

LANE REGIONAL AIR PROTECTION AGENCY

1010 Main Street, Springfield, Oregon 97477 (541) 736-1056

STANDARD AIR CONTAMINANT DISCHARGE PERMIT

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

Issued To: Metropolitan Wastewater Management Commission 410 River Avenue Eugene, Oregon 97404

Facility Location: Eugene/Springfield Water Pollution Control Facility 410 River Avenue Eugene, Oregon 97404

Permit Number: 202537 Permit Type: Standard Primary SIC: 4952 Sewerage Systems Secondary SIC: 4922 Natural Gas Transmission Date Renewed: September 6, 2018 Expiration Date: September 6, 2023 Modified Date: June 29, 2021

Issued Steven a. Dietrich

By:

Steven A. Dietrich, Director

Information Relied Upon: Modification Application Number: 67007 Date Received: February 23, 2021

Land Use Compatibility Statement: From: City of Eugene Dated: October 3, 2000

Fee Basis:

- B.65 Sewage treatment facilities employing internal combustion engines for digester gases
- C.3 Source electing to maintain baseline emission rate or netting basis
- C.4 Source requesting a PSEL equal to or greater than the SER

Permitted Sources:

1 Natural Gas/Digester Gas-fired Internal Combustion Engine Generator

- 2 Digester Gas/Off-specification Gas Burners
- 1 Digester Gas Upgrade System and RTO

1 Natural Gas/Digester Gas-fired Boiler 1 Diesel-fired Emergency Generator Liquid Processing and Odor Abatement Equipment

Effective Date: _____June 29, 2021_____

ADDENDUM NO. 2 NON-PSD/NSR MODERATE TECHNICAL PERMIT MODIFICATION

In accordance with 37-0066(4)(b)(B) of LRAPA's Rules and Regulations, Standard Air Contaminant Discharge Permit No. 202537 is hereby amended to add one (1) Digester Gas Upgrade System, EU-5. The cover page is amended to update the legal name of the permittee, add EU-5 equipment to the permitted sources list and include a secondary SIC for natural gas transmission operations. The permit has been modified as follows: Condition 2 has been amended to include EU-5, Conditions 16-18 have been modified to include operation and maintenance requirements for EU-5, and Conditions 17-22 to have been updated and renumbered (now Conditions 19-25) as part of this modification. All new language and permit condition numbers are in **bold**.

Categorically

Insignificant

Activity

Emission Unit (EU) Number	Emission Unit	Description
EU-1	Engine Generator-set	Jenbacher Genset, 1143 BHP, 7.3 MMBtu/hr, biogas and natural gas - fired, installed in 1997
		Pollution control device: Miratech "L" CO catalytic converter
EU-2	Boiler	Hurst, 200 HP, 8.2 MMBtu/hr, 4-pass scotch-marine fire tube, biogas and natural gas-fired, installed 2018
EU-3	Biogas Flares	Two (2) Shand & Jurs 97300 waste gas flares, 8" burner, 76,000 scf/hr, biogas, off-specification gas and natural gas- fired, installed 2018
		Emissions from wastewater treatment operations
EU-4	Wastewater Treatment Operations	Pollution control device: Biofiltration system and four (4) activated carbon filter odor/pollutant control vessels
EU-5		Pressure Swing Adsorption (PSA)
	Digester Gas Upgrade System	Pollution control devices: Regenerative Thermal Oxidizer (RTO) Biogas Flares (EU-3)

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

EU-5 Digester Gas Upgrade System Operation and Maintenance Requirements

Emergency Generator

- 16. The permittee must include the following monitoring parameter information for the RTO in EU-5 in the O&M Plan required by Condition 12: [LRAPA 32-007]
 - a. Description of operating and maintenance procedures, including startup and shutdown of the RTO. A schedule of RTO inspections and routine maintenance must be provided in the O&M Plan.

