DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ0221TVP03 Issue Date: Public Comment - September 23, 2013
Expiration Date: Five Years

The Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the Permittee, **Cordova Electric Cooperative, Inc.**, for the operation of the **Orca Power Plant**.

This permit satisfies the obligation of the owner and operator to obtain an operating permit as set out in AS 46.14.130(b). This draft operating permit incorporates the provisions of preliminary minor permit AQ0221MSS03.

As set out in AS 46.14.120(c), the Permittee shall comply with the terms and conditions of this operating permit.

Citations listed herein are contained within 18 AAC 50 dated April 13, 2011 Register 198. All Federal regulation citations are from those sections adopted by reference in this version of regulation in 18 AAC 50.040 unless otherwise specified.

Upon effective date of this permit, Operating Permit No. AQ0221TVP02 expires.

This Operating Permit becomes effective <insert date—30 days after issue date>.

John F. Kuterbach, Manager
Air Permits Program

Table of Contents

List of Abbreviations Used in this Permit

AAC.....Alaska Administrative Code
ADEC .....Alaska Department of Environmental Conservation
AMHS .....Alaska Marine Highway System
AS.....Alaska Statutes
BACT .....Best Available Control Technology
BHp .....Boiler Horsepower
C.F.R. .....Code of Federal Regulations
The Act.....Clean Air Act
CO .....Carbon Monoxide
EPA .....US Environmental Protection Agency
EU.....Emission Unit
FAHS .....Federal Aid Highway System
HAPs .....Hazardous Air Pollutants[HAPs as defined in AS 46.14.990]
ID.....Emission Unit Identification Number
LAER.....Lowest Achievable Emission Rate
MACT .....Maximum Achievable Control Technology[MACT as defined in 40 C.F.R. 63]
MMBtu/hr.....Million British thermal units per hour
MMSCF.....Million standard cubic feet
MR&R .....Monitoring, Recordkeeping, and Reporting
NESHAPs.....Federal National Emission Standards for Hazardous Air Pollutants[NESHAPs as contained in 40 C.F.R. 61 and 63]
NOx.....Nitrogen Oxides
NSPS .....Federal New Source Performance Standards[NSPS as contained in 40 C.F.R. 60]
O_2 .....Oxygen
PM-10 .....Particulate Matter less than or equal to a nominal ten microns in diameter
ppm .....Parts per million
ppmv, ppmvd .....Parts per million by volume on a dry basis
psia .....Pounds per Square Inch (absolute)
PSD .....Prevention of Significant Deterioration
PTE .....Potential to Emit
RICE .....Reciprocating Internal Combustion Engine
SIC. .....Standard Industrial Classification
SO_2 .....Sulfur dioxide
TPY .....Tons per year
ULSD .....Ultra-low sulfur diesel fuel
VOC .....Volatile organic compound[VOC as defined in 40 C.F.R. 51.100(s)]
vol% .....Volume percent
wt% .....Weight percent

Section 1. Stationary Source Information

Identification

Permittee:	**Cordova Electric Cooperative, Inc.** P. O. Box 20 Cordova, Alaska, 99574
Stationary Source Name:	**Orca Power Plant**
Location:	Latitude 60º 33.3´ North; Longitude 145º 45.2´ West
Physical Address:	103 Orca Road **Cordova, Alaska 99574**
Owner:	**Cordova Electric Cooperative, Inc.** P.O. Box 20 Cordova, Alaska 99574
Operator:	Cordova Electric Cooperative, Inc. P.O. Box 20 Cordova, Alaska 99574
Permittee's Responsible Official:	Danny Ackmann, Manager of Power Production P.O. Box 20 Cordova, Alaska 99574
Designated Agent:	Roger Kemppel c/o Kemppel, Huffman, & Ellis, P. C. 255 E. Fireweed Lane, Suite 200 Anchorage, AK 99503
Stationary Source and Building Contact:	Danny Ackmann, Manager of Power Production P.O. Box 20 Cordova, Alaska 99574 (907) 424-5044 **dackmann@cordovaelectric.com**
Fee Contact:	Danny Ackmann, Manager of Power Production P.O. Box 20 Cordova, Alaska 99574 (907) 424-5044 **dackmann@cordovaelectric.com**
Permit Contact:	Danny Ackmann, Manager of Power Production P.O. Box 20 Cordova, Alaska 99574 (907) 424-5044 **dackmann@cordovaelectric.com**
Process Description SIC Code:	4911 - Electrical Services
Process Description NAICS Code	221112 – Electric Power Generation

[18 AAC 50.040(j)(3) & 50.326(a)]
[40 C.F.R. 71.5(c)(1 & 2)]

Section 2. Emission Unit Inventory and Description

Emission units listed in Table A have specific monitoring, recordkeeping, or reporting conditions in this permit. Emission unit descriptions and ratings are given for identification purposes only.

