



State of Oregon
Department of
Environmental
Quality

**GENERAL
AIR CONTAMINANT DISCHARGE PERMIT
ATTACHMENT**

Department of Environmental Quality
Air Quality Division
811 SW Sixth Avenue
Portland, OR 97204-1390
Telephone: (503) 229-5359

This attachment is issued in accordance with the provisions of OAR 340-216-0060

ISSUED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY

Signed copy on file at DEQ Headquarters Office

Andrew Ginsburg, Air Quality Division Administrator

Dated

Table 1 Code	Source Description	SIC	NAICS
Part B, 27	Electrical power production, stationary or portable facilities up to 25 megawatts combined generating capacity, powered by reciprocating internal combustion engines, diesel or dual-fuel.	4911	221112

TABLE OF CONTENTS

1.0 ATTACHMENT ASSIGNMENT2

2.0 GENERAL EMISSION STANDARDS AND LIMITS3

3.0 SPECIFIC EMISSION STANDARDS AND LIMITS.....3

4.0 OPERATION AND MAINTENANCE REQUIREMENTS5

5.0 PLANT SITE EMISSION LIMITS5

6.0 COMPLIANCE DEMONSTRATION5

7.0 RECORDKEEPING REQUIREMENTS6

8.0 REPORTING REQUIREMENTS7

9.0 ADMINISTRATIVE REQUIREMENTS8

10.0 FEES8

11.0 TABLE A: MAXIMUM ALLOWED HOURS OF OPERATION9

1.0 ATTACHMENT ASSIGNMENT

- 1.1 Qualifications** All of the following conditions must be met in order to qualify for assignment to this General Air Contaminant Discharge Permit (ACDP) Attachment:
- a. The permittee is performing Electrical Power Production, using stationary or portable facilities with up to 25 megawatts combined capacity, powered by reciprocating internal combustion engines, diesel or dual-fuel, including any other supportive equipment that emits air contaminants of any type. Dual-fuel is a mixture of natural gas and diesel.
 - b. For the purpose of this permit, Electrical Power Production means either or both of the following:
 - i. Supplying electrical power to a utility grid at any time; or
 - ii. Producing electrical power for use by the owner or operator at any time other than during loss of utility power.
 - c. A Simple or Standard ACDP is not required for the source.
 - d. The source is not having ongoing, recurring or serious compliance problems.
- 1.2 Portable Facility Determination** The EPA considers portable engines to be non-road engines which are exempt from air quality permitting (40 CFR 1068.30). The DEQ, therefore, will exempt non-road engines from ACDP requirements, unless the engine(s) are projected to have annual emissions of 10 or more tons per year of any single criteria pollutant at one location. The following provides information on making a stationary (non-road) engine determination:
- a. If an engine operates in the same location for more than 12 months (can be shorter for seasonal sources), it will not be considered a non-road engine and could be subject to ACDP requirements;
 - b. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the source.
 - i. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and operates at that single location approximately three months (or more)

each year.

- c. While non-road engines are likely to be exempt from DEQ's ACDP requirements, a Notice of Intent to Construct form must be submitted for each engine utilized at a source.

1.3 Assignment DEQ will assign qualifying permittees to this attachment that have and maintain a good record of compliance with DEQ's Air Quality regulations and that DEQ determines would be appropriately regulated by a General ACDP. DEQ may rescind assignment if the permittee no longer meets the requirements of OAR 340-216-0060 and the conditions of this permit.

1.4 Permitted Activities The permittee is allowed to discharge air contaminants from processes and activities related to the air contaminant source(s) listed on the first page of this permit until this permit expires, is modified, revoked or rescinded as long as conditions of this permit are complied with. If there are other emissions activities occurring at the site besides those listed on the cover page of this permit, the permittee may be required to obtain a Simple or Standard ACDP or General ACDP Attachment(s), if applicable.