Caterpillar, 200 kW, diesel-fired

Subpart III

emergency generator, subject to NSPS

- b. Corrective actions that will be used in the event that the RTO is not performing at the highest reasonable efficiency and effectiveness to minimize emissions.
- c. Tail gas flow rate, natural gas flow rate, combustion chamber temperatures, or other physical or chemical parameters related to the operation of the RTO.
- 17. The operation of the RTO in EU-5 must be in accordance with the emissions provisions in Conditions G11 through G18. [LRAPA Title 36]

18. A log of inspections, routine maintenance, and corrective actions for EU-5 must be maintained by the permittee for a period of at least five (5) years. [LRAPA 32-007]

Monitoring and Recordkeeping Requirements

19. By the fifteenth (15th) day of each month, the permittee must record the following information, maintain the records for a period of five (5) years at the plant site, and make the records available for inspection by authorized representatives of LRAPA upon request: [LRAPA 34-016 and 42-0080]

Emission Unit (EU)	Monitoring Parameter (units)	Minimum Recording Frequency
EU-1	Digester gas burned in the genset (cubic feet)	Monthly
EU-1	Natural gas burned in the genset (cubic feet)	Monthly
EU-1	Hours of operation of the genset (hours)	Monthly
EU-1	Maintenance performed in accordance with the Subpart ZZZ NESHAP in Condition 9.	Upon occurrence
EU-2	Digester gas burned in the boiler (cubic feet)	Monthly
EU-2	Natural gas burned in the boiler (cubic feet)	Monthly
EU-3	Digester gas burned in the waste gas flares (cubic feet)	Monthly
EU-3	Off-specification gas burned in the waste gas flares (cubic feet)	Monthly
EU-4	Wastewater effluent volume (million gallons)	Monthly
EU-5	Natural gas combusted in the RTO (cubic feet)	Monthly
EU-5	PSA tail gas combusted in the RTO (cubic feet)	Monthly
EU-5	RTO maintenance and inspections performed	Upon occurrence
Categorically Insignificant Activity	Hours of operation of the emergency generator (hours) and classification of the operation	Upon occurrence

Emission Unit ¹	Pollutant	Emission Factor	Emission Factor Units	Reference
	VOC ²	124.2	lb/MMscf digester gas	Jenbacher – March 28, 2000
	NO _x	310.5	lb/MMscf digester gas	Jenbacher – March 28, 2000
Genset	со	579.6	lb/MMscf digester gas	Jenbacher – March 28, 2000
(EU-1)	VOC ²	120.4	Ib/MMscf natural gas	AP-42, Table 3.2-
	NOx	863.9	Ib/MMscf natural gas	AP-42, Table 3.2-
	со	568.1	lb/MMscf natural gas	AP-42, Table 3.2-
	VOC	5.5	lb/MMscf digester gas or natural gas	AP-42, Table 1.4-
Boiler (EU-2)	NOx	100	lb/MMscf digester gas or natural gas	AP-42, Table 1.4-
	со	84	lb/MMscf digester gas or natural gas	AP-42, Table 1.4-
	VOC	84	lb/MMscf digester gas/off-spec gas	AP-42, Table 13.5
Waste Gas Flares (EU-3)	NOx	40.8	lb/MMscf digester gas/off-spec gas	AP-42, Table 13.5
(E0-3)	со	186	lb/MMscf digester gas/off-spec gas	AP-42, Table 13.5
Wastewater	VOC	0.715	lb/10 ⁶ gallons	Facility grab samp data (1997-2016)
Treatment Operations (EU-4) Digester Gas Upgrade System, RTO (EU-5)	Total HAP	0.643	lb/10 ⁶ gallons	Facility grab samp data (1997-2016)
	Single HAP: Phenol	0.266	lb/10 ⁶ gallons	Facility grab samp data (1997-2016)
	VOC	5.5	lb/MMscf natural gas/tail gas	AP-42, Table 1.4
	NO _x	50	Ib/MMscf natural gas/tail gas	AP-42, Table 1.4
	СО	84	lb/MMscf natural gas/tail gas	AP-42, Table 1.4-

