



State of Oregon
Department of
Environmental
Quality

Permit Number: 01-0038-TV-01

Expiration Date: 01/04/2022

Page 1 of 21

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY OREGON TITLE V OPERATING PERMIT

Eastern Region
475 NE Bellevue Drive, Suite 110
Bend, Oregon 97701

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

ISSUED TO:

Northwest Pipeline LLC
295 Chipeta Way
Salt Lake City, UT 84108

INFORMATION RELIED UPON:

Application Number: 28144
Received: 04/30/2015

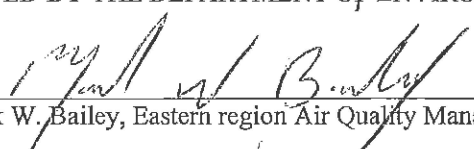
PLANT SITE LOCATION:

Baker Compressor Station
7-1/2 miles NW of Baker City to Chandler Lane
SE 1/4, NE 1/4, Section 24, T8S, R39E
Baker City, Oregon

LAND USE COMPATIBILITY STATEMENT:

Issued by: Baker County
Dated: 10/18/1994

ISSUED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY


Mark W. Bailey, Eastern region Air Quality Manager

JAN 12 2017
Date

Nature of Business

Natural Gas Transmission Pipeline

SIC

4922

NAICS

486210

RESPONSIBLE OFFICIAL

Title: Director, Operations; or
Director, Environmental Safety and Health

FACILITY CONTACT PERSON

Name: Derek Forsberg
Title: Environmental Specialist
Phone: 801-584-6748

Pages 2 - 9 redacted -- outside the scope of the SIP

23. The source test must be performed at runs of 60 and 100 percent of peak load or at two points in the normal operating range of the engine, including the minimum point in the range and peak load.
24. During each test run, the permittee shall record the following information:
- 24.a. Date, time, emissions unit and monitoring point identification;
 - 24.b. Pollutant emission results in ppmv;
 - 24.c. Pollutant emission rate, lbs/hr;
 - 24.d. Engine load in % of full load;
 - 24.e. Engine parameters;
 - 24.f. Ambient temperature, °K;
 - 24.g. Barometric pressure at test, mm Hg;
 - 24.h. Humidity of ambient air, g H₂O/g air;
 - 24.i. O₂, % by volume;
 - 24.j. CO₂, % by volume;
 - 24.k. Fuel consumption, scf/hour; and
 - 24.l. For each test day, the permittee shall record the higher heating value of the fuel, Btu/scf
25. The permittee will be required to repeat the testing in Condition 22 if the following emission results are found from the first testing events:
- 25.a. If the CO emission factor results indicate an emission factor that is 75% or greater of the emission factor listed in Condition 32.b for any or all engine(s), the engine(s) must be tested one additional time during this permit term in accordance with Condition 24 for CO.
 - 25.b. If the NO_x emission factor results indicate an emission factor that is 75% or greater of the emission factor listed in Condition 32.b for any or all engine(s), the engine(s) must be tested one additional time during this permit term in accordance with Condition 24 for NO_x.
 - 25.c. If the VOC emission factor results indicate an emission factor that is 75% or greater of the emission factor listed in Condition 32.b for any or all engine(s), the engine(s) must be tested one additional time during this permit term in accordance with Condition 24 for VOC.
26. Unless otherwise specified in this permit or an applicable requirement, DEQ is not requiring any testing, monitoring, recordkeeping or reporting for the applicable emissions limits and standards that apply to IBUs. However, if testing were performed for compliance purposes, the permittee would be required to use the test methods identified in the definitions of "opacity" and "particulate matter" in OAR 340-200-0020 and perform the testing in accordance with DEQ's Source Sampling Manual.

MONITORING REQUIREMENTS

The monitoring conditions in this section are based on OAR 340-218-0050(3)(a); unless otherwise specified.

