 of EPA Method 21 of appendix A of 40 CFR Part 60, except that the probe inlet must be placed within two (2) inches of the landfill surface while traversing the grid. [OAR 340-239-0800(3)(a)(A)]
 - 36.c.iii. The walking pattern must be no more than a 25-foot spacing interval and must traverse each monitoring grid and: [OAR 340-239-0800(3)(a)(B)]
 - 36.c.iii.1. If the permittee has no exceedances of the limits specified in Conditions 23 and 24 after any four consecutive quarterly monitoring periods, the walking pattern spacing may be increased to 100-foot intervals. The permittee must return to a 25-foot spacing interval upon any exceedances of the limits specified in Conditions 23 and 24 that cannot be remediated within 10 days or upon any exceedances detected during a LRAPA inspection; and [OAR 340-239-0800(3)(a)(B)(i)]
 - 36.c.iii.2. If the permittee can demonstrate that in the past three (3) years before the effective date of this division that there were no measured exceedances of the limit specified in Condition 24.a by annual or

quarterly monitoring, the permittee may increase the walking pattern spacing to 100-foot intervals. The permittee must return to a 25-foot spacing interval upon any exceedances of the limits specified in Conditions 23 and 24 that cannot be remediated within 10 days or upon any exceedances detected during a LRAPA inspection. [OAR 340-239-0800(3)(a)(B)(ii)]

- 36.c.iii.3. The permittee must use a wind barrier, similar to a funnel, when onsite average wind speed exceeds four (4) miles per hour or two (2) meters per second or gusts exceeding ten miles per hour. Average on-site wind speed must also be determined in an open area at 5-minute intervals using an on-site anemometer with a continuous recorder and data logger for the entire duration of the monitoring event. The wind barrier must surround the SEM monitor, and must be placed on the ground, to ensure wind turbulence is blocked. SEM cannot be conducted if average wind speed exceeds 25 miles per hour. [OAR 340-239-0800(3)(a)(C)]
- 36.c.iii.4. Monitoring must be performed during typical meteorological conditions. [OAR 340-239-0800(3)(a)(D)]
- 36.c.iv. Instantaneous Surface Emissions Monitoring Procedures must comply with the following: [OAR 340-239-0800 and OAR 340-239-0800(3)(b)]
 - 36.c.iv.1. The permittee must record any instantaneous surface readings of methane 100 ppmv or greater. The permittee must document if the reading is a confirmed reading or whether it is a nonrepeatable, momentary reading; [OAR 340-239-0800(3)(b)(A)]
 - 36.c.iv.2. Surface areas of the landfill that exceed a methane concentration limit of 500 ppmv must be marked and remediated pursuant to Condition 32.a; [OAR 340-239-0800(3)(b)(B)]
 - 36.c.iv.3. Surface areas of the landfill that exceed a methane concentration limit of 250 ppmv must be monitored in a five (5) foot grid around the location to determine the extents of the methane leak. [OAR 340-239-0800(3)(b)(C)]
 - 36.c.iv.4. The wind speed must be recorded during the sampling period; [OAR 340-239-0800(3)(b)(D)]
 - 36.c.iv.5. The landfill surface areas with cover penetrations, distressed vegetation, cracks or seeps must also be inspected visually and with a hydrocarbon detector meeting the requirements of Condition 36.a. If a landfill would not be subject to quarterly penetration monitoring as otherwise required pursuant to another state or federal regulation such as, including: OAR 340-236-0500, 40 CFR part 63 subpart AAAAA, 40 CFR part 60 subpart WWW or XXX, and if no methane is detected with the hydrocarbon detector at a specific penetration point for four (4) consecutive quarters, then the permittee may reduce monitoring to annually at that penetration. If any methane concentration is detected during annual monitoring, the penetration location must return to quarterly monitoring; and [OAR 340-239-0800(3)(b)(E)]
 - 36.c.iv.6. The location of each monitored exceedance must be marked and the location and concentration recorded. The location must be recorded using an instrument with an accuracy of at least four (4) meters. The coordinates must be in decimal degrees with at least five decimal places. [OAR 340-239-0800(3)(b)(F)]

- 36.c.v. Integrated Surface Emissions Monitoring Procedures must comply with the following: [OAR 340-239-0800(3)(c)]
 - 36.c.v.1. Integrated surface readings must be recorded and then averaged for each grid; [OAR 340-239-0800(3)(c)(A)]
 - 36.c.v.2. Individual monitoring grids that exceed an average methane concentration of 25 ppmv must be identified and remediated pursuant to Condition 32.b; and [OAR 340-239-0800(3)(c)(B)]
 - 36.c.v.3. The wind speed must be recorded during the sampling period. [OAR 340-239-0800(3)(c)(C)]
- 36.d. Gas Collection and Control System Leak Inspection Procedures. The permittee must measure leaks using a hydrocarbon detector meeting the requirements of Condition 36.a. [OAR 340-239-0800(4)]
- 36.e. Determination of Expected Gas Generation Flow Rate. The permittee must determine the expected gas generation flow rate as prescribed in 40 CFR §§ 98.343(1)(a) or 63.1960(a)(1), which are incorporated by reference herein. [OAR 340-239-0800(5)]
- 36.f. Alternative Test Methods. Notwithstanding any other provision in Condition 36, the permittee may use alternative test methods for any of the test methods described in Condition 36 provided that the alternative methods are approved in writing by LRAPA pursuant to Conditions 29 and 30. [OAR 340-239-0800(10)]

Recordkeeping Requirements

- 37. When required as provided in Conditions 15 through 40, the permittee must comply with the recordkeeping and reporting requirements in Conditions 38 and 39. [OAR 340-239-0700]
- 38. The permittee subject OAR chapter 340 division 239 must maintain the following records for at least five (5) years: [OAR 340-239-0700(2)(a)]
 - 38.a. All gas collection system downtime exceeding five (5) days, including dates of the downtime, individual well shutdown and disconnection times, the reason for the downtime, and any corrective actions conducted in response to the downtime. [OAR 340-239-0700(2)(a)(A)]
 - 38.b. All instantaneous surface readings of 100 ppmv methane or greater. All exceedances of the limits in Conditions 23 and 24, including the location of the leak (or affected grid), leak concentration in ppmv methane, date and time of measurement, the action taken to repair the leak, date of repair, any required remonitoring and the remonitored concentration in ppmv methane, wind speed during surface sampling, and the installation date and location of each well installed as part of a gas collection system expansion; [OAR 340-239-0700(2)(a)(C)]
 - 38.c. Monthly solid waste acceptance rate, for active landfills or landfills that have accepted waste within the last five (5) years; [OAR 340-239-0700(2)(a)(F)]
 - 38.d. The current amount of waste-in-place including waste composition; [OAR 340-239-0700(2)(a)(G)]
 - 38.e. The nature, location, amount, and date of deposition of nondecomposable waste for any landfill areas excluded from the collection system; [OAR 340-239-0700(2)(a)(H)]
 - 38.f. Descriptions of mitigation measures taken to prevent the release of methane or other emissions into the atmosphere: [OAR 340-239-0700(2)(a)(J)]
 - 38.f.i. When solid waste was brought to the surface during the installation or preparation of wells, piping, or other equipment; [OAR 340-239-0700(2)(a)(J)(i)]
 - 38.f.ii. During repairs or the temporary shutdown of gas collection system components; and [OAR 340-239-0700(2)(a)(J)(ii)]

- 38.f.iii. When solid waste was excavated and moved. [OAR 340-239-0700(2)(a)(J)(iii)]
- 38.g. Any construction activities pursuant to Condition 25. Records must contain the following information: [OAR 340-239-0700(2)(a)(K)]
 - 38.g.i. A description of the actions being taken, the areas of the landfill that will be affected by these actions, the reason the actions are required, and any landfill gas collection system components that will be affected by these actions; [OAR 340-239-0700(2)(a)(K)(i)]
 - 38.g.ii. Construction start and finish dates, projected equipment installation dates, and projected shut down times for individual gas collection system components; and [OAR 340-239-0700(2)(a)(K)(ii)]
 - 38.g.iii. A description of the mitigation measures taken to minimize methane emissions and other potential air quality impacts; [OAR 340-239-0700(2)(a)(K)(iii)]
- 38.h. The permittee who converts waste-in-place from volume to mass, must keep readily accessible, records of the annual recalculation of site-specific density, design capacity, and the supporting documentation; [OAR 340-239-0700(2)(a)(O)]
- 38.i. The date of initial placement of waste in newly constructed landfill cells; and [OAR 340-239-0700(2)(a)(R)]
- 38.j. Documentation of any component leaks above 250 ppmv methane detected pursuant to Condition 33.a and all repairs performed in response to any component leaks above 500 ppmv. [OAR 340-239-0700(2)(a)(S)]
- 38.k. The maximum design capacity of the landfill. [OAR 340-239-0700(2)(a)(T)]
- 39. Record Retention: The permittee must maintain copies of the records and reports required by OAR chapter 340 division 239 and provide the records and reports to LRAPA within five (5) business days upon request. [OAR 340-239-0700(2)(d)]