Table A - Emission Unit Inventory

EU ID	Emission Unit Name	Emission Unit Description	Rating/Size	Installation Date
1	Diesel Electric Generator #3	GM, EMD 20-645 E4, diesel engine	2,500 kW (3,600 bhp)	1985
2	Diesel Electric Generator #4	Fairbanks Morse 38TD8-1/8, diesel engine	2,403 kW (3,360 bhp)	1984
3	Diesel Electric Generator #5	Caterpillar 3516, diesel engine	1,090 kW (1,469 bhp)	2000
4	Diesel Electric Generator #6	Caterpillar 3516, diesel engine	1,090 kW (1,469 bhp)	2000
10	Diesel Electric Generator #8	EMD 20-710 GC-T2, diesel engine	3,580 kW (5,000 bhp)	2009
Insignificant Emission Units				
EU ID	**Emission Unit Name**	**Emission Unit Description**	**Rating/Size**	**Installation Date**
5	Steam Boiler	Fuel oil-fired Burnham boiler, PV 905A	0.394 MMBtu/hr	1984
6	Steam Boiler	Fuel oil-fired Burnham boiler, AFG	0.394 MMBtu/hr	1984
7	Diesel Tank #1	Diesel fuel storage tank	15,000 gallons	1984
8	Diesel Tank #2	Diesel fuel storage tank	10,000 gallons	1984
9	Lube Oil Tank #3	Lube oil storage tank	8,000 gallons	1984

Notes:

1. Emission units 5 and 6 are insignificant units as defined by 18 AAC 50.326(g)(7).
2. Emission units 7, 8, and 9 are insignificant units as defined by 18 AAC 50.326(g)(21). The Permittee has submitted TANKs 4.09d emission report for these units and VOC emissions are each less than 10 pounds per year.

[18 AAC 50.326(a)]
[40 C.F.R. 71.5(c)(3)]

Section 3. State Requirements

Visible Emissions Standards

1. **Industrial Process and Fuel-Burning Equipment Visible Emissions.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EU IDs 1, 2, 3, 4, and 10 listed in Table A to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

[18 AAC 50.040(j), 50.055(a)(1), &50.326(j)]
[40 C.F.R. 71.6(a)(1)]

1.1. For EU IDs 1, 2, 3, 4, and 10, monitor, record and report in accordance with Conditions 2 - 4.

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)]

Visible Emissions Monitoring, Recordkeeping and Reporting

Liquid Fuel-Fired Emission Units (EU IDs 1, 2, 3, 4, and 10)

2. **Visible Emissions Monitoring.** When required by Condition 1.1, or in the event of replacement during the permit term, the Permittee shall observe the exhaust of EU IDs 1, 2, 3, 4, and 10 for visible emissions using either the Method 9 Plan under Condition 2.1 or the Smoke/No-Smoke Plan under Condition 2.2. The Permittee may change visible emissions plans for an emission unit at any time unless prohibited from doing so by Condition 2.3. The Permittee may for each emission unit elect to continue the visible emissions monitoring schedule in effect from the previous permit at the time a renewal permit is issued, if applicable.

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(i)]

2.1. **Method 9 Plan.** For all 18-minute observations in this plan, observe exhaust, following 40 C.F.R. 60, Appendix A-4, Method 9, adopted by reference in 18 AAC 50.040(a), for 18 minutes to obtain 72 consecutive 15-second opacity observations.

a. First Method 9 Observation. For any unit, observe exhaust for 18 minutes within 14 calendar days after changing from the Smoke/No-Smoke Plan of Condition 2.2.