1.5 Relation to Local Land Use Laws This permit is not valid in Lane County, or at any location where the operation of the permittee's processes, activities, and insignificant activities would be in violation of any local land use or zoning laws. For operations within Lane County, contact the Lane Regional Air Pollution Authority for obtaining any necessary permits at (541) 736-1056. It is the permittee's sole responsibility to obtain local land use approvals as, or where, applicable before operating this facility at any location.

2.0 GENERAL EMISSION STANDARDS AND LIMITS

2.1 Fuels The permittee must not use any fuel other than diesel or dual-fuel that contains a mixture of natural gas and diesel.

2.2 Fuel Sulfur Content The permittee must not use diesel fuel containing more than 0.05% sulfur by weight.

3.0 SPECIFIC EMISSION STANDARDS AND LIMITS

3.1 Determination of Tier 1, Tier 2 or Tier 3 The permittee must self-classify their generator facility as Tier 1, Tier 2 or Tier 3. Different operating limits apply to each tier.

- Tier 3 Generator**
- a. Tier 1. If the engine(s) emit(s) more than 0.016 pounds of NO_x per horsepower-hour (lb NO_x/hp-hr), then it is a Tier 1 facility. **Note: Generators are classified as Tier 1, unless a source test conducted in accordance with Part 6.0 of this permit shows that the NO_x emission rate falls into the Tier 2 or Tier 3 range.**
 - b. Tier 2. If the engine(s) emit(s) more than 0.008 lb NO_x/hp-hr, but not more than 0.016 lb NO_x/hp-hr, then it is a Tier 2 facility.
 - c. Tier 3. If the engine(s) emit(s) 0.008 lb NO_x/hp-hr or less, then it is a Tier 3 facility.
 - d. If the permittee operates multiple generators, then the facility will be classified at the lowest tier that any generator is in. For example, if the permittee operates 2 generators and one is Tier 1 and the other is Tier 2, then the facility will be classified as Tier 1.
- 3.2 Emission Control System Requirements**
- Not later than January 1, 2002, all generators used for power production must be equipped with an exhaust emission control system(s) that is designed and certified by the manufacturer(s) to reduce emissions of Particulate Matter (PM), Carbon Monoxide (CO) and Volatile Organic Compounds (VOC*).
- a. Particulate filters alone do not satisfy this requirement. The control system must be specifically designed to reduce CO and VOC* as well as PM.
 - b. The use of fuel catalysts does not satisfy this requirement unless the manufacturer or supplier demonstrates to DEQ's satisfaction, through rigorous testing, that the fuel catalyst is at least as effective as exhaust emission control systems in reducing emissions of PM, CO and VOC*.
- * Total Organic Carbon (TOC) or Non-Methane Hydrocarbons (NMHC) may be specified in lieu of VOC.
- 3.3 Maximum hours of operation in any 12-consecutive month period**
- The maximum hours of operation in any 12-consecutive month period must not exceed the hours specified in Table A provided at the end of this permit.
- 3.4 NESHAP for RICE**
- Facilities assigned to this General Permit attachment are subject to 40 CFR part 63, subpart ZZZZ. This subpart contains federal standards for hazardous air pollutants from the operation of a Reciprocal Internal Combustion Engine (RICE). There are notification and reporting requirements to be submitted to the EPA.

4.0 OPERATION AND MAINTENANCE REQUIREMENTS

- 4.1 **Work Practices** The permittee must tune all generators used for power production at least once per year. The tune-up must include an inspection of the emissions control system. If the emissions control system is not working properly, it must either be repaired or replaced.

5.0 PLANT SITE EMISSION LIMITS

- 5.1 **Plant Site Emission Limits (PSEL)** The permittee must now allow plant site emissions to exceed the following:

Pollutant	Limit	Units
PM	24	tons per year
PM ₁₀	14	tons per year
SO ₂	39	tons per year
NO _x	39	tons per year
CO	99	tons per year
VOC	39	tons per year

- 5.2 **PM₁₀ PSEL for Medford-Ashland AQMA** For sources operating in the Medford-Ashland AQMA, the permittee must not allow plant site emissions of PM₁₀ to exceed the following:

Pollutant	Limit	Units
PM ₁₀	4.5	tons per year
	49	pounds per day

- 5.3 **Annual Period** The annual plant site emissions limits apply to any 12-consecutive calendar month period.