20. The permittee must use the following emission factors to estimate emissions in accordance with Condition 5: [LRAPA 34-016 and 42-0080]

¹<u>NOTE</u>: Emission factors are not listed for the Categorically Insignificant Activity emission unit since emissions from these types of activities are excluded from PSEL compliance monitoring. [LRAPA 42-0035(5)]

 2 <u>NOTE</u>: VOC as defined in 40 CFR 51.100(s). For the purposes of Subpart ZZZZ, when calculating emissions of VOC, emissions of formaldehyde should not be included.

Reporting Requirements

- **22.** By March 15th of each year, an annual report must be submitted with the information as required per Conditions 5, 13, 19, and G15. The annual report must also include greenhouse gas emissions calculations as required by OAR 340-215-0030. [LRAPA 34-016]
- **23.** Unless otherwise specified, all reports, test results, and notifications required by this permit must be submitted to the following office: [LRAPA 34-016]

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

Outdoor Burning

24. The permittee is prohibited from conducting outdoor burning, except as may be allowed by LRAPA Title 47. [LRAPA 47-001]

Fee Schedule

25. In accordance with adopted regulations, the permittee will be invoiced by October 1st of each year for the Annual Fee due December 1st of each year. [LRAPA 37-8020 Table 2]

KE/CMW 6/29/2021 Page 5 of 5 Permit No.: 202537



LANE REGIONAL AIR PROTECTION AGENCY

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STANDARD AIR CONTAMINANT DISCHARGE PERMIT

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

Issued To:

Eugene/Springfield Water Pollution Control Facility 410 River Avenue Eugene, Oregon 97404

<u>Mailing Address</u>: 410 River Avenue Eugene, Oregon 97404

Permit Number: 202537 Permit Type: Standard <u>SIC</u>: 4952 Sewerage Systems <u>Date Renewed</u>: September 6, 2018 <u>Expiration Date</u>: September 6, 2023 <u>Modified Date</u>: August 26, 2020

Issued By: ___

Merlyn L. Hough, Director

Information Relied Upon: Agency-initiated modification

Land Use Compatibility Statement: From: City of Eugene Dated: October 3, 2000

Fee Basis:

- B.65 Sewage treatment facilities employing internal combustion engines for digester gases
- C.3 Source electing to maintain baseline emission rate or netting basis
- C.4 Source requesting a PSEL equal to or greater than the SER

Permitted Sources:

- 1 Internal Combustion Engine Generator/Digester Gas-fired
- 2 Digester Gas Burners
- 1 Natural Gas/Digester Gas fired Boiler Liquid Processing and Odor Abatement Equipment
- 1 Diesel-fired Emergency Generator

Effective
Date: <u>August 26, 2020</u>

ADDENDUM NO. 1 NON-TECHNICAL PERMIT MODIFICATION

In accordance with 37-0066(4)(b)(A) and 37-0084 of LRAPA's Rules and Regulations, the following change has been made to Standard Air Contaminant Discharge Permit No. 202537. Condition 9.b.i. has

Eugene/Springfield Water Pollution Control Facility Expiration Date: September 6, 2023 Modification Date: August 26, 2020

been amended to correct the language to include the requirement that is applicable to the spark ignition engine (SI) in EU-1 and remove language that was included that was applicable to a compression ignition engine (CI). The change reads as follows with the revision in **bold**:

EU-1 Jenbacher Engine Generator Operation and Maintenance Requirements

 The permittee must operate the Jenbacher engine generator in EU-1 in accordance with the requirements specified in the Spark Ignition Reciprocating Internal Combustion Engines (SI-RICE) National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subpart ZZZZ.

...