General Monitoring Requirements

27. The permittee must not knowingly render inaccurate any required monitoring device or method. [OAR 340-218-0050(3)(a)(E)]
28. The permittee must use the same methods to determine compliance as those used to determine actual emissions for fee purposes and can be no less rigorous than the requirements of OAR 340-218-0080. [OAR 340-218-0050(3)(a)(F)]
29. The permittee must comply with the monitoring requirements on the date of permit issuance unless otherwise specified in the permit or an applicable requirement. [OAR 340-218-0050(3)(a)(G)]

30. Compliance with Conditions 10, 11, 13 and 14 will be demonstrated by combusting only natural gas at the Northwest Pipeline LLC, Baker Compressor Station. Natural gas fuel usage shall be monitored in accordance with Condition 32.

Facility-Wide Monitoring

31. ~~The permittee must maintain a log of each nuisance complaint received by the permittee during the operation of the facility. Documentation must include date of contact, time of observed nuisance condition, description of nuisance condition, location of receptor, status of plant operation during the observed period, and time of response to complainant. A plant representative must immediately investigate the condition following the receipt of the nuisance complaint and a plant representative must provide a response to the complainant within 24 hours, if possible. This condition is only enforceable by the state. [OAR 340-218-0050(3)(a)]~~

Plant Site Emissions Monitoring: [OAR 340-222-0080]

32. The permittee must determine compliance with the Plant Site Emission Limits established in Condition 19 of this permit by conducting monitoring and calculations for each 12-month period in accordance with the following procedures, test methods and frequencies:

Table 6: Process Monitoring

Emissions Unit	Parameter	Units	Frequency
EU1, EU2	Fuel consumption in each engine	(MMscf/month) (MMscf/year)	Monthly
	Operating time for each engine	(hrs/month) (hrs/year)	
EU4	Fuel consumption in the boiler	(MMscf/month) (MMscf/year)	

- 32.a. The permittee must calculate emissions using the following formula, process parameters and emission factors:

$$E = P_{eu} \times EF_{eu} \times K$$

Where:

- E = Pollutant emissions in lbs/month and tons/yr.;
 P_{eu} = Process parameter identified in the table below;
 EF_{eu} = Emission factor identified for each emissions unit and pollutant in the table below;
K = Conversion constant: 1 lb/lb for daily and monthly emissions calculations; 1 ton/2,000 lbs for annual emissions calculations.

- 32.b. Emissions factors for calculating pollutant emissions:

Table 7: Emission Factors for Compliance Demonstration

Emissions Unit/Device	Pollutant	Emission Factor	Units
EU1	PM/PM ₁₀ /PM _{2.5}	10	lbs/MMscf
	SO ₂	4.29	lbs/MMscf
	NO _x	33.4	lbs/hr
	CO	3.19	lbs/hr
	VOC	9.57	lbs/hr

Emissions Unit/Device	Pollutant	Emission Factor	Units
EU2	PM/PM ₁₀ /PM _{2.5}	0.46	lbs/hr
	SO ₂	0.009	lbs/hr
	NO _x	22.8	lbs/hr
	CO	7.9	lbs/hr
	VOC	6.1	lbs/hr
EU4	NO _x	100	lbs/MMscf

- 32.c. The emissions factors listed in Condition 32.b are not enforceable limits unless otherwise specified in this permit. Compliance with PSELs must only be determined by the calculations contained in this Condition.

RECORDKEEPING REQUIREMENTS

The recordkeeping conditions in this section are based on OAR 340-218-0050(3)(b); unless otherwise specified.