Reporting Requirements

- 40. When required as provided in Condition 15 through 40, the permittee must comply with the reporting requirements in Condition 40.a through 40.k: [OAR 340-239-0700(3)]
 - 40.a. Closure Notification. The permittee that has ceased accepting waste must submit a Closure Notification to LRAPA within 30 days of waste acceptance cessation and provide the information in Conditions 40.a.i and 40.a.ii: [OAR 340-239-0700(3)(a)]
 - 40.a.i. The Closure Notification must include the last day solid waste was accepted, the anticipated closure date of the landfill, and the estimated waste-in-place; and [OAR 340-239-0700(3)(a)(A)]
 - 40.a.ii. LRAPA may request additional information as necessary to verify that permanent closure has taken place in accordance with the requirements of any applicable regulations, requirements, or ordinances in effect at the time of closure. [OAR 340-239-0700(3)(a)(B)]
 - 40.b. Equipment Removal Report. The permittee must submit a gas collection and control system Equipment Removal Report to LRAPA 30 days prior to well capping, removal or cessation of operation of the gas collection, treatment, or control system equipment. The report must contain the following information: [OAR 340-239-0700(3)(b)]
 - 40.b.i. A copy of the Closure Notification submitted pursuant to Condition 40.a; [OAR 340-239-0700(3)(b)(A)]
 - 40.b.ii. A copy of the Initial Performance Test Report or other documentation demonstrating that the gas collection and control system has been installed and operated for a

- minimum of 15 years, unless the permittee can demonstrate to the satisfaction of LRAPA that due to declining methane rates the landfill is unable to operate the gas collection and control system for a 15-year period; and [OAR 340-239-0700(3)(b)(B)]
- 40.b.iii. Surface emissions monitoring results needed to verify that landfill surface methane concentration measurements do not exceed the limits specified in Condition 24. [OAR 340-239-0700(3)(b)(C)]
- 40.c. Semi-Annual Report. The permittee must prepare semi-annual reports for the periods of January 1 through June 30 of each year, unless otherwise approved in writing by LRAPA. The Semi-Annual Report will be due on **August 15**, unless otherwise approved in writing by LRAPA. The Semi-Annual Report must contain the following information: [OAR 340-239-0700(3)(c)]
- 40.c.i. All instantaneous surface readings of 100 ppmv or greater. All exceedances of the limits in Conditions 23 and 24 [compliance standards] and Condition 33.a [component leaks] including the location of the leak (or affected grid), leak concentration in ppmv, date and time of measurement, the action taken to repair the leak, date of repair, any required remonitoring and the remonitored concentration in ppmv, wind speed during surface sampling, the concentration recorded at each location for which an exceedance was recorded in the previous month, and the installation date and location of each well installed as part of a gas collection system expansion; [OAR 340-239-0700(3)(c)(A)]
- 40.d. Annual Report. The permittee subject to OAR chapter 340 division 239 must prepare an Annual Report for the period of January 1 through December 31 of each year. Each Annual Report must be submitted to LRAPA by **February 15** of the following year, unless otherwise specified by LRAPA. The Annual Report must consist of the semi-annual and the following annual reporting requirements: [OAR 340-239-0700(3)(d)]
- 40.d.i. Landfill name, owner and operator, address, and permit number as issued according to OAR chapter 340 division 216; [OAR 340-239-0700(3)(d)(A)]
- 40.d.ii. Average composition of the landfill gas collected over the reporting period (reported in percent methane and percent carbon dioxide by volume); [OAR 340-239-0700(3)(d)(C)]
- 40.d.iii. Most recent topographic map of the site showing the areas with final cover and a geomembrane and the areas with final cover without a geomembrane with corresponding percentages over the landfill surface; [OAR 340-239-0700(3)(d)(I)]
- 40.d.iv. The information required Conditions 38.a, 38.b, 38.d, 38.f, and 38.g ; and [OAR 340-239-0700(3)(d)(J)]
- 40.d.v. Instrument specifications for all instruments used for monitoring compliance with this division. [OAR 340-239-0700(3)(d)(K)]
- 40.e. Waste-in-Place Report. The permittee subject to the requirements of Condition 15 must prepare an initial Waste-in-Place Report and annual Waste-in-Place reports each following year. Each annual Waste-in-Place Report must be prepared for the period of January 1 through December 31 of each year and be submitted to LRAPA by February 15 of the following year. The report also must include: [OAR 340-239-0700(3)(e)]
- 40.e.i. Landfill name, owner and operator, address, and the permit number as issued according to division 216; [OAR 340-239-0700(3)(e)(A)]
- 40.e.ii. The landfill's status (active, closed, or inactive) and the estimated waste-in-place, as of December 31 of the prior year, in tons; [OAR 340-239-0700(3)(e)(B)]
- 40.e.iii. A description of the known and assumed waste composition in the landfill; and [OAR 340-239-0700(3)(e)(C)]

- 40.e.iv. The most recent topographic map of the site showing the areas with final cover and a geomembrane and the areas with final cover without a geomembrane with a calculation of the corresponding percentage geomembrane coverage over the landfill surface. [OAR 340-239-0700(3)(e)(D)]
- 40.f. Methane Generation Rate Report. The permittee subject to the requirements of Condition 15 must calculate the methane generation rate using the calculation procedures specified in Condition 36.b and report the results, along with a summary of efforts being implemented at the landfill to reduce landfill gas emissions, to LRAPA: [OAR 340-239-0700(3)(f)]
 - 40.f.i. The report must include the results of a visual inspection of the landfill cover and any actions done to fix leaks and minimize methane releases. [OAR 340-239-0700(3)(f)(D)]
- 40.g. Collection and Control System Design Plan. The Collection and Control System Design Plan must be prepared and approved by a professional engineer and must meet the following requirements: [OAR 340-239-0700(3)(i)]
 - 40.g.i. The collection and control system as described in the design plan must meet the design requirements in Conditions 18 through 21; [OAR 340-239-0700(3)(i)(A)]
 - 40.g.ii. If LRAPA does not approve or disapprove the Design Plan, or does not request that additional information be submitted within 90 days of receipt, then the permittee may continue with implementation of the Design Plan with the recognition that the permittee is proceeding at their own risk. In the event that the Design Plan is required to be modified to obtain approval, the permittee must take any steps necessary to conform any prior actions to the approved Design Plan; and [OAR 340-239-0700(3)(i)(B)]
 - 40.g.iii. If the permittee chooses to demonstrate compliance with the emission control requirements of OAR chapter 340 division 239 using a treatment system as defined in OAR chapter 340 division 239, then the permittee must prepare a site-specific treatment system monitoring plan as specified in OAR 239-0110(2)(d)(C)). [OAR 340-239-0700(3)(i)(C)]
- 40.h. Amended Design Plan. The permittee who has already been required to submit a design plan under Conditions 22 must submit an Amended Design Plan to LRAPA within 90 days of any event that requires a change to the Design Plan as follows: [OAR 340-239-0700(3)(j)]
 - 40.h.i. At least 90 days before expanding operations to an area not covered by the previously approved Design Plan; and [OAR 340-239-0700(3)(j)(A)]
 - 40.h.ii. Prior to installing, repairing, or expanding the gas collection system in a way that is not consistent with the Design Plan previously approved by LRAPA. [OAR 340-239-0700(3)(j)(B)]
- 40.i. Instantaneous Surface Emission Monitoring Report. [OAR 340-239-0700(3)(l)]
 - 40.i.i. An Instantaneous Surface Emissions Monitoring Report required under Conditions 40.i.i.1 or 40.i.i.2 must include documentation of the following: [OAR 340-239-0700(3)(l)(B)]
 - 40.i.i.1. Any corrective actions taken as a result of the surface emissions monitoring and clearly identify the location, date and time (to nearest second), average wind speeds including wind gusts, and reading (in parts per million) of concentrations of methane above 100 ppmv, other than non-repeatable, momentary readings. For location, the permittee must determine the latitude and longitude coordinates using an instrument with an accuracy of at least four meters. The coordinates