(i) For any unit replaced during the term of this permit, observe exhaust for 18 minutes within 30 days of startup.

b. Monthly Method 9 Observations. After the first Method 9 observation, perform 18-minute observations at least once in each calendar month that an emission unit operates.

c. Semiannual Method 9 Observations. After observing emissions for three consecutive operating months under Condition 2.1.b, unless a six-minute average is greater than 15 percent and one or more observations are greater than 20 percent, perform 18-minute observations:

(i) Within six months after the preceding observation, or

(ii) For an emission unit with intermittent operations, during the next scheduled operation immediately following six months after the preceding observation.

d. Annual Method 9 Observations. After at least two semiannual 18-minute observations, unless a six-minute average is greater than 15 percent and one or more individual observations are greater than 20 percent, perform 18-minute observations:

(i) Within 12 months after the preceding observation; or

(ii) For an emission unit with intermittent operations, during the next scheduled operation immediately following 12 months after the preceding observation.

e. Increased Method 9 Frequency. If a six-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more observations are greater than 20 percent, then increase or maintain the 18-minute observation frequency for that emission unit to at least monthly intervals as described in Condition 2.1.b, until the criteria in Condition 2.1.c for semiannual monitoring are met.

2.2. **Smoke/No Smoke Plan.** Observe the exhaust for the presence or absence of visible emissions, excluding condensed water vapor.

a. Initial Monitoring Frequency. Observe the exhaust during each calendar day that an emission unit operates.

b. Reduced Monitoring Frequency. After the emission unit has been observed on 30 consecutive operating days, if the emission unit operated without visible smoke in the exhaust for those 30 days, then observe emissions at least once in every calendar month that an emission unit operates.

c. Smoke Observed. If smoke is observed, either begin the Method 9 Plan of Condition 2.1 or perform the corrective action required under Condition 2.3.

2.3. **Corrective Actions Based on Smoke/No Smoke Observations**. If visible emissions are present in the exhaust during an observation performed under the Smoke/No Smoke Plan of Condition 2.2, then the Permittee shall either follow the Method 9 plan of Condition 2.1 or

a. initiate actions to eliminate smoke from the emission unit within 24 hours of the observation;

b. keep a written record of the starting date, the completion date, and a description of the actions taken to reduce smoke; and

c. after completing the actions required under Condition 2.3.a,

(i) take Smoke/No Smoke observations in accordance with Condition 2.2.

(A) at least once per day for the next seven operating days and until the initial 30 day observation period is completed; and

(B) continue as described in Condition 2.2.b; or

(ii) if the actions taken under Condition 2.3.a do not eliminate the smoke, or if subsequent smoke is observed under the schedule of Condition 2.3.c(i)(A), then observe the exhaust using the Method 9 Plan unless the Department gives written approval to resume observations under the Smoke/No Smoke Plan; after observing smoke and making observations under the Method 9 Plan, the Permittee may at any time take corrective action that eliminates smoke and restart the Smoke/No Smoke Plan under Condition 2.2.a.

3. **Visible Emissions Recordkeeping.** When required by Condition 1.1, or in the event of replacement of any EU IDs 1, 2, 3, 4, and 10 during the permit term, the Permittee shall keep records as follows:

[18 AAC 50.040(j); 50.326(j) and 50.346(c)]
[40 C.F.R. 71.6(a)(3)(ii)]

3.1. If using the Method 9 Plan of Condition 2.1,

a. the observer shall record:

(i) the name of the stationary source, emission unit and location, emission unit type, observer's name and affiliation, and the date on the Visible Emissions Observation in Section 11;

(ii) the time, estimated distance to the emissions location, sun location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), plume background, and operating mode (load or fuel consumption rate or best estimate if unknown) on the sheet at the time opacity observations are initiated and completed;

(iii) the presence or absence of an attached or detached plume and the approximate distance from the emissions outlet to the point in the plume at which the observations are made;

(iv) opacity observations to the nearest five percent at 15-second intervals on the Visible Emissions Observation record in Section 11, and

(v) the minimum number of observations required by the permit; each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period.

b. To determine the six-minute average opacity, divide the observations recorded on the record sheet into sets of 24 consecutive observations; sets need not be consecutive in time and in no case shall two sets overlap; for each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24; record the average opacity on the sheet.

c. Calculate and record the highest 6-minute and 18-consecutive-minute averages observed.

3.2. If using the Smoke/No Smoke Plan of Condition 2.2, record the following information in a written log for each observation and submit copies of the recorded information upon request of the Department:

a. the date and time of the observation;

b. from Table A, the ID of the emission unit observed;

c. whether visible emissions are present or absent in the exhaust;

d. a description of the background to the exhaust during the observation;

e. if the emission unit starts operation on the day of the observation, the startup time of the emission unit;

f. name and title of the person making the observation; and

g. operating mode (load or fuel consumption rate).