General Recordkeeping Requirements

33. The permittee must maintain the following general records of testing and monitoring required by this permit: [OAR 340-218-0050(b)(A)]
- 33.a. The date, place as defined in the permit, and time of sampling or measurements;
 - 33.b. The date(s) analyses were performed;
 - 33.c. The company or entity that performed the analyses;
 - 33.d. The analytical techniques or methods used;
 - 33.e. The results of such analyses;
 - 33.f. The operating conditions as existing at the time of sampling or measurement; and
 - 33.g. The records of quality assurance for continuous monitoring systems (including but not limited to quality control activities, audits, calibration and drift checks).
34. Unless otherwise specified by permit condition, the permittee must make every effort to maintain 100 percent of the records required by the permit. If information is not obtained or recorded for legitimate reasons (e.g., the monitor or data acquisition system malfunctions due to a power outage), the missing record(s) will not be considered a permit deviation provided the amount of data lost does not exceed 10% of the averaging periods in a reporting period or 10% of the total operating hours in a reporting period, if no averaging time is specified. Upon discovering that a required record is missing, the permittee must document the reason for the missing record. In addition, any missing record that can be recovered from other available information will not be considered a missing record. [OAR 340-214-0114, OAR 340-214-0110, and OAR 340-218-0050(3)(b)]
35. The permittee must comply with the recordkeeping requirements on the date of permit issuance unless otherwise specified in the permit or an applicable requirement. [OAR 340-218-0050(3)(b)(C)]
36. Unless otherwise specified, the permittee must retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings (or other original data) for continuous monitoring instrumentation, and copies of all reports required by the permit. All existing records required by the previous Air Contaminant Discharge Permit or Oregon Title V Operating Permit must also be retained for five (5) years from the date of the monitoring sample, measurement, report or application. [OAR 340-218-0050(b)(B)]

Source Specific Recordkeeping Requirements

37. Source specific recordkeeping requirements:

- 37.a. Monthly amount of natural gas combusted in each GMWA-6 engine (EU1);
- 37.b. Monthly amount of natural gas combusted in GMVH-8 engine (EU2);
- 37.c. Monthly amount of natural gas combusted in the Sellers boiler (EU4);
- 37.d. Annual records of the natural gas combusted in each engine of EU1;
- 37.e. Annual records of the natural gas combusted in EU2;
- 37.f. Annual records of the natural gas combusted in EU4;
- 37.g. Monthly hours of operation of each engine of EU1;
- 37.h. Monthly hours of operation of EU2;
- 37.i. Annual hours of operation for each engine of EU1;
- 37.j. Annual hours of operation of EU2;
- 37.k. Annual hours of operation of AUX-1;
- 37.l. Source test and emission factor verification test reports;
- 37.m. Excess emissions log; and
- 37.n. Complaint log.

REPORTING REQUIREMENTS

The reporting conditions in this section are based on OAR 340-218-0050(3)(c); unless otherwise specified.

General Reporting Requirements38. Excess Emissions Reporting: The permittee must report all excess emissions as follows: [OAR 340-214-0300 through 340-214-0360]

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

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

- 38.e. The permittee must notify DEQ of planned startup/shutdown or scheduled maintenance events.
- 38.f. The permittee must continue to maintain a log of all excess emissions in accordance with OAR 340-214-0340(3). However, the permittee is not required to submit the detailed log with the semi-annual and annual monitoring reports. The permittee is only required to submit a brief summary listing the date, time, and the affected emissions units for each excess emission that occurred during the reporting period. [OAR 340-218-0050(3)(c)]
- 39. Permit Deviations Reporting: The permittee must promptly report deviations from permit requirements that do not cause excess emissions, including those attributable to upset conditions, as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. "Prompt" means within 15 days of the deviation. Deviations that cause excess emissions, as specified in OAR 340-214-0300 through 340-214-0360 must be reported in accordance with Condition 38.
- 40. All required reports must be certified by a responsible official consistent with OAR 340-218-0040(5). [OAR 340-218-0050(3)(c)(D)]
- 41. Reporting requirements must commence on the date of permit issuance unless otherwise specified in the permit. [OAR 340-218-0050(3)(c)(E)]

