

Lane Regional Air Pollution Authority  
1010 Main Street  
Springfield, Oregon 97477  
(541) 726-2514

SYNTHETIC MINOR AIR CONTAMINANT DISCHARGE PERMIT  
(SM•ACDP)

Issued in accordance with provisions of Title 34, Lane Regional  
Air Pollution Authority's Rules and Regulations and based on the  
land use compatibility findings included in the permit record.

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ISSUED TO:

Eugene Water & Electric Board  
Steam Plant  
500 East 4<sup>th</sup> Avenue  
Eugene, Oregon 97401

LAND USE COMPATIBILITY STATEMENT:

From: City of Eugene  
Dated: April 21, 1998

MAILING ADDRESS:

P.O. Box 10148  
Eugene, Oregon 97440-2148

PERMITTED SOURCES:

Steam and Electric Generation Facility  
SIC 4911

PERMIT NUMBER: 202505

PERMIT TYPE: Synthetic Minor (SM)

ISSUED: November 3, 1998

EXPIRES: November 2, 2003

SPECIFIC EMISSION POINTS:

Boiler 1 Bunker C and Diesel  
Boiler 2 Bunker C and Diesel  
Boiler 3 Bunker C and Diesel  
Boiler 4 Natural Gas and Diesel  
Boiler 5 Natural Gas and Diesel

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Issued

By: \_\_\_\_\_  
Barbara J. Cole, Director

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 Pollution Authority (LRAPA).

Performance Standards and Emission Limits

2. Emissions of particulate matter (PM) from any single air contaminant source shall not exceed either of the following: [LRAPA 32-020 and 32-030]
  - a. 0.2 grains per dry standard cubic foot of exhaust gas, adjusted to 50 percent excess air or calculated to 12 percent carbon dioxide, from any single air contaminant emissions source installed, constructed or modified prior to June 1, 1970 (exhaust stack of Boilers 1, 2 or 3).
  - b. 0.1 grains per dry standard cubic foot of exhaust gas, adjusted to 50 percent excess air or calculated to 12 percent carbon dioxide, from any single air contaminant emissions source installed, constructed or modified after June 1, 1970 (exhaust stacks of Boilers 4 or 5).
3. The permittee shall not allow visible emissions from any emissions point which equal or exceed 20% opacity for a period or periods aggregating more than three (3) minutes in any one (1) hour, excluding uncombined water. [LRAPA 32-010(1)(B) and 32-010(3)]
4. Fuel Sulfur Limitations
  - a. The permittee shall not use any Bunker C fuel oil with a sulfur content in excess of 1.75%. Sulfur content may be verified by vender certification or through independent test of each shipment of oil. [LRAPA 32-065]
  - b. The permittee shall not use any Diesel fuel oil or used Transformer oil with a sulfur content in excess of 0.3%. Sulfur content may be verified by vender certification or through independent test of each shipment of oil. [LRAPA 32-065]

Synthetic Minor Limitations

5. LRAPA 34-120, "Synthetic Minor Sources", allows the potential emissions from this source to be limited by enforceable conditions on production, hours of operation throughput or fuel usage. In accordance with the requirements of LRAPA 34-120, the permittee shall not burn more than 917,936 gallons of Diesel (including used on-spec Transformer oil), 100,000 gallons of Bunker C fuel oil, and 1,196,803,440 cubic feet of natural gas. These limits shall be based on the summation of the previous 12-month combustion totals.
6. Used Transformer Oil Combustion
  - a. The permittee may combust used Transformer oil, which is generated from EWEB equipment, in accordance with the EWEB Steam Plant Protocol for Burning Used, Non-PCB Transformer Oil for Energy Recovery, which meets the specifications of on-spec used oil in 40 CFR 761 and 40 CFR 279 and as listed below:

Parameter	Limit
Arsenic	≤ 5 ppm

Cadmium	≤	2 ppm
Chromium	≤	10 ppm
Lead	≤	100 ppm
Total Halogens	≤	1000 ppm
PCB	<	2 ppm
Flash Point	≥	150 °F

- b. The permittee shall maintain records of used oil transferred to the day tank and the diesel tank along with sufficient documentation to demonstrate that the oil meets the definition of on-spec used oil. These records shall be maintained in accordance with the EWEB protocol. The protocol may be modified with the approval of the Authority.
- c. Used Transformer oil may be burned in lieu of Diesel fuel and shall be counted as part of the allowed Diesel fuel usage for compliance with the PSEL and Synthetic Minor conditions of this permit.

#### New Source Performance Standards (NSPS)

The permittee shall comply with the NSPS requirements of 40 CFR 60 Subpart Dc relating to Boiler 4, including but not necessarily limited to the following:

7. The permittee shall not allow the emissions of SO<sub>2</sub> from the exhaust of Boiler 4 in excess of 0.50 pounds per million Btu heat input while combusting fuel oil. [40 CFR 60.42c(d)]
8. As an alternative to complying with Condition 7, the permittee shall not combust any fuel oil in Boiler 4 which contains greater than 0.5 weight percent sulfur. [40 CFR 60.42c(d)]
9. The permittee shall not allow emissions to the atmosphere from Boiler 4 which exceed 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. [40 CFR 60.43c(c)] This opacity standard applies at all times, except during periods of startup, shutdown, or malfunction. [40 CFR 43c(d)]

The permittee shall comply with the NSPS requirements of 40 CFR 60 Subpart Db relating to Boiler 5, including but not necessarily limited to the following:

10. The permittee shall not allow the emissions of SO<sub>2</sub> from the exhaust of Boiler 5 in excess of 0.80 pounds per million Btu heat input while combusting fuel oil. [40 CFR 60.42b(a)] This limit is applicable at all times, including periods of startup and shutdown. This condition can be met by maintaining fuel sulfur certificates from the fuel supplier which certify the oil as very low sulfur oil (0.5 % sulfur or less).
11. The permittee shall not allow emissions to the atmosphere from Boiler 5 which exceed 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. [40 CFR 60.43b(f)] This opacity standard applies at all times, except during periods of startup, shutdown, or malfunction. [40 CFR 43b(g)]
12. The permittee shall not allow the emissions of NO<sub>x</sub> (expressed as NO) from the exhaust of Boiler 5 in excess of 0.20 pounds per million Btu heat input while combusting fuel oil and/or natural gas. [40 CFR 60.44b(a)(1)(ii)] This limit applies at all times including periods of startup, shutdown, or malfunction.

Monitoring for NSPS

Boiler 4

13. The permittee has elected to demonstrate compliance with the sulfur dioxide standard based on fuel supplier certification and shall obtain fuel sulfur content certificates for each fuel oil delivery to the onsite tanks. [40CFR60.46c(a)]

Boiler 5

14. The permittee shall install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere from Boiler 5 and record the output of the system. [40CFR60.48b(a)]
15. The permittee shall demonstrate compliance with the sulfur dioxide standard by combusting only low sulfur oil and shall maintain fuel receipts as described in 40CFR60.49b(r). [40CFR60.47b(b)]
16. The permittee shall install, calibrate, maintain, and operate a continuous monitoring system for measuring nitrogen oxides emissions discharged to the atmosphere from Boiler 5 and record the output of the system. [40CFR60.48b(b)] As an alternative, the permittee may monitor steam-generating unit operating conditions and predict nitrogen oxide emission rates as specified in a plan approved by LRAPA pursuant to 40CFR60.49b(c). [40CFR60.48b(g)(2)]

Source Testing for NSPS Compliance

17. After the issuance of this permit, the permittee shall conduct source tests, while burning Diesel fuel oil, on the exhaust stack of Boiler 5 for SO<sub>2</sub>, NO<sub>x</sub>, and Particulate, in accordance with 40 CFR 60.8 and the applicable sections of 40 CFR 60 subparts Db and Dc, within 60 days of initially burning Diesel fuel oil, in each boiler. In lieu of SO<sub>2</sub> source testing, the permittee may use fuel sulfur certificates from the fuel supplier to calculate SO<sub>2</sub> emissions.
18. The permittee shall submit a source test plan to LRAPA at least 15 days prior to conducting the required testing. Source test reports shall be submitted to the Authority within 45 days of completing the required testing.
19. All source testing shall be conducted in accordance with the Department of Environmental Quality's source sampling manual.