4. **Visible Emissions Reporting.** When required by Condition 1.1, or in the event of replacement of any EU IDs 1, 2, 3, 4, and 10 during the permit term, the Permittee shall report visible emissions as follows:

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(iii)]

4.1. Include in each stationary source operating report under Condition 73, include for the period covered by the report:

a. which visible emissions plan of Condition 2 was used for each emission unit; if more than one plan was used, give the time periods covered by each plan;

b. for each emission unit under the Method 9 Plan,

(i) copies of the observation results (i.e. opacity observations) for each emission unit that used the Method 9 Plan, except for the observations the Permittee has already supplied to the Department; and

(ii) a summary to include:

(A) number of days observations were made;

(B) highest six-minute average observed; and

(C) dates when one or more observed six-minute averages were greater than 20 percent;

c. for each emission unit under the Smoke/No Smoke Plan, the number of days that Smoke/No Smoke observations were made and which days, if any, that smoke was observed; and

d. a summary of any monitoring or recordkeeping required under Conditions 2 and 2.3.c(ii) that was not done;

4.2. Report under Condition 72:

a. the results of Method 9 observations that exceed an average of 20 percent opacity for any six-minute period; and

b. if any monitoring under Condition 2 was not performed when required, report within three days of the date the monitoring was required.

Particulate Matter Emissions Standards

5. **Industrial Process and Fuel-Burning Equipment Particulate Matter.** The Permittee shall not cause or allow particulate matter emitted from EU IDs 1, 2, 3, 4, and 10 listed in Table A to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.040(j), 50.326(j), & 50.055(b)(1)]
[40 C.F.R. 71.6(a)(1)]

5.1. For EU IDs 1, 2, 3, 4, and 10, monitor, record and report in accordance with Conditions 6 - 7.

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)]

PM Monitoring, Recordkeeping and Reporting

Liquid Fuel-Fired Engines (EU IDs 1, 2, 3, 4, and 10)

6. **Particulate Matter Monitoring for Diesel Engines.** The Permittee shall conduct source tests on diesel engines, EU IDs 1, 2, 3, 4, and 10, to determine the concentration of particulate matter (PM) in the exhaust of the emission unit.

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(i)]

6.1. Except as provided in Condition 6.4 within six months of exceeding the criteria of Condition 6.2.a or 6.2.b, either

a. conduct a PM source test according to requirements set out in Section 6; or

b. make repairs so that emissions no longer exceed the criteria of Condition 6.2; to show that emissions are below those criteria, observe emissions as described in Condition 2.1 under load conditions comparable to those when the criteria were exceeded.

6.2. Conduct the test according to Condition 6.1 if

a. 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity greater than 20 percent; or

b. for an emission unit with an exhaust stack diameter that is less than 18 inches, 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity that is greater than 15 percent and not more than 20 percent, unless the Department has waived this requirement in writing.

6.3. During each one-hour PM source test run, observe the exhaust for 60 minutes in accordance with Method 9 and calculate the average opacity measured during each one-hour test run. Submit a copy of these observations with the source test report.

6.4. The automatic PM source test requirement in Conditions 6.1 and 6.2 is waived for an emissions unit if a PM source test on that unit has shown compliance with the PM standard during this permit term.

7. **Particulate Matter Reporting for Diesel Engines**. The Permittee shall report as follows:

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(iii)]

7.1. Report under Condition 72

a. the results of any PM source test that exceeds the PM emissions limit; or

b. if one of the criteria of Condition 6.2 was exceeded and the Permittee did not comply with either Condition 6.1.a or 6.1.b, this must be reported by the day following the day compliance with Condition 6.1 was required;

7.2. Report observations in excess of the threshold of Condition 6.2.b within 30 days of the end of the month in which the observations occur;

7.3. In each operating report under Condition 73, include for the period covered by the report:

a. the dates, EU IDs, and results when an observed 18-minute average was greater than an applicable threshold in Condition 6.2;

b. a summary of the results of any PM testing under Condition 6; and

c. copies of any visible emissions observation results (opacity observations) greater than the thresholds of Condition 6.2, if they were not already submitted.

Sulfur Compound Emission Standards Requirements

8. **Sulfur Compound Emissions.** In accordance with 18 AAC 50.055(c), the Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EU IDs 1, 2, 3, 4, and 10 to exceed 500 ppm averaged over three hours.