- b. In lieu of the requirements specified in Conditions 9.a.i through 9.a.iii, the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d to Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to Subpart ZZZZ. The analysis program must, at a minimum, analyze the following three parameters and verify that their listed condemning limits have not been exceeded: [40 CFR 63.6625(j)]
 - i. <u>Total Acid Number</u>: The Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from the Total Acid Number of the oil when new; or
 - ii. <u>Viscosity</u>: The viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or
 - iii. <u>Percent Water Content</u>: The percent water content (by volume) is greater than 0.5.
 - iv. If the condemning limits identified in Conditions 9.b.i through 9.b.iii are not exceeded, the permittee is not required to change the oil. If any one of the limits is exceeded, the permittee must change the oil within two (2) business days of receiving the results of the analysis or before continuing to use the engine, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

KE/CMW 8/26/2020

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STANDARD AIR CONTAMINANT DISCHARGE PERMIT

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: **Eugene/Springfield Water Pollution Control Facility** 410 River Avenue Eugene, Oregon 97404

Mailing Address: Same as above

Permit Number: 202537 Permit Type: Standard SIC: 4952 Sewerage Systems Date Renewed: September 6, 2018 Expiration Date: September 6, 2023

Issued By: Merlyn L. Hough, Director

Land Use Compatibility Statement: From: City of Eugene Dated: October 3, 2000

Fee Basis:

- B.65 Sewage treatment facilities employing internal combustion engines for digester gases
- C.3 Source electing to maintain baseline emission rate or netting basis
- C.4 Source requesting a PSEL equal to or greater than the SER

Permitted Sources:

1 Internal Combustion Engine Generator/Digester Gas-fired

2 Digester Gas Burners

- 1 Natural Gas/Digester Gas fired Boiler Liquid Processing and Odor Abatement Equipment
- 1 Diesel-fired Emergency Generator

SFP - 6 2018 Effective Date:

Permitted Activities

1. Until this permit expires or is revoked, the permittee is herewith allowed to discharge exhaust gases containing 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) Number	Emission Unit	Description
	Engine Concreter est	Jenbacher Genset, 1143 BHP, 7.3 MMBtu/hr, biogas-fired, installed in 1997
EU-1	Engine Generator-set	Pollution control device: Miratech "L" CO catalytic converter
EU-2	Boiler	Hurst, 200 HP, 8.2 MMBtu/hr, 4-pass scotch-marine fire tube, biogas and natural gas-fired, installed 2018
EU-3	Biogas Flares	Two (2) Shand & Jurs 97300 waste gas flares, 8" burner, 76,000 scf/hr, biogas and natural gas-fired, installed 2018
		Emissions from wastewater treatment operations
EU-4	Wastewater Treatment Operations	Pollution control device: Biofiltration system and four (4) activated carbon filter odor/pollutant control vessels
Categorically Insignificant Activity	Emergency Generator	Caterpillar, 200 kW, diesel-fired emergency generator, subject to NSPS Subpart IIII

Plant Site Emission Limits (PSELs)

3. The total emissions from the plant site must not exceed the following 12-month rolling limits: [LRAPA 42-0040 and 42-0041]

Source	NOx	СО	VOC	Single HAP	Total HAP	GHG
Plant Site Total	98	99	46	9	24	74,000

Annual Plant Site Emissions Limits (PSELs) (tons/year)

PSEL Monitoring and Compliance

- 4. **By the fifteenth (15th) day of each month**, the permittee must record the process production parameters listed in Condition 17 and calculate the emissions from the previous 12 months using the method in Condition 5. [LRAPA 34-016 and 42-0080]
- 5. The permittee must calculate the pollutant mass emissions listed in Condition 3, except for GHGs, on a 12-month rolling basis using the following equation for all processes: [LRAPA 42-0080(4)(c)]

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

where, E

Σ

i

EF

Emissions in tons/year;
 Symbol representing "summation of";
 Month, beginning with the most recent

= Month, beginning with the most recent, summing for 12 preceding, consecutive calendar months;

Pollutant emissions factor (see Condition 18);

P = Process production (recorded per Condition 17);

K = Conversion factor of 2000 pounds per 1 ton.