Recordkeeping and Reporting for NSPS

20. The permittee shall maintain records and submit quarterly reports to LRAPA in accordance with 40CFR60.48c for information relating to Boiler 4.
21. The permittee shall maintain records and submit quarterly reports to LRAPA in accordance with 40CFR60.49b for information relating to Boiler 5.

Source Testing Requirements for Emission Factor Verification

22. The permittee shall conduct source tests for verification of emission factors used to determine the PSEL and Synthetic Minor limitations for PM<sub>10</sub>, CO and NO<sub>x</sub>, while burning Bunker C fuel oil, on the exhaust stack of either Boilers 1 or 3 and while burning Diesel, on the exhaust stack of either Boiler 4 or 5 once during the term of this permit. Testing required under the NSPS testing conditions may be used to satisfy this condition in part.
23. The permittee shall submit a source test plan to LRAPA at least 15 days prior to conducting the required testing. Source test reports shall be submitted to the Authority within 45 days of

completing the required testing.

24. All source testing shall be conducted in accordance with the Department of Environmental Quality's source sampling manual.

If source testing for emission factor verification indicates that there is a significant difference from the factors used to determine the PSEL and Synthetic Minor conditions, the Authority may reopen this permit, or require the permittee to apply for a permit modification, to adjust the type and/or amount of allowed fuel combustion.

Plant Site Emission Limits (PSELs)

25. Total emissions from all sources located on the plant site shall not exceed the annual and hourly limits listed below, which were calculated on base production rates and process emissions indicated in the attached Review Report. [LRAPA 34-060(5)]

Hourly PSEL  
(pounds per hour)

<u>Source</u>	<u>PM</u>	<u>PM<sub>10</sub></u>	<u>VOC</u>	<u>NO<sub>x</sub></u>	<u>SO<sub>2</sub></u>	<u>CO</u>	<u>Pb</u>
Boilers	74	74	3.4	252	1012	50	NA
Totals	74	74	3.4	252	1012	50	NA

The Hourly PSEL is based on capacity of the boilers and the hourly usage of 5337 gallons of Diesel, 3463 gallons of Bunker C fuel oil, and 193,566 cubic feet of natural gas. Any changes in operation that may increase the emissions or the PSEL must be approved by LRAPA.

Annual PSEL  
(tons per calendar year)

<u>Source</u>	<u>PM</u>	<u>PM<sub>10</sub></u>	<u>VOC</u>	<u>NO<sub>x</sub></u>	<u>SO<sub>2</sub></u>	<u>CO</u>	<u>Pb</u>
Boilers	3.4	3.4	2.0	73	35	99	NA
Totals	3.4	3.4	2.0	73	35	99	NA

The Annual PSEL is based on the annual usage of 917,936 gallons of Diesel, 100,000 gallons of Bunker C fuel oil, and 1,196,803,440 cubic feet of natural gas. Any changes in operation that may increase the emissions or the PSEL must be approved by LRAPA.

