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Original Issuance: June 25, 1991

Revision a: Not issued

Revision b: November 17, 1997

Revision c: August 3, 1998

Revision d: March 27, 2009

Revision e: July 31, 2009

Revision f: July 24, 2013

**Northwest Clean Air Agency (NWCAA) hereby issues
 Order of Approval to Construct (OAC) 304f**

Project Summary: Construct a combined cycle, natural gas fired combustion turbine power plant rated at 125 megawatts. Ancillary equipment includes a 3-cell cooling tower and 500 kilowatt standby diesel generator. Nitrogen oxide (NOx) emissions are controlled with steam injection and selective catalytic reduction. This cogeneration plant has the ability to send low pressure steam to Socco Forest Products for use in their kilns.

Approved Emission Units:

- One (1) GE 7EA combined cycle combustion turbine with heat recovery steam generator, nominal heat input rate of 1138 MMBtu/hr
- One (1) 500 kW emergency Cummins Diesel Turbogenerator

Owner/Operator	Facility Name and Location
Puget Sound Energy, Inc. PO Box 97034 Bellevue, WA 98009-9734	Puget Sound Energy, Sumas Generating Station 1340 Thompson Lane Sumas, WA 98295 Contact: L. Todd Lawson

Permit History

- As of the date of issuance, this Order supersedes NWCAA OAC 304e issued July 31, 2009.

Note that in addition to other applicable rules and regulations, one or more of the approved emission units are subject to applicable portions of the following federal regulations:

New Source Performance Standards (NSPS)

- 40 CFR 60 Subpart A - General Provisions
- 40 CFR 60 Subpart GG - Standards of Performance for Stationary Gas Turbines

National Emission Standards for Hazardous Air Pollutants (NESHAP)/Maximum Achievable Control Technology Standards (MACT)

- Subpart A – General Provisions
- 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

As authorized by Northwest Clean Air Agency Regulation Section 300, this order is issued subject to the following restrictions and conditions¹:

1. Emissions from the plant stack shall not exceed any of the following:

a. Nitrogen oxides:

- 6 ppm_{dv} corrected to 15% oxygen, calendar day average, ISO standard conditions
- 18.1 lb/hour, calendar day average
- 75 tons/year

b. Carbon monoxide:

- 6 ppm_{dv} corrected to 15% oxygen, one-hour average, ISO standard conditions
- 12.6 lb/hour
- 52 tons/year

Carbon monoxide emissions limits shall apply at all times except during a time period not to exceed two hours during startup.

c. Opacity:

- Not to exceed five percent (5%) at the point of exhaust or within a reasonable distance of that point for more than six minutes in any one-hour period. Opacity shall be determined by U.S. EPA Reference Method 9 or other method approved by the Control Officer.

d. Ammonia:

- 10 ppm_{dv} corrected to 15% oxygen, one hour average, ISO standard conditions
- 13.3 lb/hour
- 55 tons/year

2. The following continuous emission monitors shall be installed and operated on the stack:

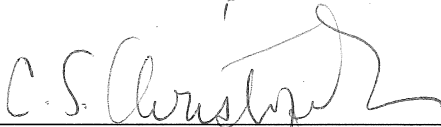
¹ Nothing in this permit is intended to, or shall, alter or waive any applicable law [including but not limited to defenses, entitlements, challenges or clarifications related to the Credible Evidence Rule, 62. Fed. Reg. 8315 (Feb. 27, 1997)] concerning the use of data for any purpose under the Act, generated by the reference method specified herein or otherwise.

Pursuant to Section 300.10 of the NWCAA Regulation and RCW 43.21B, this Order may be appealed to the Pollution Control Hearings Board (PCHB). To appeal to the PCHB, a written notice of appeal must be filed with the PCHB and a copy served upon the NWCAA within 30 days of the date the applicant receives this Order. Additional information regarding appeal procedures can be found at: www.eho.wa.gov under PCHB.


- a. Oxygen - in accordance with Performance Specification 3 (40 CFR 60 Appendix B)
- b. Nitrogen oxides - in accordance with Performance Specification 2 (40 CFR 60 Appendix B)

The continuous emission monitors shall be used for continuous compliance determinations and shall be installed and operated in accordance with NWCAA 367, NWCAA Appendix A and 40 CFR Part 75.

3. A record of the amount of time the turbine is in used shall be maintained. Natural gas consumption for the turbine shall be monitored and recorded.
4. Annual source testing for carbon monoxide (CO) and ammonia (NH₃) emissions shall be conducted for the gas turbine stack using EPA Method 10 and BAAQMD Method ST-1B, respectively. Testing shall be conducted at least once per calendar year. All source testing shall be conducted, and plans and test results submitted in accordance with NWCAA Section 367 and NWCAA Appendix A.
5. The following information shall be reported to the NWCAA on a calendar month basis within 30 days following the end of the previous month.
 - a. Concentration of NO_x in ppmvd corrected to 15% oxygen, calendar day average, and NO_x emissions in lb/calendar day for the gas turbine stack.
 - b. Total MMBtu of natural gas burned in the turbine during the month.
 - c. Number of hours the turbine operated during the month.
 - d. Number of hours the standby diesel generator has operated during the calendar year
6. The combustion turbine shall burn natural gas only, as defined in 40 CFR 72.2.
7. The Cummins Diesel Turbo 500 kW standby generator shall not be operated more than 132 hours in any calendar year.



Christos Christoforou, P.E.
Engineer



Mark Buford, P.E.
Assistant Director

Revision a: There was no revision A.

Revision b: NO_x limit changed from hourly to a 24-hour average. Remove monthly CO reporting requirement.

Revision c: CO control catalyst may be removed after completion of six months of continuous CO monitoring. Add a 2-hour CO limit exemption during turbine startup.

Revision d: Update with new owner information. Delete obsolete and non-applicable requirements, including removing VOC and PM/PM-10 limits and their initial source test requirements. Add annual source testing for CO and ammonia. Clarify reporting requirements.

Revision e: Remove "pipeline grade" from Condition 6 and add a citation to define "natural gas".

Revision f: Add 40 CFR 63 Subpart ZZZZ in the preamble. Remove the provision to monitor water to fuel ratio from Condition 3.