- must be in decimal degrees with at least five decimal places; and [OAR 340-239-0700(3)(I)(B)(i)]
- 40.i.i.2. The results of the most recent methane generation rate calculation. [OAR 340-239-0700(3)(I)(B)(ii)]
- 40.j. Notwithstanding any other provision of OAR chapter 340 division 239, when any provision of OAR chapter 340 division 239 requires that any report, or information be submitted by the permittee, the report must contain certification by a responsible official of the truth, accuracy, and completeness of the report. This certification, and any other certification required under this division, must state that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete. [OAR 340-239-0700(3)(q)]
- 40.k. Design Capacity Report. An amended design capacity report must be submitted providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill to meet or exceed 2.5 million megagrams and 2.5 million cubic meters. This increase in design capacity may result from an increase in the permitted volume of the landfill or an increase in the density. [OAR 340-239-0700(3)(r)]

40 CFR part 63 subpart ZZZZ – RICE Requirements (EU: GEN):

Compliance Requirements

41. The permittee must comply with the applicable emissions limitations, operating limitations, and other requirements of 40 CFR part 63 subpart ZZZZ no later than May 3, 2013. [40 CFR 63.6595(a)(1) and LRAPA 44-0150(5)(ffff)]
42. The permittee must meet the applicable notification requirements in Conditions 68 through 70 and 40 CFR part 63, subpart A. [40 CFR 63.6595(c) and LRAPA 44-0150(5)(ffff)]

Emission Limitations, Operating Limitations, and Other Requirements:

43. The permittee must be in compliance with the numerical emission limitation established in 40 CFR part 63 subpart ZZZZ based on the results of testing the average of three (3) 1-hour runs using the testing requirements and procedures in Conditions 52 through 55 and Table 4. [40 CFR 63.6603 and LRAPA 44-0150(5)(ffff)]
44. The permittee of an existing stationary reciprocating internal combustion engine (RICE) located at an area source of hazardous air pollutants (HAPs) emissions, the permittee must comply with the requirements and operating limitations in 40 CFR part 63 subpart ZZZZ Table 2d. [40 CFR 63.6603(a) and LRAPA 44-0150(5)(ffff)]
45. The permittee must use diesel fuel that meets the requirements in 40 CFR 1090.305 for nonroad diesel fuel. [40 CFR 63.6604(a) and LRAPA 44-0150(5)(ffff)]
- 45.a. Except as specified in 40 CFR 1090.300(a), diesel fuel must meet the ultra-low sulfur diesel (ULSD) per-gallon standards of Conditions 45.a.i and 45.a.ii. [40 CFR 1090.305(a)]
- 45.a.i. Sulfur standard. Maximum sulfur content of 15 ppm. [40 CFR 1090.305(b)]
- 45.a.ii. Cetane index or aromatic content. Diesel fuel must meet either the standards in Condition 45.a.ii.1 or 45.a.ii.2: [40 CFR 1090.305(c)]
- 45.a.ii.1. Minimum cetane index of 40. [40 CFR 1090.305(c)(1)]
- 45.a.ii.2. Maximum aromatic content of 35 volume percent. [40 CFR 1090.305(c)(2)]
46. The permittee must be in compliance with the emission limitations, operating limitations, and other requirements in Conditions 43 through 74 at all times. [40 CFR 63.6605(a) and LRAPA 44-0150(5)(ffff)]

47. At all times the permittee must operate and maintain the generator engine (EU: GEN), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to LRAPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b) and LRAPA 44-0150(5)(ffff)]
48. The permittee must minimize the engine's (EU: GEN) time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which the time the emission standards applicable to all the other than startup in Table 2d of 40 CFR part 63 subpart ZZZZ apply. [40 CFR 63.6625(h) and LRAPA 44-0150(5)(ffff)]
49. The permittee must demonstrate initial compliance with each emission limitation, operation limitation, and other requirement that applies to the engine according to 40 CFR part 63 subpart ZZZZ Table 5. [40 CFR 63.6630(a) and LRAPA 44-0150(5)(ffff)]

Testing and Initial Compliance Requirements:

50. The permittee must conduct an initial performance test or other initial compliance demonstration according to 40 CFR part 63 subpart ZZZZ Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in Conditions 41 and 42 and according to the provisions in 40 CFR 63.7(a)(2) in Table 8. [40 CFR 63.6612(a) and LRAPA 44-0150(5)(ffff)]
51. The permittee is not required to conduct an initial performance test on the generator engine (EU: GEN) for which a performance test has been previously conducted, but the test must meet all of the conditions described in Conditions 51.a through 51.d. [40 CFR 63.6612(b) and LRAPA 44-0150(5)(ffff)]
 - 51.a. The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly. [40 CFR 63.6612(b)(1)]
 - 51.b. The test must not be older than 2 years. [40 CFR 63.6612(b)(2)]
 - 51.c. The test must be reviewed and accepted by LRAPA. [40 CFR 63.6612(b)(3)]
 - 51.d. Either no process or equipment changes must have been made since the test was performed, or the permittee must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes. [40 CFR 63.6612(b)(4)]
52. The permittee must conduct each performance test in 40 CFR part 63 subpart ZZZZ Table 4 that applies to the generator engine (EU: GEN). [40 CFR 63.6620(a) and LRAPA 44-0150(5)(ffff)]
53. Each performance test must be conducted according to the requirements of 40 CFR part 63 subpart ZZZZ Table 4. If the permittee owns or operates a non-operational stationary RICE that is subject to performance testing, the permittee does not need to start up the engine (EU: GEN) solely to conduct the performance test. The permittee of a non-operational engine can conduct the performance test when the engine is started up again. [40 CFR 63.6620(b) and LRAPA 44-0150(5)(ffff)]
54. The permittee must conduct three (3) separate test runs for each performance test required as specified in 40 CFR 63.7(e)(3). Each test run must last at least one (1) hour, unless otherwise specified in Conditions 43 through 74. [40 CFR 63.6620(d) and LRAPA 44-0150(5)(ffff)]
55. The permittee must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO₂). If pollutant concentrations are to be corrected to 15 percent oxygen and CO₂ concentration is measured in lieu of oxygen concentration measurement, a CO₂ correction factor is needed. Calculate

the CO₂ correction factor as described in Conditions 55.a through 55.c. [40 CFR 63.6620(e)(2) and LRAPA 44-0150(5)(ffff)]

- 55.a. Calculate the fuel-specific F_O value for the fuel burned during the test using values obtained from EPA Method 19, Section 5.2, and the following equation: [40 CFR 63.6620(e)(2)(i)]

Equation 1

$$F_O = \frac{0.209 F_d}{F_c}$$

Where:

- F_O = Fuel factor based on the ratio of oxygen volume to the ultimate CO₂ volume produced by the fuel at zero percent excess air.
0.209 = Fraction of air that is oxygen, percent/100.
F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from EPA Method 19, dsm³/J (dscf/10⁶ Btu).
F_c = Ratio of the volume of CO₂ produced to the gross calorific value of the fuel from EPA Method 10, dsm³/J (dscf/10⁶ Btu).

- 55.b. Calculate the CO₂ correction factor for correcting measurement data to 15 percent O₂, as follows: [40 CFR 63.6620(e)(2)(ii)]

Equation 2

$$X_{CO_2} = \frac{5.9}{F_O}$$

Where:

- X_{CO₂} = CO₂ correction factor, percent.
5.9 = 20.9 percent O₂ – 15 percent O₂, the defined O₂ correction value, percent.
F_O = Fuel factor based on the ratio of oxygen volume to the ultimate CO₂ volume produced by the fuel at zero percent excess air.

- 55.c. Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O₂ using CO₂ as follows: [40 CFR 63.6620(e)(2)(iii)]

Equation 3

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2}$$

Where:

- C_{adj} = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O₂.
C_d = Measured concentration of CO, THC, and formaldehyde, uncorrected
X_{CO₂} = CO₂ correction factor, percent.
%CO₂ = Measured CO₂ concentration measured, dry basis, percent.