Performance Standards and Limitations

- 6. The permittee must ensure that emissions from any air contaminant source do not equal or exceed 20 percent opacity for a period or periods aggregating more than three minutes in any one hour. [LRAPA 32-010(3)]
- 7. Particulate matter emissions from any fuel burning equipment installed, constructed, or modified on or after June 1, 1970 but prior to April 16, 2015 must not exceed 0.14 grains per dry standard cubic foot, corrected to 12% CO₂ or 50% excess air. [LRAPA 32-030(1)(b)]
- Particulate matter emissions from any fuel burning equipment installed, constructed, or modified on or after April 16, 2015 must not exceed 0.10 grains per dry standard cubic foot, corrected to 12% CO₂ or 50% excess air. [LRAPA 32-030(2)]

EU-1 Jenbacher Engine Generator Operation and Maintenance Requirements

- The permittee must operate the Jenbacher engine generator in EU-1 in accordance with the requirements specified in the Spark Ignition Reciprocating Internal Combustion Engines (SI-RICE) National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subpart ZZZZ.
 - a. The engine must meet the following maintenance requirements from Subpart ZZZZ, Table 2d, Section 13 for a non-emergency, non-black start stationary RICE which

combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis:

- i. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;
- ii. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and
- iii. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.
- b. In lieu of the requirements specified in Conditions 9.a.i through 9.a.iii, the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d to Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to Subpart ZZZZ. The analysis program must, at a minimum, analyze the following three parameters and verify that their listed condemning limits have not been exceeded: [40 CFR 63.6625(j)]
 - i. <u>Total Base Number</u>: The Total Base Number is less than 30 percent of the Total Base Number of the oil when new; or
 - ii. <u>Viscosity</u>: The viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or
 - iii. Percent Water Content: The percent water content (by volume) is greater than 0.5.
 - iv. If the condemning limits identified in Conditions 9.b.i through 9.b.iii are not exceeded, the permittee is not required to change the oil. If any one of the limits is exceeded, the permittee must change the oil within two (2) business days of receiving the results of the analysis or before continuing to use the engine, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.
- c. The permittee must be in compliance with the emission limitations and operating limitations in Subpart ZZZZ that apply to the engine at all times. [40 CFR 63.6605(a)]
- d. The permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practices for minimizing emissions. [40 CFR 63.6605(b)]
- e. The permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the RICE was operated and maintained according to the permittee's maintenance plan. [40 CFR 63.6655(e)]
- f. The permittee must maintain of all information required by Condition 9.e in records that are 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. [40 CFR 63.6660]

EU-3 Wastewater Biogas Flares Operation and Maintenance Requirements

- 10. The permittee must ensure that the excess biogas flares in EU-3 are operated in a manner to maximize efficiency, as follows: [LRAPA 32-007(1)]
 - a. Flares must be operated with a monitored pilot flame, utilizing biogas or natural gas, when there is a demand to combust biogas. The flame must be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. The flame must be monitored for on/off status and for flame failure, and the system must be equipped with alarms to signal such events. If any excess emission events occur due to pilot flame ignition malfunction, then the flares must be operated with a continuous pilot flame regardless of the demand to combust biogas.
 - b. The flares must be operated with supplemental fuel, either natural gas or propane, to assist biogas combustion unless the heating value of the biogas is 200 btu/scf or greater. The heating value of digester fuel combusted is assumed to be 600 btu/scf, but can also be calculated using the method described in 40 CFR 60.18(f)(3).
 - c. The flares must be designed and operated with no visible emissions as determined by EPA Method 22, except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours.