[18 AAC 50.040(j), 50.055(c), & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

For Fuel Oil[1](EU IDs 1, 2, 3, 4, and 10)

8.1. The Permittee shall do one of the following for each shipment of fuel:

a. If the fuel grade requires a sulfur content less than 0.5 percent by weight, keep receipts that specify fuel grade and amount; or

b. If the fuel grade does not require a sulfur content less than 0.5 percent by weight, keep receipts that specify fuel grade and amount and

(i) test the fuel for sulfur content; or

(ii) obtain test results showing the sulfur content of the fuel from the supplier or refinery; the test results must include a statement signed by the supplier or refinery of what fuel they represent.

8.2. Fuel testing under Condition 8.1 must follow an appropriate method listed in 18 AAC 50.035(b)-(c) and 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1).

8.3. If a load of fuel contains greater than 0.75 percent sulfur by weight, the Permittee shall calculate SO_2 emissions in ppm using either Section 12 or Method 19 of 40 C.F.R. 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a).

8.4. The Permittee shall report as follows:

a. If SO_2 emissions calculated under Condition 8.3 exceed 500 ppm, the Permittee shall report under Condition 72. When reporting under this condition, include the calculation under Section 12.

b. The Permittee shall include in the report required by Condition 73:

(i) a list of the fuel grades received at the stationary source during the reporting period;

(ii) for any grade with a maximum fuel sulfur greater than 0.5 percent sulfur, the fuel sulfur of each shipment; and

(iii)for fuel with a sulfur content greater than 0.75 percent, the calculated SO_2 emissions in ppm.

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)]

[1] *Oil* means crude oil or petroleum or a liquid fuel derived from crude oil or petroleum, including distillate and residual oil, as defined in 40 C.F.R. 60.41b, effective 7/1/07.

Stationary Source-Wide Specific Requirements

Owner Requested Limits

9. **Avoidance of 18 AAC 50.502(c)(3) Classification**: For EU 10, the Permittee shall comply with Condition 10.

[Condition 3, Permit No.AQ0221MSS03, xx/xx/2013]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

Operational Restrictions to Protect Ambient Air Quality

EU IDs 1 through 6, and 10

10. **Protection of the 3-hr, 24-hr, and annual SO_2 Alaska Ambient Air Quality Standards:** The Permittee shall ensure that the fuel sulfur content of the liquid fuel consumed in EUs 1 through 6 and 10 does not exceed 0.0015 percent sulfur by weight (wt% S). Monitor, record and report as follows:

    10.1. For each shipment of fuel delivered to the stationary source, obtain and record the weight percent sulfur, as determined from:

        a. ASTM approved testing methods such as D129-00; D1552-98; D2622-98; D4294-98; and D4045-99;

        b. certified test results from supplier or refinery; or

        c. fuel grade receipts.

    10.2. Record the wt% S for all liquid fuel delivered to the source for the previous rolling 12-month period.

    10.3. Report

        a. in the operating report required by Condition 73, a list of all fuel grades received, under Condition 10.1, at the stationary source during the reporting period.

        b. under the excess emissions requirements of Condition 72, the fuel sulfur content of each shipment recorded under Condition 10.1 that exceeds 0.0015 wt% S.

11. **Protection of Annual NO_2 AAAQS:** The Permittee shall comply with Condition 12.

[Condition 5, Minor Permit No. AQ0221MSS03, Month XX, 2013]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

Nitrogen Oxides PSD Avoidance Emissions Limit

12. To avoid classification as a Prevention of Significant Deterioration (PSD) major stationary source, the Permittee shall limit the NOx emissions from Emission Units 1, 2, 3, 4, and 10 to no more than 248 tons total in any consecutive 12-month period. Monitor and record for each of Emission Units 1, 2, 3, 4, and 10 as follows:

[Condition 6, Minor Permit No.AQ0221MSS03, xx/xx/2013]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

12.1. On any day that Emission Units 1, 2, 3, 4, or 10 are operated, monitor and record the hours of operation and daily production of energy (kW-hr) for each operating generator.

12.2. On any day that Emission Units 1, 2, 3, 4, or 10 are operated, calculate the average daily load (% of full rated capacity) for each emission unit as follows:

$L = P \div (H \times C)$

Where:
L = Average Daily Load (%)
P = Daily Power Output (kW-hr/day)
H = Hours of Operation (hr/day)
C = Maximum Rated Capacity (kW)

12.3. Calculate and record the daily average NOx emission rate using the following equation:

$ER = H \times EF_{\%\ load}$

Where:
ER = Emission rate (lb/day)
H = Hours of Operation (hours per day), as set out in Condition 12.1 above.
$EF_{\%\ load}$ = Emission factor (lb/hr) as set out in Condition 12.4 for the average daily load % of the generator, as determined in Condition 12.2 above.