6.0 COMPLIANCE DEMONSTRATION

- 6.1 **Testing Requirement** If the permittee wishes to demonstrate that the generator(s) is(are) in Tier 2 or Tier 3, the permittee must conduct a source test on each generator for NO_x emissions using the following test methods and procedures:

- a. Method 7E must be used for measuring NO_x emissions;
- b. The permittee must monitor and record the following parameters during the source test:

- i. Visible emissions as measured by EPA Method 9 for a period of at least six minutes during or within 30 minutes before or after each test run;
 - ii. CO and VOC emissions as measured by EPA Methods 10 and 25a, respectively (report VOC as total hydrocarbons on a propane basis);
 - iii. Process operating parameters;
 - iv. Pollution control device operating parameters, if any.
- c. All tests must be conducted in accordance with DEQ's Source Sampling Manual and with the pretest plan submitted at least 15 days in advance and approved by the DEQ Regional Source Test Coordinator. The permittee must submit test data and results for review to the DEQ Regional Source Test Coordinator within 30 days unless otherwise approved in the pretest plan.
- d. Only regular operating staff may adjust the combustion system or production processes and emission control parameters during the source test and within 2 hours prior to the tests. Any operating adjustments made during the source test, which are a result of consultation during the tests with source testing personnel, equipment vendors or consultants, may render the source test invalid.

6.2 Monitoring Requirements

The permittee must monitor the operation and maintenance of the plant and associated air contaminant control devices as follows:

- a. Each month, monitor the hours of operation
- b. Each month, calculate the total hours of operation for the preceding 12 months

6.3 Fuel Sulfur Monitoring

The permittee must either obtain a certificate from the vendor stating that the fuel sulfur content complies with the limit in Condition 2.2 or have a sample of the fuel analyzed in accordance with the appropriate ASTM analytical procedures. If the permittee has samples analyzed for sulfur, a sample must be collected from the holding tank just after each shipment of diesel is added to the tank.

7.0 RECORDKEEPING REQUIREMENTS

7.1 Monitoring Requirements

The permittee must monitor and maintain the following records related to the operation and maintenance of the electric power

generator(s) and associated air contaminant control devices:

- a. The hours of operation each month of each generator used for power production.
- b. Each month, calculate the hours of operation for the preceding 12-consecutive month period.
- c. The results of any emission tests
- d. The sulfur content of each batch of diesel fuel received
- e. Information from equipment manufacturers regarding engine emissions and the efficiency of pollution control equipment. These records must be retained for as long as the generators are used for power production.

8.0 REPORTING REQUIREMENTS

- 8.1 Annual Report** The permittee must submit to DEQ by **February 15** of each year this permit is in effect, (2) copies of the following information for the preceding calendar year:
- a. Operating parameters:
 - i. Monthly total operating hours of each generator.
 - ii. For each month, the total operating hours of each generator for the 12-consecutive month period ending each month.
 - iii. The tier level of the generator(s)
 - b. List the current plant site contact. Provide name, title, phone number and email address.
 - c. All reports and certifications submitted to DEQ under Divisions 200 to 264 must accurately reflect the monitoring, record keeping and other documentation held or performed by the owner or operator.
- 8.2 RICE Reporting Requirements to EPA** The permittee must provide DEQ with a copy of all notifications and reports required by 40 CFR part 63, subpart ZZZZ.
- 8.3 Initial Startup Notice** The permittee must notify DEQ in writing of the date a new facility is started up. The notification must be submitted no later than seven (7) days after startup.
- 8.4 Engine Replacement Notice** The permittee must not replace an engine at the facility without first receiving DEQ approval from the appropriate regional office. For engine replacement, the notification must include the

identification of the engine being replaced and the replacement engine. The notification must include make, model number, serial number, horsepower, and tier of both engines.

