Northwest Clean Air Agency (NWCAA) hereby issues
Order of Approval to Construct (OAC) 1439

Project Summary: Replacement of an existing 230 horsepower (hp) diesel-fired Caterpillar model S4 emergency generator engine at the #2 Control Room with a new, non-emergency Caterpillar model C18 ultra-low sulfur diesel (ULSD) fired standby generator engine rated at 500 kilowatt (kW), or 671 brake hp output. The engine may be used for other applications onsite.

Approved Emission Unit:

- One ULSD-fired Caterpillar model C18 standby generator engine rated at 500 kW equipped with diesel particulate filter and oxidation catalyst.

Owner/Operator	Facility Name and Location
HF Sinclair Puget Sound Refinery 8505 S Texas Rd Anacortes, WA 98221 Contact: Mindy Mejia	HF Sinclair Puget Sound Refinery 8505 S Texas Rd Anacortes, WA 98221

Note that in addition to other applicable rules and regulations, the approved emission unit is 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 IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- 40 CFR 63 Subpart A - General Provisions
- 40 CFR 63 Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines

Issuance of this Order is authorized by Northwest Clean Air Agency Regulation Section 300. The Owner/Operator must comply with the following restrictions and conditions[1]:

(1) Visible emissions from the generator engine exhaust stack that exceed five percent

[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 FR 8315 (Feb. 27, 1997)] concerning the use of data for any purpose under the Act, generated by the reference method specified herein or otherwise.

opacity for more than an aggregate of three minutes in any consecutive 60-minute period as determined by Washington State Department of Ecology Method 9A are prohibited.

(2) Fire the generator engine with only ultra-low sulfur diesel with a maximum sulfur content of 15 ppm. Retain records of all fuel purchased for the engine.

(3) Reduce emissions of CO from the generator engine by 70 percent or more by volume on a dry basis at 15 percent O_2.

(4) Demonstrate compliance with Condition (3) of this Order by complying with the periodic testing requirements in 40 CFR 63.6610, 40 CFR 63.6615, 40 CFR 63.6620, 40 CFR 63.6630, and Table 3.1 of that subpart.

Record and report the average horsepower of the generator engine during the performance test.

Conduct all testing in accordance with NWCAA Section 367 and NWCAA Appendix A.

(5) During the initial performance test, measure and record the pressure drop across the oxidation catalyst in accordance with 40 CFR 63 Subpart ZZZZ Table 5.1.a.iii. Thereafter, measure and record the pressure drop across the oxidation catalyst per 40 CFR 63.6640 and Table 6.1.a.v of that subpart. Maintain the pressure drop across the oxidation catalyst in accordance with 40 CFR 63 Subpart ZZZZ Table 2b.1.a.

(6) Comply with the requirements to install, operate, and maintain a continuous parameter monitoring system (CPMS) as specified in 40 CFR 63.6625 and Table 5.1.a.ii of that subpart. During the initial performance test, measure and record the inlet temperature of the oxidation catalyst in accordance with 40 CFR 63 Subpart ZZZZ Table 5.1.a.iii. Thereafter, continuously monitor and record the oxidation catalyst inlet temperature in accordance with 40 CFR 63.6640 and Table 6.1.a.ii-iv of that subpart. Maintain the inlet temperature of the oxidation catalyst in accordance with 40 CFR 63 Subpart ZZZZ Table 2b.1.b.

(7) Do not operate the engine for more than 900 hours per calendar year. Equip the engine with a non-resettable hourly runtime meter. Keep a record of the generator engine's annual hours of operation in a log onsite and readily available for review by NWCAA.

(8) Maintain documentation of the generator engine's EPA Tier IV Final certification onsite and readily available for review by NWCAA.

(9) Maintain a copy of the engine operation and maintenance (O&M) manual onsite and readily available for review by operators and NWCAA. The O&M manual must include the engine manufacturer's recommended maintenance schedule, including recommended maintenance for the diesel particulate filter, oxidation catalyst, and

Pursuant to Section 300.10 of the NWCAA Regulation and ch 43.21B RCW, 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: http://www.eluho.wa.gov/ under PCHB.

CPMS.

(10) Maintain and operate the generator engine, including the diesel particulate filter and oxidation catalyst, such that it achieves the EPA Tier IV Final emission standards for the life of the engine. Perform all maintenance in accordance with the manufacturer's specifications and associated O&M manual and maintenance schedule. Record all maintenance activities performed on the engine, diesel particulate filter, oxidation catalyst, and CPMS, including the date and nature of maintenance performed, in a log. Keep the log onsite and readily available for review by NWCAA.

(11) Maintain all records required by this Order onsite for no less than five years from the date of generation and keep them readily available for review by NWCAA personnel.

(12) Provide written notification to the NWCAA of startup date of the new generator engine. Postmark the notice no later than 15 days after startup and include a reference to OAC 1439.

Robyn Nabstedt, EIT
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