Monitoring Requirements:

56. The permittee must comply with emission and operating limitations and must monitor and collect data according to Conditions 43 through 74. [40 CFR 63.6635(a) and LRAPA 44-0150(5)(ffff)]
57. Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, the permittee must monitor continuously at all times that the

stationary RICE (EU: GEN) is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [40 CFR 63.6635(b) and LRAPA 44-0150(5)(ffff)]

58. The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculation used to report emission or operating levels. The permittee must, however, use all the valid data collected during all other periods. [40 CFR 63.6635(c) and LRAPA 44-0150(5)(ffff)]
59. The permittee must report each instance in which the generator engine did not meet each emission limitation or operating limitation in Table 2d. These instances are deviations from the emission and operating limitations in Conditions 43 through 74. These deviations must be reported according to the requirements in Conditions 71 through 74. If the permittee changes the catalyst, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablishes the values of the operating parameters, the permittee must also conduct a performance test to demonstrate that the permittee is meeting the required emission limitation applicable to the stationary RICE. [40 CFR 63.6640(b) and LRAPA 44-0150(5)(ffff)]

Recordkeeping Requirements:

60. The permittee must keep records described in Conditions 60.a through 60.e: [40 CFR 63.6655(a) and LRAPA 44-0150(5)(ffff)]
 - 60.a. A copy of each notification and report that the permittee submitted to comply with 40 CFR part 63 subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee, according to the requirement in 40 CFR 63.10(b)(2)(xiv) in Table 8. [40 CFR 63.6655(a)(1)]
 - 60.b. Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(2)]
 - 60.c. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii) in Table 8. [40 CFR 63.6655(a)(3)]
 - 60.d. Records of all required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(4)]
 - 60.e. Records of actions taken during periods of malfunction to minimize emissions in accordance with Condition 47, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)(5)]
61. The permittee must keep records in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1) in Table 8. [40 CFR 63.6660(a) and LRAPA 44-0150(5)(ffff)]
62. As specified in 40 CFR 63.10(b)(1) in Table 8, the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.6660(b) and LRAPA 44-0150(5)(ffff)]
63. The permittee must keep each record readily accessible in hard copy or electronic form for at least five (5) years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1) in Table 8. [40 CFR 63.6660(c) and LRAPA 44-0150(5)(ffff)]

Reporting Requirements:

64. The engine (EU: GEN) percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the

written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided. [40 CFR 63.6620(i) and LRAPA 44-0150(5)(ffff)]

65. The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements of Conditions 68 through 70. [40 CFR 63.6630(c) and LRAPA 44-0150(5)(ffff)]
66. The permittee must report each instance in which the generator engine did not meet each emission limitation or operation limitation in Table 2d. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in Conditions 71 through 74. If the permittee changes the catalyst, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablishes the values of the operating parameters, the permittee must also conduct a performance test to demonstrate that the generator engine is meeting the required emission limitation applicable to the stationary RICE. [40 CFR 63.6640(b) and LRAPA 44-0150(5)(ffff)]
67. The permittee must report each instance in which the engine (EU: GEN) did not meet the requirements in 40 CFR part 63 subpart ZZZZ Table 8 that are applicable. [40 CFR 63.6640(e) and LRAPA 44-0150(5)(ffff)]
68. The permittee must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(f)(4), 63.9(b) through (e) and (h) in Table 8 by the dates specified, as applicable. [40 CFR 63.6645(a) and LRAPA 44-0150(5)(ffff)]
69. The permittee must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required by 40 CFR 3.7(b)(1) in Table 8. [40 CFR 63.6645(g) and LRAPA 44-0150(5)(ffff)]
70. The permittee that is required to conduct a performance test or other initial compliance demonstration as specified in 40 CFR part 63 subpart ZZZZ Tables 4 and 5, must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii). [40 CFR 63.6645(h) and LRAPA 44-0150(5)(ffff)]
 - 70.a. For each initial compliance demonstration required in 40 CFR part 63 subpart ZZZZ Table 5 that does not include a performance test, the permittee must submit a Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration. [40 CFR 63.6645(h)(1)]
71. The permittee must submit each report in 40 CFR part 63, subpart ZZZZ Table 7 that applies to the generator engine (EU: GEN). [40 CFR 63.6650(a) and LRAPA 44-0150(5)(ffff)]
72. Unless LRAPA has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report by the date in 40 CFR part 63 subpart ZZZZ Table 7 and according to the requirements in Conditions 72.a through 72.d. [40 CFR 63.6650(b) and LRAPA 44-0150(5)(ffff)]
 - 72.a. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for the permittee's generator engine (EU: GEN) in Conditions 41 and 42 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified in Conditions 41 and 42. [40 CFR 63.6650(b)(1)]
 - 72.b. For semiannual Compliance reports, the first Compliance report must be delivered no later than August 15 or February 15, whichever date follows the end of the first calendar half after the compliance date that is specified in Conditions 41 and 42. [40 CFR 63.6650(b)(2)]

- 72.c. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. [40 CFR 63.6650(b)(3)]
- 72.d. For semiannual Compliance reports, each subsequent Compliance report must be delivered no later than **August 15 or February 15**, whichever date is the first date following the end of the semiannual reporting period. [40 CFR 63.6650(b)(4)]
- 73. The permittee must provide the information required in Conditions 73.a through 73.e in the Compliance report. [40 CFR 63.6650(c) and LRAPA 44-0150(5)(ffff)]
 - 73.a. Company name and address. [40 CFR 63.6650(c)(1)]
 - 73.b. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. [40 CFR 63.6650(c)(2)]
 - 73.c. Date of report and beginning and ending dates of the reporting period. [40 CFR 63.6650(c)(3)]
 - 73.d. If the generator engine has a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction of an affected source to minimize emissions in accordance with Condition 47, including actions taken to correct a malfunction. [40 CFR 63.6650(c)(4)]
 - 73.e. If there are no deviations from any emission or operating limitations that apply to the generator engine, a statement that there were no deviations from the emission or operating limitations during the reporting period. [40 CFR 63.6650(c)(5)]
- 74. For each deviation from an emission or operating limitation that occurs for the engine (EU: GEN) where a continuous monitoring system (CMS) is not being used to comply with the emission and operating limitations, the Compliance report must contain the information in Conditions 73.a through 73.d and the information in Conditions 74.a and 74.b. [40 CFR 63.6650(d) and LRAPA 44-0150(5)(ffff)]
 - 74.a. The total operating time of the engine (EU: GEN) at which the deviation occurred during the reporting period. [40 CFR 63.6650(d)(1)]
 - 74.b. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [40 CFR 63.6650(d)(2)]

Paved Industrial Roads and Unpaved Roads Requirements: (EUs UPR and PIR)

- 75. The permittee must apply all reasonable precautions of Condition 8 for all Paved Industrial Roads and Unpaved Roads (EUs: UPR and PIR). [LRAPA 48-015(1)] This condition is only enforceable by LRAPA.
- 76. At least once each month, for a minimum period of 30 minutes, the permittee must visually survey the site for any sources of excess fugitive emissions. For the purpose of this survey, excess fugitive emissions are considered to be any visible emissions that leave the plant site boundaries for more than 18 seconds in a six (6) minute period. The person conducting the observation must follow the procedures of EPA Method 22. If sources of visible emissions are identified, the permittee must: [OAR 340-218-0050(3)(a), LRAPA 34-016(1) and LRAPA 48-015(2)&(3)]
 - 76.a. Immediately take corrective action to minimize the fugitive emissions, including but not limited to those actions identified in Condition 75; and
 - 76.b. Develop an LRAPA-approved fugitive emission control plan upon request by LRAPA if the above precautions are not adequate and implement the plan whenever fugitive emissions leave the property for more than 18 seconds in a six (6) minute period.

77. The permittee must maintain records of the fugitive emissions surveys and corrective actions, as applicable. The record must be maintained onsite for a period of a least five (5) years and must be provided to LRAPA personnel of request. [OAR 340-218-0050(3)(b) and LRAPA 34-016(1)]

Aggregate Insignificant Emission Unit Requirements: Tire Shredder (EU: AIE)

78. LRAPA acknowledges that aggregate insignificant emission unit (EU: AIE) identified by rule as aggregate insignificant emission [LRAPA title 12 and OAR 340-200-0020] exist at facilities required to obtain a LRAPA Air Contaminant Discharge Permit (ACDP). Emission Unit AIE must comply with all applicable requirements. In general, the requirements that could apply to EUs: AIE are as follows:
- 78.a. LRAPA 32-010(3) – 20% opacity for a period or periods aggregating more than three (3) minutes in any hour for sources other than wood fired boilers.
- 78.b. LRAPA 32-015(2)(b) – 0.15 gr/dscf for non-fugitive, non-fuel burning equipment installed, prior to April 16, 2015.
- 78.c. LRAPA 32-045 – Process weight limit for non-fugitive, non-fuel burning process equipment.
79. Unless otherwise specified in this permit or an applicable requirement to do any testing, monitoring, recordkeeping or reporting for the applicable emission limits and standards that apply to the tire shredder (EU: AIE). 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 LRAPA title 12 and perform the testing in accordance with the DEQ’s Source Sampling Manual.