Monitoring and Recordkeeping

26. The permittee shall effectively inspect and monitor the operation and maintenance of the plant and associated air contaminant control facilities and shall implement the procedures necessary to monitor and record the following parameters. A record of all such data shall be maintained for a period of two years at the plant site for inspection by authorized representatives of LRAPA. [LRAPA 34-070(5)]

- a. All operating and production parameters to be reported to LRAPA annually as required in Condition 28.
  - b. Excess emission records as defined in LRAPA Title 36 (recorded on occurrence).
  - c. A description of any maintenance to air contaminant control systems (recorded on occurrence).
27. A record of the following data shall be maintained and made available for LRAPA inspection upon request. In addition, a copy of this information must be submitted to LRAPA with the Annual Information Update Form. This information will be used to determine compliance with the hourly and annual PSELS. [LRAPA 34-070(5)]

<u>Parameter</u>	<u>Minimum Recording Frequency</u>
Diesel Fuel Usage	Monthly
Diesel Fuel — Sulfur Content	Each Shipment of Diesel Fuel
Bunker C Fuel Oil Usage	Monthly
Bunker C — Sulfur Content	Each Shipment of Oil
Natural Gas Usage	Monthly

The permittee shall use this data to compare with the limits specified in the Synthetic Minor limitations of this permit.

Reporting Requirements

28. The permittee shall submit to LRAPA by February 15, of each year this permit is in effect, one copy of the following information for the preceding calendar year: [LRAPA 34-070(5)]
- a. Operating and production parameters:
    - i. Annual type and quantity of fuel combusted in each boiler,
    - iii. Emission calculations showing compliance with the hourly and annual PSEL for all pollutants.
  - b. Monthly records showing compliance with the 12-month rolling limits established under the Synthetic Minor conditions of this permit.
  - c. A log of all planned and unplanned excess emissions in accordance with LRAPA 36-025.
  - d. Explain any permanent changes made to the boilers which would affect air contaminant emissions, and provide the date changes were made.
  - e. List all major maintenance performed on air pollution control equipment.
29. When it is anticipated that shutdown, by-pass, or operation at reduced efficiency of production equipment or air pollution control equipment for necessary scheduled maintenance may result in excess emissions, the source operator must obtain prior LRAPA approval of procedures that will be used to minimize excess emissions. Application for approval of procedures associated with scheduled maintenance shall be submitted in writing and received by LRAPA at least 72 hours prior to the event. [LRAPA 36-015(1)]
30. Unless otherwise specified, all reports, test results, notifications, etc., required by the above terms and conditions shall be submitted to the following office: [LRAPA 34-070(5)]

Lane Regional Air Pollution Authority  
1010 Main Street  
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Fee Schedule

31. In accordance with adopted regulations, the permittee will be invoiced annually for the Compliance Determination Fee and for all applicable fees associated with Synthetic Minor status. [LRAPA 34-150(3)]

General Conditions

32. The permittee shall not cause or allow any air contaminant discharges from any source which cause injury, detriment, public nuisance, or annoyance to any persons or to the public, or which cause injury or damage to business or property. [LRAPA 32-090]
33. The permittee shall operate all air contaminant generating processes so that fugitive-type dust associated with the operation will be adequately controlled at all times. [LRAPA 48-015(2)]
34. The permittee shall conduct dust suppression measures such as, but not limited to, cleaning paved road surfaces as necessary so that fugitive-type dust associated with the operation will be adequately controlled at all times. [LRAPA 48-015(2)]
35. The permittee shall operate and maintain all plant process equipment and all air contaminant collection and disposal facilities in a manner which minimizes air contaminant discharges. [LRAPA 32-007]
36. The permittee shall not cause or allow the emission of odorous matter or other fugitive emissions so as to create nuisance conditions off the permittee's property. [LRAPA 50-020]
37. The permittee shall 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 emission of air contaminants which would otherwise violate these LRAPA rules or this permit. [LRAPA 33-030(1)]
38. The permittee shall not willfully cause or permit the installation or use of any device or use of any means designed to mask the emission of an air contaminant which causes or tends to cause detriment to health, safety, or welfare of any person. [LRAPA 33-030(2)]
39. The permittee shall not cause or allow the emissions of particulate matter which is greater than 250 microns in size if such particulate matter does or will deposit upon the real property of another person. [LRAPA 32-055]
40. In accordance with LRAPA 51-015, the permittee will take all actions specified in the applicable Table I, II, or III (Attachment A) and implement the following emissions reduction plan during air pollution episodes when so notified by LRAPA.