Semi-Annual and Annual Reports

- 42. The permittee must submit three (3) copies of reports of any required monitoring at least every 6 months, completed on forms approved by DEQ. Six month periods are January 1 to June 30, and July 1 to December 31. One copy of the report must be submitted to the EPA and two copies to the DEQ regional office. All instances of deviations from permit requirements must be clearly identified in such reports: [OAR 340-218-0050(3)(c)(A) and 340-218-0080(6)(d)]
- 42.a. The first semi-annual report is due on **July 30** and must include the semi-annual compliance certification, OAR 340-218-0080.
- 42.b. The annual report is due on **March 15** and must consist of the following:
 - 42.b.i. The emission fee report [OAR 340-220-0100], and proper documentation of calculations;
 - 42.b.ii. The annual facility wide emissions calculated monthly according to Condition 32 for each 12-month period;
 - 42.b.iii. A summary of the excess emissions upset log; [OAR 340-214-0340]
 - 42.b.iv. The second semi-annual compliance certification; [OAR 340-218-0080]
 - 42.b.v. Highest monthly amount of natural gas combusted in each engine of EU1;
 - 42.b.vi. Highest monthly amount of natural gas combusted in EU2;
 - 42.b.vii. Highest monthly amount of natural gas combusted in EU4;
 - 42.b.viii. Annual records of the natural gas combusted in each engine of EU1;
 - 42.b.ix. Annual records of the natural gas combusted in EU2;
 - 42.b.x. Annual records of the natural gas combusted in EU4;
 - 42.b.xi. Hours of operation for each engine in EU1;
 - 42.b.xii. Hours of operation of EU2;
 - 42.b.xiii. Hours of operation and maintenance records for AUX-1 as defined in Condition 17 of this permit; and
 - 42.b.xiv. The GHG report, if required by Condition 44.

43. The semi-annual compliance certification must include the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable): [OAR 340-218-0080(6)(c)]
 - 43.a. The identification of each term or condition of the permit that is the basis of the certification;
 - 43.b. The identification of the method(s) or other means used by the permittee for determining the compliance status with each term and condition during the certification period. Such methods and other means must include, at a minimum, the methods and means required under OAR 340-218-0050(3). *Note: Certification of compliance with the monitoring conditions in the permit is sufficient to meet this requirement, except when the permittee must certify compliance with new applicable requirements incorporated by reference into the permit. When certifying compliance with new applicable requirements that are not yet in the permit, the permittee must provide the information required by this condition.* If necessary, the permittee also must identify any other material information that must be included in the certification to comply with section 113(c)(2) of the FCAA, which prohibits knowingly making a false certification or omitting material information;
 - 43.c. The status of compliance with terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification must be based on the method or means designated in Condition 43.b of this rule. The certification must identify each deviation and take it into account in the compliance certification.
 - 43.d. The certification must also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance, as defined under OAR 340-200-0010, occurred; and
 - 43.e. Such other facts as DEQ may require to determine the compliance status of the source.
44. ~~Greenhouse Gas Registration and Reporting: If the calendar year emission rate of greenhouse gases (CO₂e) is greater than or equal to 2,756 tons (2,500 metric tons), the permittee must register and report its greenhouse gas emissions with DEQ in accordance with OAR 340-215. The greenhouse gas report must be certified by the responsible official consistent with OAR 340-218-0040(5) and included in the annual report required by Condition 42.b.~~
45. ~~Notwithstanding any other provision contained in any applicable requirement, the permittee may use monitoring as required under OAR 340-218-0050(3) and incorporated into the permit, in addition to any specified compliance methods, for the purpose of submitting compliance certifications. [OAR 340-218-0080(6)(e)]~~

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

~~Submit all Notices and applications that do not include payment, all reports (annual reports, source test plans and reports, etc.) to the Eastern Region's Permit Coordinator.~~

DEQ Eastern Region
475 NE Bellevue Drive, Suite 110
Bend, OR 97701
541-388-6146

~~Submit payments for invoices, applications to modify the permit, and any other payments to DEQ's Business Office:~~

DEQ Air Quality Division
700 NE Multnomah St. #600
Portland, OR 97204
503-229-5359

~~Submit all reports for EPA requirements to:~~

Clean Air Act Compliance Mgr.
US EPA Region 10, MS: OCE-101
1200 Sixth Avenue, Suite 900
Seattle, WA 98101

Pages 16 - 21 redacted -- outside the scope of the SIP