Performance Testing Requirements

Tire Shredder Generator (EU: GEN) Performance Testing Requirements

80. The permittee must demonstrate limit concentration of CO in Table 2d and the concentration of formaldehyde based on the results of testing the average of three (3) 1-hour runs using the testing requirements and procedures in Conditions 52 through 55 and Table 4 for the EU: GEN. [40 CFR 63.6603, LRAPA 44-0150(5)(ffff), LRAPA 34-015 and LRAPA 35-0120]
81. The permittee must conduct the initial performance test on EU: GEN within 180 days after the issuance of this permit. [40 CFR 63.6612(a), LRAPA 44-0150(5)(ffff) and LRAPA 34-015]
82. The permittee must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO₂). If pollutant concentrations are to be corrected to 15 percent oxygen and CO₂ concentration is measured in lieu of oxygen concentration measurement, a CO₂ correction factor is needed. Calculate the CO₂ correction factor as described in Conditions 55.a through 55.c. [40 CFR 63.6620(e)(2), LRAPA 44-0150(5)(ffff) and LRAPA 35-0120(3)]
83. The permittee must perform the source test while the EU: GEN is operating within 10% of its normal maximum operating capacity. Normal maximum operating capacity is either: [LRAPA 35-0140]
- 83.a. The generator’s maximum operating rated capacity; or
- 83.b. The maximum rate which the permittee expects to achieve within the term of the Air Contaminant Discharge Permit (ACDP).
84. The permittee must test stack emissions for CO and formaldehyde using an approved source test plan in accordance with the DEQ *Source Sampling Manual*. [LRAPA 35-0140]

Measured Pollutant	Method(s)	Standard
CO	Method 10 of 40 CFR part 60, appendix A-4, ASTM Method D6522-00 (2005), Method 320 of 40 CFR part 63, appendix A, OR ASTM D6348-03. (Refer to <u>Table 4</u>)	Limit CO exhaust concentration to ≤ 49 ppmvd @ 15% O ₂ OR reduce CO emissions by 70% or more (Refer to <u>Table 2d</u>)
Formaldehyde	EPA Method 323	Emission Factor Verification
Opacity	EPA Method 203B	≤ 20 percent

85. The permittee must submit a source test plan at least 60 days prior to the test to be approved by the LRAPA Source Test Coordinator. All tests must be conducted in accordance with DEQ's *Source Sampling Manual* and the approved source test plan. Test data and results must be submitted for review to LRAPA within 60 days of the test dates unless otherwise approved in the pretest plan. [LRAPA 35-0120(3)]
86. The permittee must ensure that only regular operating staff 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 the compliance source test, which are a result of consultation during the tests with the sources testing personnel, equipment vendors, or consultants, may render the source test invalid. [LRAPA 35-0120(3)]
87. The permittee must ensure, unless otherwise specified by permit, state rule, federal regulation, or LRAPA letter, that each source test consist of at least three (3) test runs and the emission results reported as the arithmetic average of all valid test runs. If for reasons beyond the control of the permittee (e.g., forced shutdown, extreme meteorological conditions, failure of an irreplaceable portion of the sample train) a test run is invalidated and cannot be replaced by a valid test run, LRAPA may consider accepting two (2) test runs for demonstrating compliance with the emission limit or DEQ *Source Sampling Manual* standard. However, all test runs, including those deemed invalid, are to be included in the test report. [[40 CFR 63.6620(d), LRAPA 44-0150(5)(ffff) and LRAPA 35-0120(3)]
88. Any required source test that is declared invalid by LRAPA or fails to demonstrate compliance with the applicable limits in Condition 44 and Table 2d, must be repeated. The permittee must submit a new source test plan to LRAPA for approval within 30 calendar days from the date LRAPA declares a source test invalid or the permittee receives source test results that fail to demonstrate compliance with the applicable limits. [LRAPA 35-0140]

Recordkeeping Requirements

89. **By the fifteenth (15th) working day of each month**, the permittee must monitor and maintain records the following information. A record of the required data must be maintained for a period of five (5) years at the plant site and must be available for inspection by authorized representatives of LRAPA. [LRAPA 34-016(1) and LRAPA 42-0080]

Activity	Units	Recording Frequency
PSEL calculation according to Condition 5	Tons	Monthly
Tire Shredder Generator (EU: GEN) hours of operation according to Condition 5.a	Hours	Monthly

Activity	Units	Recording Frequency
Vehicle miles traveled on Paved Industrial Roads (EU: PIR) and on Unpaved Roads (EU: UPR) according to Condition 5.b	Miles	Monthly
GHG emission calculations according to Condition 7	Metric tons	Annually
Visible Emission (VE) survey logs according to Condition 9	Any visible emissions	Monthly
OAR 340-239 Requirements: Landfill Gas (EU: LFG)		
All gas collection system downtime exceeding five (5) days according to Condition 38.a	NA	Annually
All instantaneous surface readings of 100 ppmv methane or greater according to Condition 38.b	ppmv	Annually
Solid waste acceptance rate according to Condition 38.c	Tons	Annually
Current waste-in-place according to Condition 38.d	Tons	Annually
Deposition of nondecomposable waste according to Condition 38.e	NA	Annually
Mitigation measures according to Condition 38.f	NA	Annually
Construction activities according to Condition 38.g	NA	Annually
Conversion of waste-in-place from volume to mass according to Condition 38.h	NA	Annually
Date of initial placement of waste in newly constructed landfill cells according to Condition 38.i	NA	Documentation
Component leaks above 250 ppmv according to Condition 38.j	ppmv	Annually
Maximum design capacity according to Condition 38.k	Tons	Documentation
40 CFR part 63 subpart ZZZZ Requirements: Tire Shredder Generator (EU: GEN)		
A copy of the Initial Notification or Notification of Compliance Status according to Condition 60.a	NA	Documentation
Records of malfunction of operation according to Condition 60.b	NA	Annually
Records of performance test or evaluations according to Condition 60.c	NA	Documentation
Records of maintenance performed according to Condition 60.d	NA	Annually
Records of actions taken during periods of malfunction according to Condition 60.e	NA	Annually

90. The permittee must maintain a log of all written complaints and complaints received via telephone or email that specifically refer to air pollution concerns associated to the permitted facility. The log must include a record of the permittee's actions to investigate the validity of each complaint and a record of actions taken for complaint resolution. [LRAPA 34-016]
91. The permittee must maintain copies of the records and reports required by OAR chapter 340 division 239 and provide the records and reports to LRAPA within five (5) business days upon request. [OAR 340-239-0700(2)(d) and LRAPA 34-015]

Reporting Requirements

92. A semi-annual report is due after the end of each semi-annual reporting period. The first semi-annual reporting period is from January 1st through June 30th and the second semi-annual reporting period is July 1st to December 31st. The permittee must submit a Semi-Annual Report on **August 15th** of each year and the second Semi-Annual Report is due **February 15th** of the following year. The Semi-Annual Reports must have the following: [LRAPA 34-016 and 42-0080]

Report	Reporting Period	Due Date
PSEL calculations according to Condition 5	Annual	February 15
Tire Shredder Generator (EU: GEN) hours of operation according to Condition 5.a	Annual	February 15
Vehicle miles traveled on Paved Industrial Roads (EU: PIR) and on Unpaved Roads (EU: UPR) according to Condition 5.b	Annual	February 15
GHG Report, if required according to Condition 7	Annual	March 31
Visible Emission (VE) survey logs according to Condition 9	Semi-Annual	February 15 and August 15
The upset log information required by Condition G.13, if required by G.13	Annual	February 15
OAR 340-239 Requirements: Landfill Gas (EU: LFG)		
All instantaneous surface readings of 100 ppmv methane or greater according to Condition 40.c	Semi-Annual	February 15 and August 15
Instantaneous Surface Monitoring Report according to Condition 40.i	Semi-Annual	February 15 and August 15
Average composition of the landfill gas collected over the reporting period according to Condition 40.d.ii	Annual	February 15
Most recent topographic map of site according to Condition 40.d.iii	Annual	February 15
All gas collection system downtime exceeding five (5) days according to Condition 40.d.iv	Annual	February 15
Current waste-in-place according to Condition 40.d.iv	Annual	February 15
Mitigation measures according to Condition 40.d.iv	Annual	February 15
Construction activities according to Condition 40.d.iv	Annual	February 15
Instrument specifications for all instruments used for monitoring compliance according to Condition 40.d.v	Annual	February 15