<u>Episode Level</u>	<u>Required Action</u>
Alert	None
Warning	Prepare to Cease Electric Power Generation

Emergency	Cease Electric Power Generation
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41. The permittee shall allow LRAPA representatives access to the plant site and pertinent records at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, copying air contaminant emission discharge records, and otherwise conducting necessary functions related to this permit. [LRAPA 13-020(1)(h)]
42. A copy of the permit application and this Air Contaminant Discharge Permit must be available for inspection upon request.
43. All air pollution control equipment at the site shall be operated and maintained to meet or exceed manufacturer's specifications in order to ensure that emissions are controlled to the greatest extent possible for the type of control equipment used. [LRAPA 32-005]
44. The permittee is prohibited from conducting open burning on the plant site except as may be allowed by LRAPA 47-020. [LRAPA 32-005]
45. The permittee shall at all times conduct dust suppression measures to meet the requirements set forth in "Fugitive Emissions" and "Nuisance Conditions". [LRAPA 48-015(2) and LRAPA 32-090, respectively]
46. In accordance with LRAPA 36-001 through 36-025, the permittee shall immediately (i.e., as soon as possible but in no case more than one hour after the beginning of the excess emission period) notify LRAPA by telephone or in person of any excess emission, other than pre-approved startup, shutdown, or scheduled maintenance. Notification shall include the source name, nature of the emissions problem, name of the person making the report, name and telephone number of contact person for further information, date and time of the onset of the upset condition, whether or not the incident was planned, the cause of the excess emissions (startup, shutdown, maintenance, breakdown, or other), equipment involved in the upset, estimated type and quantity of excess emissions, estimated time of return to normal operations, efforts made to minimize emissions, and a description of remedial actions to be taken. Follow-up reporting shall be made in accordance with LRAPA direction and LRAPA 36-025. [LRAPA Title 36]  

Notification shall 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) 726-2514. During nonbusiness hours, weekends, or holidays, the permittee shall immediately notify LRAPA by calling the LRAPA Upset/Complaint Line. The current number is (541) 726-1930.

In addition, any excess emissions which could endanger public health or safety shall immediately be reported to the Oregon Emergency Response System (OERS) at 1-800-452-0311.
47. The permittee shall notify LRAPA in writing, using an LRAPA "Notice of Construction" form, or "Permit Application Form", and obtain approval in accordance with LRAPA 34-035 before:
  - a. Constructing or installing any new source of air contaminant emissions, including air pollution control equipment, or
  - b. Modifying or altering an existing source that may significantly affect the emission of air contaminants, or
  - c. Making any physical change which increases emissions, or
  - d. Changing the method of operation, the process, or the fuel use, or increasing the normal hours of operation to levels above those contained in the permit application and reflected in this permit and which result in increased emissions.
48. Application for renewal of this permit must be submitted not less than 60 days prior to the permit expiration date. A Filing Fee, and Application Processing Fee, an Annual Compliance

Determination Fee and all applicable fees of Title 34 Table A, Part I must be submitted with the application for the permit renewal.

Application for a modification of this permit must be submitted not less than 60 days prior to the source modification. A filing fee and an application-processing fee and must be submitted with the application. [LRAPA 34-035]

49. The procedure for issuance of a permit shall apply to renewal of a permit. If a completed application for a renewal of a permit is filed with the Authority in a timely manner, prior to the expiration date of the permit, the permit shall not be deemed to expire until final action has been taken on the renewal application to issue or deny a permit. [LRAPA 34-130(16)]
50. 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.
51. This permit is subject to revocation for cause as provided in LRAPA 34-140(3). [LRAPA 34-140]

DPK/bp