9.0 ADMINISTRATIVE REQUIREMENTS

- 9.1 Reassignment to the General ACDP Attachment** A complete application for reassignment to this attachment is due within 60 days after the attachment is reissued. DEQ will notify the permittee when the attachment is reissued. The application must be sent to the appropriate regional office.
- a. If DEQ is delinquent in renewing the attachment, the existing attachment will remain in effect and the permittee must comply with the conditions of the attachment until such time that the attachment is reissued and the permittee is reassigned to the attachment.
 - b. The permittee may submit an application for either a Simple or Standard ACDP at any time, but the permittee must continue to comply with the attachment until DEQ takes final action on the Simple or Standard ACDP application.
 - c. If a complete application for reassignment or a Simple or Standard ACDP is filed with DEQ in a timely manner, the attachment will not be deemed to expire until final action has been taken on the application.

10.0 FEES

- 10.1 Annual Compliance Fee** The Annual Compliance Determination Fee specified in OAR 340-216-0090, Table 2, Part 2(c) for a Class Two General ACDP is due on **December 1** of each year this permit is in effect. An invoice indicating the amount, as determined by DEQ regulations, will be mailed prior to the above date.

11.0 TABLE A: MAXIMUM ALLOWED HOURS OF OPERATION

11.1 How to use this table:

- a. If the power producing facility has only 1 generator: Find the number in the first column that is equal to the maximum capacity of the generator; if the exact capacity is not listed, select the next higher number. Then move across the table to the second, third or fourth column, depending on which Tier the generator is in, to find the maximum allowed hours of operation. The total hours of operation in any 12-consecutive month period may not exceed the number of hours listed.

Example: The facility has 1 generator, Tier 2, rated at 3.65 MW. In the first column, go down to 3.75 (since 3.65 is not listed, use the next higher number, 3.75). Now move across to the Tier 2 column, and find 867. The generator may be operated no more than 867 hours in any 12-consecutive month period.

- b. If the power producing facility has 2 or more generators: Find the number in the first column that is equal to the maximum combined capacity of all generators; if the exact capacity is not listed, select the next higher. Then move across the table to the second, third or fourth column, depending on which Tier the generators are in, to find the maximum allowed hours of operation. This limit applies to each generator. The total hours of operation of each generator in any 12-consecutive month period may not exceed the number of hours listed.

Example: The facility has 2 generators, both Tier 2, rated at 2.25 MW and 1.4 MW. The combined capacity is $2.25 + 1.4 = 3.65$ MW. In the first column, go down to 3.75 (since 3.65 is not listed, use the next higher number, 3.75). Now move across to the Tier 2 column, and find 867. Each generator may be operated no more than 867 hours in any 12-consecutive month period.

11.2 Table A – Maximum Combined Capacity all Generators

Maximum facility capacity rating, in megawatts	Tier 1	Tier 2	Tier 3
	Maximum hours of operation per year	Maximum hours of operation per year	Maximum hours of operation per year
0.50	3586	6500	No limit
0.75	2391	4333	8667
1.00	1793	3250	6500
1.25	1434	2600	5200
1.50	1195	2167	4333
1.75	1025	1857	3714
2.00	897	1625	3250
2.25	797	1444	2889
2.50	717	1300	2600
2.75	652	1182	2364
3.00	598	1083	2167
3.25	552	1000	2000
3.50	512	929	1857
3.75	478	867	1733
4.00	448	813	1625
4.25	422	765	1529
4.50	398	722	1444
4.75	377	684	1368
5.00	359	650	1300
6.0	299	542	1083
7.0	256	464	929
8.0	224	406	813
9.0	199	361	722
10.0	179	325	650
11.0	163	295	591
12.0	149	271	542
13.0	138	250	500
14.0	128	232	464
15.0	120	217	433
16.0	112	203	406
17.0	105	191	382
18.0	100	181	361
19.0	94	171	342
20.0	90	163	325
21.0	85	155	310
22.0	82	148	295
23.0	78	141	283
24.0	75	135	271
25.0	72	130	260

gfd/msf:07/25/01:mma/ww:07/15/11
AQGP-018a, power generators-