Report	Reporting Period	Due Date
Waste-In-Place Report according to Condition 40.e	Annual	February 15
Methane Generation Rate Report according to Condition 40.f	Annual	February 15
Amended Design Plan according to Condition 40.h	Upon occurrence	Within 90 days of any event that required a change to the Design Plan
Closure Notification according to Condition 40.a	Upon occurrence	Within 30 days of waste acceptance cessation
Equipment Removal Report according to Condition 40.b	Upon occurrence	30 days prior to well capping, removal/cessation of gas collection, treatment or control system equipment
40 CFR part 63 subpart ZZZZ Requirements: Tire Shredder Generator (EU: GEN)		
All reports required by <u>Table 7</u> according to Conditions 71 through 74	Semi-Annual	February 15 and August 15
Each time the generator engine did not meet emission or operating limitations according to Condition 66	Semi-Annual	February 15 and August 15
Each instance the generator engine did not meet the requirements of <u>Table 8</u> according to Condition 67	Upon occurrence	As required
All applicable notifications according to Condition 68	Upon occurrence	As required
Notification of Intent to conduct a performance test according to Condition 69 and Condition 85	Upon occurrence	At least 60 days before performance test is scheduled to begin
Notice of Compliance Status according to Conditions 65 and 70	Upon occurrence	Before the close of business on the 30 th day following the completion of the initial compliance demonstration
Percent load during a performance test according to Condition 64	Upon occurrence	Before the close of business on the 30 th day following the completion of the initial compliance demonstration

93. Unless otherwise specified, all reports, test results, notification, etc., required by the above terms and conditions must be reported to the following office: [LRAPA 34-016]

Lane Regional Air Protection Agency
 1010 Main Street
 Springfield, Oregon 97477
 (541) 736-1056

Fee Schedule

94. In accordance with adopted regulations, the permittee will be invoiced for the annual permit fees on October 1st, with fees due December 1st of each year. [LRAPA 37-8020 Table 2]

Abbreviations, Acronyms, and Definitions

ACDP	Air Contaminant Discharge Permit	NO _x	Nitrogen oxides
AIE	Aggregate Insignificant Emissions	NSPS	New Source Performance Standard
Agency	Lane Regional Air Protection Agency	NSR	New Source Review
ASTM	American Society for Testing and Materials	O ₂	Oxygen
AQMA	Air Quality Maintenance Area	OAR	Oregon Administrative Rules
Calendar year	The 12-month period beginning January 1 st and ending December 31 st	ORS	Oregon Revised Statues
CFR	Code of Federal Regulations	O&M	Operation and Maintenance
CMS	Continuous Monitoring System	Pb	Lead
CO	Carbon monoxide	PCD	Pollution control device
DEQ	Oregon Department of Environmental Quality	PIR	Paved Industrial Roads
dscf	dry standard cubic foot	PM	Particulate matter
EPA	US Environmental Protection Agency	PM ₁₀	Particulate matter less than 10 microns in size
FCAA	Federal Clean Air Act	PM _{2.5}	Particulate matter less than 2.5 microns in size
gal	gallon(s)	ppmv	Part per million by volume
GEN	Generator engine	PSD	Prevention of Significant Deterioration
gr/dscf	Grains per dry standard cubic foot	PSEL	Plant Site Emission Limit
HAP	Hazardous Air Pollutant as defined by LRAPA title 44	PTE	Potential to Emit
IC	Internal Combustion	RACT	Reasonable Available Control Technology
I&M	Inspection and maintenance	RICE	Reciprocating Internal Combustion Engine
lb	pound(s)	scf	Standard cubic foot
LFG	Landfill Gas	SER	Significant Emission Rate
LRAPA	Lane Regional Air Protection Agency	SEM	Surface Emission Monitor
MMBtu	Million British thermal units	SIC	Standard Industrial Code
MMcf	Million cubic feet	SIP	State Implementation Plan
NA	Not applicable	SO ₂	Sulfur dioxide
NESHAP	National Emissions Standards for Hazardous Air Pollutants	Special Control Area	As defined in LRAPA title 29
NMOC	Non-Methane Organic Compound	TRS	Total Reduced Sulfur
		THC	Total Hydrocarbon
		UPR	Unpaved Roads
		VE	Visible emissions
		VOC	Volatile organic compound
		WIP	Waste-In-Place
		Year	A period consisting of any 12-consecutive calendar months

GENERAL PERMIT CONDITIONS

General Conditions and Disclaimers

- G1. A copy of the permit application and this Air Contaminant Discharge Permit (ACDP) must be available on site for inspection upon request. [LRAPA 37-0020(3)]
- G2. The permittee must allow the Director or his/her authorized representatives access to the plant site and pertinent records at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, reviewing and copying air contaminant discharge records and otherwise conducting necessary functions related to this permit in accordance with ORS 468.095. [LRAPA 13-020(1)(h)]
- G3. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

Performance Standards and Emission Limits

- G4. The permittee must not cause or permit the deposition of any particulate matter which is larger than 250 microns in size at sufficient duration and quantity, as to create an observable deposition upon the real property of another person. [LRAPA 32-055]
- G5. The permittee must not discharge from any source whatsoever such quantities of air contamination which cause injury or damage to any persons, the public, business or property. Such determination to be made by LRAPA. [LRAPA 32-090(1)]
- G6. The permittee must not cause or permit emission of water vapor if the water vapor causes or tends to cause detriment to the health, safety or welfare of any person or causes, or tends to cause damage to property or business. [LRAPA 32-090(2)]
- G7. The permittee must not willfully cause or permit the installation or use of any device or use of any means which, without resulting in a reduction in the total amount of air contaminants emitted, conceals emissions of air contaminants which would otherwise violate LRAPA rules. [LRAPA 32-050(1)]
- G8. The permittee must not cause or permit the installation or use of any device or use of any means designed to mask the emissions of an air contaminant which causes or tends to cause detriment to health, safety or welfare of any person. [LRAPA 32-050(2)]
- G9. The permittee must not allow any materials to be handled, transported, or stored; or a building, its appurtenances or road(s) to be used, constructed, altered, repaired, or demolished; or any equipment to be operated, without taking reasonable precautions to prevent particulate matter from being airborne. [LRAPA 48-015(1)]
- G10. The permittee may not cause or allow air contaminants from any source subject to regulation by LRAPA to cause nuisance. [LRAPA 49-010(1)]

Excess Emissions: General Policy

- G11. Emissions of air contaminants in excess of applicable standards or permit conditions are unauthorized and are subject to enforcement action, pursuant to LRAPA 36-010 and 36-030. These rules apply to any permittee operating a source which emits air contaminants in violation of any applicable air quality rule or permit condition, including but not limited to excess emissions

resulting from the breakdown of air pollution control devices or operating equipment, process upset, startup, shutdown, or scheduled maintenance. Sources that do not emit air contaminants in excess of any applicable rule or permit condition are not subject to the recordkeeping and reporting requirements in LRAPA title 36. Emissions in excess of applicable standards are not excess emissions if the standard is in an NSPS or NESHAP and the NSPS or NESHAP exempts startups, shutdowns and malfunctions as defined in the applicable NSPS or NESHAP. [LRAPA 36-001(1)]

Excess Emissions: Notification and Record-keeping

- G12. For all other excess emissions not addressed in LRAPA Sections 36-010, 36-015, or 36-040, the following requirements apply: [LRAPA 36-020(1)]
- a. The owner or operator, of a small source, as defined by LRAPA 36-005(7), need not notify LRAPA of excess emissions events immediately unless otherwise required by permit condition, written notice by LRAPA, or if the excess emission is of a nature that could endanger public health.
 - b. Notification must be made to the LRAPA office. The current LRAPA telephone number during regular business hours (8 a.m. - 5 p.m., M-F) is (541) 736-1056. During nonbusiness hours, weekends, or holidays, the permittee must immediately notify LRAPA by calling the LRAPA Upset/Complaint Line. The current number is (541) 726-1930.
 - c. Follow-up reporting, if required by LRAPA, must contain all information required by Condition G15.
- G13. At each annual reporting period specified in this permit, or sooner if required by LRAPA, the permittee must submit a copy of the upset log entries for the reporting period, as required by Condition G15. [LRAPA 36-025(4)(a)]
- G14. Any excess emissions which could endanger public health or safety must immediately be reported to the Oregon Emergency Response System (OERS) at 1-800-452-0311.
- G15. The permittee must keep an upset log of all planned and unplanned excess emissions. The upset log must include the following: [LRAPA 36-025(3) and 36-030(1)]
- a. date and time each event was reported to LRAPA;
 - b. whether the process handling equipment and the air pollution control equipment were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
 - c. whether repairs or corrections were made in an expeditious manner when the permittee knew or should have known that emission limits were being or were likely to be exceeded;
 - d. whether the event was one in a recurring pattern of incidents which indicate inadequate design, operation, or maintenance; and
 - e. final resolution of the cause of the excess emissions.