EU-4 Biofilter and Activated Carbon Odor Control Vessels Operation and Maintenance Requirements

- 11. The permittee must continuously operate the biofilter and activated carbon odor control vessels unless an operational schedule is established and allowed under the Operation and Maintenance (O&M) Plan required by Condition 12. [LRAPA 32-007(1)]
- 12. The permittee must follow an O&M Plan for air pollution control devices at the facility and submit it to LRAPA for approval. The O&M Plan must include, but is not limited to, the following: [LRAPA 32-007]
 - a. Description of operating and maintenance procedures, including startup and shutdown of air emission control equipment such as piping, ductwork, fans, carbon unit, activated carbon replacement, and biofilter media replacement. A schedule of control equipment inspections and routine maintenance must be provided in the O&M Plan.
 - b. Corrective actions that will be used in the event that control equipment is not performing at the highest reasonable efficiency and effectiveness to minimize emissions.
 - c. Flow rates, temperatures, or other physical or chemical parameters related to the operation of air pollution control equipment and emission reduction processes.
 - d. An appendix containing example forms used to record inspections, maintenance, and corrective actions.
- 13. The O&M Plan must be reviewed by the permittee at least annually and updates must be submitted to LRAPA *by March 15th* each year. [LRAPA 32-007]
- 14. A log of inspections, routine maintenance, and corrective actions must be maintained by the permittee for a period of at least five (5) years. [LRAPA 32-007]

15. The operation of the biofilter and activated carbon odor control vessels must be in accordance with the excess emissions provisions in Conditions G11 through G18. [LRAPA Title 36]

Categorically Insignificant Activity – Emergency Generator

- The emergency generator (Categorically Insignificant Activity) must meet all applicable requirements for an "emergency stationary ICE" as defined in 40 CFR 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. [40 CFR 60.4219]
 - a. There is no time limit on the use of emergency stationary ICE in emergency situations. [40 CFR 60.4211(f)(1)]
 - b. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor or the insurance company associated with the engine. Required maintenance and testing of such units is limited to 50 hours per year.¹
 - i. ¹NOTE: The 50 hour limitation is not based on 40 CFR 60.4211(f)(2); it is based on Oregon DEQ policy.
 - c. The permittee is prohibited from using the emergency stationary ICE for any nonemergency use including but not limited to peak shaving, demand response operation, and/or generation of income from the sale of power. To perform such an activity, the permittee must first obtain a modified permit or a separate permit for power generation that appropriately addresses and allows this activity. [40 CFR 60.4211(f)(3)]
 - d. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation used for maintenance checks and readiness testing.
 [40 CRF 60.4214(b)]

Monitoring and Recordkeeping Requirements

17. **By the fifteenth (15th) day of each month**, the permittee must record the following information, maintain the records for a period of five (5) years at the plant site, and make the records available for inspection by authorized representatives of LRAPA upon request: [LRAPA 34-016 and 42-0080]

Emission Unit (EU)	Monitoring Parameter (units)	Minimum Recording Frequency
EU-1	Gas burned in the genset (cubic feet)	Monthly
EU-1	Hours of operation of the genset (hours)	Monthly
EU-1	Maintenance performed in accordance with the Subpart ZZZZ NESHAP in Condition 9.	Upon occurrence
EU-2	Gas burned in the boiler (cubic feet)	Monthly

Activity

Emission Unit (EU)	Monitoring Parameter (units)	Minimum Recording Frequency
EU-3	Gas burned in the waste gas flares (cubic feet)	Monthly
EU-4	Wastewater effluent volume (million gallons)	Monthly
Categorically Insignificant	Hours of operation of the emergency generator (hours) and classification of the operation	Upon occurrence

18. The permittee must use the following emission factors to estimate emissions in accordance with Condition 5: [LRAPA 34-016 and 42-0080]