Upset logs must be kept by the permittee for five (5) calendar years. [LRAPA 36-025(3)]

Excess Emissions: Scheduled Maintenance

- G16. If the permittee anticipates that scheduled maintenance of air contaminant sources or air pollution control devices may result in excess emissions, the permittee must obtain prior LRAPA

authorization of procedures that will be used to minimize excess emissions. Application for approval of procedures associated with the scheduled maintenance must be submitted and received by LRAPA in writing at least seventy-two (72) hours prior to the event. The application must include the following: [LRAPA 36-015(1)]

- a. reasons explaining the need for maintenance, including but not limited to: why the maintenance activity is necessary; why it would be impractical to shut down the source operation during the maintenance activity; if applicable, why air pollution control devices must be by-passed or operated at reduced efficiency during the maintenance activity; and why the excess emissions could not be avoided through better scheduling for maintenance or through better operation and maintenance practices;
 - b. identification of the specific production or emission control device or system to be maintained;
 - c. identification of the nature of the air contaminants likely to be emitted during the maintenance period, and the estimated amount and duration of the excess emissions, including measures such as the use of overtime labor and contract services and equipment that will be taken to minimize the length of the maintenance period; and
 - d. identification of specific procedures to be followed which will minimize excess emissions at all times during the scheduled maintenance.
- G17. No scheduled maintenance associated with the approved procedures in Condition G16 that is likely to result in excess emissions may occur during any period in which an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency has been declared, or during an announced yellow or red woodstove advisory period, in areas determined by LRAPA as PM_{2.5} or PM₁₀ nonattainment areas. [LRAPA 36-015(6)]
- G18. In cases where LRAPA has not received notification of scheduled maintenance that is likely to cause excess emissions within the required seventy-two (72) hours prior to the event, or where such approval has not been waived pursuant to LRAPA 36-015(3), the permittee must immediately notify LRAPA by telephone of the situation, and must be subject to the requirements of Conditions G12 and G13. [LRAPA 36-015(7)]

Air Pollution Emergencies

- G19. The permittee must, upon declaration of an air pollution alert, air pollution warning, or air pollution emergency, take all emission reduction measures specified in Tables 1, 2, and 3 of LRAPA title 51 (included in Attachment A of this permit). Permittees responsible for a source of air contamination within a Priority I AQCR must, upon declaration of an episode condition affecting the locality of the air contamination source, take all appropriate actions specified in the applicable table and must take all appropriate actions specified in an LRAPA-approved preplanned abatement strategy for such condition which has been submitted and is on file with LRAPA. [LRAPA 51-015]

Notification of Construction/Modification

- G20. The permittee must notify LRAPA in writing using an LRAPA "Notice of Intent to Construct" form, or other permit application forms and obtain approval in accordance with LRAPA 34-010 and 34-034 through 34-038 before:
- a. constructing, installing or establishing a new stationary source that will cause an increase in regulated pollutant emissions
 - b. making any physical change or change in the operation of an existing stationary source that will cause an increase, on an hourly basis at full production, in any regulated pollutant emissions; or

- c. constructing or modifying any pollution control equipment.

Notification of Name Change

- G21. The permittee must notify LRAPA in writing, using an LRAPA Application for Administrative Amendment to ACDP form, within 60 days after legal change of the registered name of the company with the Corporation Division of the State of Oregon. [LRAPA 37-0030(4)]

Applicable administrative fees must be submitted with an application for the name change.

Permit Renewal

- G22. Application for renewal of this permit must be submitted not less than 120 days prior to the permit expiration date for Simple ACDPs, and 180 days prior to the permit expiration date for Standard ACDP. [LRAPA 37-0040(2)(b)]

- G23. A source may not be operated after the expiration date of a permit, unless any of the following occur prior to the expiration date of the permit: [LRAPA 37-0082(1)(a)]

- a. A timely and complete application for renewal or for an LRAPA Title V Operating Permit has been submitted; or
- b. Another type of permit, ACDP or Title V, has been issued authorizing operation of the source.

- G24. For a source operating under an ACDP or LRAPA Title V Operating Permit, a requirement established in an earlier ACDP remains in effect notwithstanding expiration of the ACDP, unless the provision expires by its terms or unless the provision is modified or terminated according to the procedures used to establish the requirement initially. [LRAPA 37-0082(1)(c)]

- G25. Any permittee who fails to submit any relevant facts or who has submitted incorrect information in a permit application must, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. [LRAPA 37-0040(4)]

Termination Conditions

- G26. This permit will be automatically terminated upon: [LRAPA 37-0082(2)]

- a. Issuance of a renewal or new ACDP for the same activity or operation;
- b. Written request of the permittee, if LRAPA determines that a permit is no longer required;
- c. Failure to submit a timely application for permit renewal. Termination is effective on the permit expiration date; or;
- d. Failure to pay annual fees within 90 days of invoice by LRAPA, unless prior arrangements for payment have been approved in writing by LRAPA.

- G27. If LRAPA determines that a permittee is in noncompliance with the terms of the permit, submitted false information in the application or other required documentation, or is in violation of any applicable rule or statute, LRAPA may revoke the permit. LRAPA will provide notice of the intent to revoke the permit to the permittee under LRAPA title 31. The notice will include the reasons why the permit will be revoked, and include an opportunity for the permittee to request a contested case hearing prior to the revocation. A written request for hearing must be received by LRAPA within 60 days from service of the notice on the permittee, and must state the grounds of the request. The hearing will be conducted as a contested case hearing under ORS 183.413 through 183.470 and

LRAPA title 14. The permit will continue in effect until the 60th day after service of the notice on the permittee, if the permittee does not timely request a hearing, or until a final order is issued if the permittee timely requests a hearing. [LRAPA 37-0082(4)(a)]

G28. A permit automatically terminated under LRAPA 37-0082(2)(b) through (2)(d) may only be reinstated by the permittee by applying for a new permit. The permittee must also pay the applicable new source permit application fees in this title unless the owner or operator submits the renewal application within three months of the permit expiration date. [LRAPA 37-0082(3)]

G29. If LRAPA finds there is a serious danger to the public health, safety or the environment caused by a permittee's activities, LRAPA may immediately revoke or refuse to renew the permit without prior notice or opportunity for a hearing. If no advance notice is provided, notification will be provided to the permittee as soon as possible as provided under LRAPA title 31. The notification will set forth the specific reasons for the revocation or refusal to renew and will provide an opportunity for the permittee to request a contested case hearing for review of the revocation or refusal to renew. A permittee's written request for hearing must be received by LRAPA within 90 days of service of the notice on the permittee and must state the grounds for the request. The hearing will be conducted as a contested case hearing under ORS 183.413 through 183.470 and LRAPA title 14. The revocation or refusal to renew becomes final without further action by LRAPA if a request for a hearing is not received within the 90 days. If a request for a hearing is timely received, the revocation or refusal to renew will remain in place until issuance of a final order. [LRAPA 37-0082(4)(b)]

G30. Any hearing requested must be conducted pursuant to the rules of LRAPA. [LRAPA title 14]

Asbestos

G31. The permittee must comply with the asbestos abatement requirements in LRAPA title 43 for all activities involving asbestos-containing materials, including, but not limit to, demolition, renovation, repair, construction, and maintenance. [LRAPA title 43]

[Revised 1/19/18]

40 CFR part 63 subpart ZZZZ Table 2.d: Requirements for Existing Stationary RICE located at Area Source of HAP Emissions

For each...	Meet the following requirements, except during periods of startup
Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O ₂ ; or
	b. Reduce CO emissions by 70 percent or more.

40 CFR part 63 subpart ZZZZ Table 4: Requirements for Performance Tests

Complying with	You must	Using...	According to the following requirements
Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary RICE: and		(a) For formaldehyde, CO, O ₂ , and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter <i>and</i> the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A , the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A . If using a control device, the sampling site must be located at the outlet of the control device.
	ii. Determine the O ₂ concentration of the stationary RICE exhaust at the	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2 , or ASTM Method D6522-00 (Reapproved 2005) ^a	(a) Measurements to determine O ₂ concentration must be made at the same time and location as the

Complying with	You must	Using...	According to the following requirements
	sampling port location; and	(heated probe not necessary)	measurements for formaldehyde or CO concentration.
	iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A-3 , or Method 320 of 40 CFR part 63, appendix A , or ASTM D 6348-03 ^a	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO concentration.
	v. measure CO at the exhaust of the stationary RICE	(1) Method 10 of 40 CFR part 60, appendix A-4 , ASTM Method D6522-00 (2005) ^{a c} , Method 320 of 40 CFR part 63, appendix A , or ASTM D6348-03 ^a	(a) CO concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

^a You may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005). You may obtain a copy of ASTM-D6522-00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

40 CFR part 63 subpart ZZZZ Table 5: Initial Compliance with Emission Limitations, Operating Limitations, and Other Requirements

For each...	Complying with the requirement to...	You have demonstrated initial compliance if...
12. Existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O ₂ , dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.

40 CFR part 63 subpart ZZZZ Table 7: Requirements for Reports

For each...	You must submit a...	The report must contain...	The permittee must submit the report..
Existing non-emergency, non-black start stationary CI RICE >300 HP located at an area source of HAP	Compliance Report	a. If there are no deviation from any emission or operating limitations that apply to the engine, a statement that there were no deviations from the emission or operation limitations during the reporting period.	i. Semiannually according to the requirements in Conditions 72.a through 72.d.
		b. If the permittee had a deviation from any emission or operating limitation during the reporting period, the information in Condition 74, OR	i. Semiannually according to the requirements in Condition 72.
		c. If the permittee had a malfunction during the reporting period, the information in Condition 73.d.	i. Semiannually according to the requirements in Condition 72.

40 CFR part 63 subpart ZZZZ Table 8: Applicability of General Provisions to 40 CFR part 63 subpart ZZZZ.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.1	General applicability of the General Provisions	Yes.	
§ 63.2	Definitions	Yes.	Additional terms defined in § 63.6675 .
§ 63.3	Units and abbreviations	Yes.	
§ 63.4	Prohibited activities and circumvention	Yes.	
§ 63.5	Construction and reconstruction	Yes.	
§ 63.6(a)	Applicability	Yes.	
§ 63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§ 63.6(b)(5)	Notification	Yes.	
§ 63.6(b)(6)	[Reserved]		
§ 63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§ 63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§ 63.6(c)(3)-(4)	[Reserved]		

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§ 63.6(d)	[Reserved]		
§ 63.6(e)	Operation and maintenance	No.	
§ 63.6(f)(1)	Applicability of standards	No.	
§ 63.6(f)(2)	Methods for determining compliance	Yes.	
§ 63.6(f)(3)	Finding of compliance	Yes.	
§ 63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§ 63.6(h)	Opacity and visible emission standards	No.	Subpart ZZZZ does not contain opacity or visible emission standards.
§ 63.6(i)	Compliance extension procedures and criteria	Yes.	
§ 63.6(j)	Presidential compliance exemption	Yes.	
§ 63.7(a)(1)-(2)	Performance test dates	Yes.	Subpart ZZZZ contains performance test dates at §§ 63.6610 , 63.6611 , and 63.6612 .
§ 63.7(a)(3)	CAA section 114 authority	Yes.	
§ 63.7(b)(1)	Notification of performance test	Yes.	Except that § 63.7(b)(1) only applies as specified in § 63.6645 .
§ 63.7(b)(2)	Notification of rescheduling	Yes.	Except that § 63.7(b)(2) only applies as specified in § 63.6645 .
§ 63.7(c)	Quality assurance/test plan	Yes.	Except that § 63.7(c) only applies as specified in § 63.6645 .
§ 63.7(d)	Testing facilities	Yes.	
§ 63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at § 63.6620 .
§ 63.7(e)(2)	Conduct of performance tests and reduction of data	Yes.	Subpart ZZZZ specifies test methods at § 63.6620 .
§ 63.7(e)(3)	Test run duration	Yes.	
§ 63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§ 63.7(f)	Alternative test method provisions	Yes.	
§ 63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§ 63.7(h)	Waiver of tests	Yes.	
§ 63.8(a)(1)	Applicability of monitoring requirements	Yes.	Subpart ZZZZ contains specific requirements for monitoring at § 63.6625 .

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.8(a)(2)	Performance specifications	Yes.	
§ 63.8(a)(3)	[Reserved]		
§ 63.8(a)(4)	Monitoring for control devices	No.	
§ 63.8(b)(1)	Monitoring	Yes.	
§ 63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§ 63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§ 63.8(c)(1)(i)	Routine and predictable SSM	No.	
§ 63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§ 63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No.	
§ 63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§ 63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes.	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§ 63.8(c)(5)	COMS minimum procedures	No.	Subpart ZZZZ does not require COMS.
§ 63.8(c)(6)-(8)	CMS requirements	Yes.	Except that subpart ZZZZ does not require COMS.
§ 63.8(d)	CMS quality control	Yes.	
§ 63.8(e)	CMS performance evaluation	Yes.	Except for § 63.8(e)(5)(ii) , which applies to COMS.
		Except that § 63.8(e) only applies as specified in § 63.6645 .	
§ 63.8(f)(1)-(5)	Alternative monitoring method	Yes.	Except that § 63.8(f)(4) only applies as specified in § 63.6645 .
§ 63.8(f)(6)	Alternative to relative accuracy test	Yes.	Except that § 63.8(f)(6) only applies as specified in § 63.6645 .
§ 63.8(g)	Data reduction	Yes.	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§ 63.6635 and 63.6640 .
§ 63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§ 63.9(b)(1)-(5)	Initial notifications	Yes.	Except that § 63.9(b)(3) is reserved.
		Except that § 63.9(b) only applies as	

General provisions citation	Subject of citation	Applies to subpart	Explanation
		specified in § 63.6645 .	
§ 63.9(c)	Request for compliance extension	Yes.	Except that § 63.9(c) only applies as specified in § 63.6645 .
§ 63.9(d)	Notification of special compliance requirements for new sources	Yes.	Except that § 63.9(d) only applies as specified in § 63.6645 .
§ 63.9(e)	Notification of performance test	Yes.	Except that § 63.9(e) only applies as specified in § 63.6645 .
§ 63.9(f)	Notification of visible emission (VE)/opacity test	No.	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.9(g)(1)	Notification of performance evaluation	Yes.	Except that § 63.9(g) only applies as specified in § 63.6645 .
§ 63.9(g)(2)	Notification of use of COMS data	No.	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes.	If alternative is in use.
		Except that § 63.9(g) only applies as specified in § 63.6645 .	
§ 63.9(h)(1)-(6)	Notification of compliance status	Yes.	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. § 63.9(h)(4) is reserved.
			Except that § 63.9(h) only applies as specified in § 63.6645 .
§ 63.9(i)	Adjustment of submittal deadlines	Yes.	
§ 63.9(j)	Change in previous information	Yes.	
§ 63.9(k)	Electronic reporting procedures	Yes.	Only as specified in § 63.9(j) .
§ 63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§ 63.10(b)(1)	Record retention	Yes.	Except that the most recent 2 years of data do not have to be retained on site.
§ 63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§ 63.10(b)(2)(vi)-(xi)	Records	Yes.	
§ 63.10(b)(2)(xii)	Record when under waiver	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes.	For CO standard if using RATA alternative.
§ 63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§ 63.10(b)(3)	Records of applicability determination	Yes.	
§ 63.10(c)	Additional records for sources using CEMS	Yes.	Except that § 63.10(c)(2)-(4) and (9) are reserved.
§ 63.10(d)(1)	General reporting requirements	Yes.	
§ 63.10(d)(2)	Report of performance test results	Yes.	
§ 63.10(d)(3)	Reporting opacity or VE observations	No.	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.10(d)(4)	Progress reports	Yes.	
§ 63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§ 63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§ 63.10(e)(2)(ii)	COMS-related report	No.	Subpart ZZZZ does not require COMS.
§ 63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that § 63.10(e)(3)(i) (C) is reserved.
§ 63.10(e)(4)	Reporting COMS data	No.	Subpart ZZZZ does not require COMS.
§ 63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§ 63.11	Flares	No.	
§ 63.12	State authority and delegations	Yes.	
§ 63.13	Addresses	Yes.	
§ 63.14	Incorporation by reference	Yes.	
§ 63.15	Availability of information	Yes.	