Emission Unit ¹	Pollutant	Emission Factor	Emission Factor Units	Reference
×	VOC ²	124.2	lb/MMscf digester gas	Jenbacher – March 28, 2000
Genset (EU-1)	NOx	310.5	lb/MMscf digester gas	Jenbacher – March 28, 2000
	CO	579.6	lb/MMscf digester gas	Jenbacher – March 28, 2000
	VOC	5.5	lb/MMscf digester gas or natural gas	AP-42, Table 1.4-1
Boiler (EU-2)	NOx	100	lb/MMscf digester gas or natural gas	AP-42, Table 1.4-1
	СО	84	lb/MMscf digester gas or natural gas	AP-42, Table 1.4-1
Waste Gas Flares (EU-3)	VOC	84	lb/MMscf digester gas	AP-42, Table 13.5-1
	NOx	40.8	lb/MMscf digester gas	AP-42, Table 13.5-1
	СО	186	lb/MMscf digester gas	AP-42, Table 13.5-2
Wastewater Treatment Operations (EU-4)	VOC	0.715	lb/10 ⁶ gallons	Facility grab sample data (1997-2016)
	Total HAP	0.643	lb/10 ⁶ gallons	Facility grab sample data (1997-2016)
	Single HAP: Phenol	0.266	lb/10 ⁶ gallons	Facility grab sample data (1997-2016)

¹<u>NOTE</u>: Emission factors are not listed for the Categorically Insignificant Activity emission unit since emissions from these types of activities are excluded from PSEL compliance monitoring. [LRAPA 42-0035(5)]

²<u>NOTE</u>: VOC as defined in 40 CFR 51.100(s). For the purposes of Subpart ZZZZ, when calculating emissions of VOC, emissions of formaldehyde should not be included.

Reporting Requirements

- 19. **By March 15th of each year**, an annual report must be submitted with the information as required per Conditions 5, 13, 17, and G15. The annual report must also include greenhouse gas emissions calculations as required by OAR 340-215-0030. [LRAPA 34-016]
- 20. Unless otherwise specified, all reports, test results, and notifications required by this permit must be submitted to the following office: [LRAPA 34-016]

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

Open Burning

21. The permittee is prohibited from conducting open burning, except as may be allowed by LRAPA Title 47. [LRAPA 47-001]

Fee Schedule

22. In accordance with adopted regulations, the permittee will be invoiced by October 1st of each year for the Annual Fee due December 1st of each year. [LRAPA 37-8020 Table 2]

KE/CMW 09/06/18

ABBREVIATIONS, ACRONYMS AND DEFINITONS

ACDP ASTM AQMA Btu CFR CO CO2 CO2e DEQ dscf EF EPA EU FCAA GHG gr/dscf HAP I&M Ib LRAPA MM	Air Contaminant Discharge Permit American Society for Testing and Materials Air Quality Maintenance Area British thermal unit Code of Federal Regulations Carbon monoxide Carbon dioxide Carbon dioxide equivalent Oregon Department of Environmental Quality Dry standard cubic foot of gas volume Emission factor US Environmental Protection Agency Emission unit Federal Clean Air Act Greenhouse gases Grains per dry standard cubic foot (1 pound=7000 grains) Hazardous Air Pollutant as defined by LRAPA Title 44 Inspection and maintenance Pound(s) Lane Regional Air Protection Agency Million Million British thermal units
N/A NAICS	Not applicable North American Industry Classification System
NESHAP NOx	National Emissions Standards for Hazardous Air Pollutants Nitrogen oxides
NSPS	New Source Performance Standard
NSR	New Source Review
O ₂	Oxygen
OAR	Oregon Administrative Rules
ORS	Oregon Revised Statutes
O&M	Operation and maintenance
PM	Particulate matter
PM10	Particulate matter less than 10 microns in size
PM _{2.5}	Particulate matter less than 2.5 microns in size
ppm	Part per million
PSD PSEL	Prevention of Significant Deterioration Plant Site Emission Limit
PSEL	Potential to Emit
scf	Standard cubic foot
SDS	Safety Data Sheet
SER	Significant Emission Rate
Short ton	Equivalent to ton/year (1 short ton=2000 pounds)
SIC	Standard Industrial Code
SIP	State Implementation Plan
SO ₂	Sulfur dioxide
TACT	Typically Achievable Control Technology
VE	Visible emissions
VOC	Volatile organic compound
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;
 - 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. 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 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 1/12/2018]