12.4. For Emission Units 1, 2, 3, and 4, use the emission factors determined from the results of source tests as shown in Table B:

Table B - NOx Emission Factors (lb/hr) for Emission Units 1, 2, 3, and 4

Average Daily Load (%)	Emission Unit 1	Emission Unit 2	Emission Unit 3	Emission Unit 4
100 - 76	75.6	65.1	28.9	28.1
75 - 51	52.0	50.4	26.3	25.0
50 - 26	38.4	33.1	17.8	20.0
25 - 0	24.1	16.4	8.4	9.9

12.5. For Emission Unit 10, use the vendor emission factors shown in Table C unless source testing is performed under Condition 15. Upon source testing performed under Condition 15 use the emission factors obtained from the source test.

Table C - NOx Emission Factors for Emission Unit 10

Average Daily Load (%)	lb NOx per hour
100 - 76	59.1
75 - 51	38.8
50 - 26	33.7
25 - 0	19.3

12.6. Calculate and record the monthly NOx emission rate (lb/month) by summing the daily emission rates calculated in accordance with Conditions 12.3 and 12.4 above. Convert the results to tons per month and tons per consecutive 12-month period (tons/year).

[Condition 6, Minor Permit No.AQ0221MSS03, xx/xx/2013]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

13. The Permittee shall submit in accordance with the operating report in Condition 73 summaries of the monthly and consecutive 12-month total NOx emissions from each Emission Unit 1, 2, 3, 4 and 10, obtained in Condition 12.

[Condition 7, Minor Permit No.AQ0221MSS03, xx/xx/2013]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

14. If the consecutive 12 month total NOx emissions total from Condition 13 exceeds 248 tons report as excess emissions in accordance with Condition 72.

[Condition 8, Minor Permit No.AQ0221MSS03, xx/xx/2013]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

15. After the initial start-up of Emission Unit 10, if the 12 month rolling total NOx emissions in Condition 13 exceed 225 tons, then within 180 days of discovery, conduct a source test to verify the NOx emissions rate for Emission Unit 10.

[Condition 9, Minor Permit No.AQ0221MSS03, xx/xx/2013]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

15.1. Conduct the source test at or about each of the following loads: 25 percent, 50 percent, 75 percent and 100 percent of the rated engine capacity such that NOx emission factors can be determined for each of the load ranges listed in Table C. Monitor and record the fuel consumption and average load during each test. List the average operating parameters for each run in the source test result.

15.2. From each test, determine the NOx emission factor for each of the load ranges listed in Table C using exhaust properties determined by either Method 19 or Method 1-4, for each load. If using Method 19, then use the higher heating value throughout the analysis.

15.3. Within 45 days of the source test conducted in Condition 15.1, calculate the 12 month rolling NOx emissions for the stationary source for each of the previous 12 calendar months. Use the average daily load specific emission factors for Emission Unit 10 as calculated in Condition 15.2.

15.4. Report in the first operating report due after the source test, the source test results and 12 month rolling NOx emissions.

15.5. After completion of the NOx emission source test for Emission Unit 10 determine stationary source NOx PTE by summing the NOx PTE for each emission unit. Attach the NOx PTE calculations and results to the first stationary source operating report due after completion of NOx emission source tests.

Insignificant Emission Units

16. For EU IDs 5, 6, 7, 8, and 9, listed in Table A and for emission units at the stationary source that are insignificant as defined in 18 AAC 50.326(d)-(i) that are not listed in this permit, the following apply:

16.1. **VE Standard**: The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from an industrial process, fuel-burning equipment, or an incinerator to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

[18 AAC 50.050(a) & 50.055(a)(1)]

16.2. **PM Standard**: The Permittee shall not cause or allow particulate matter emitted from an industrial process or fuel-burning equipment to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.055(b)(1)]

16.3. **Sulfur Standard**: The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from an industrial process or fuel-burning equipment, to exceed 500 ppm averaged over three hours.

[18 AAC 50.055(c)]

16.4. **General MR&R for Insignificant Emission Units**

a. The Permittee shall submit the certification of compliance of Condition 74 based on reasonable inquiry;

b. The Permittee shall comply with the requirements of Condition 52;

c. The Permittee shall report in the operating report required by Condition 73 if an emission unit is insignificant because of actual emissions less than the thresholds of 18 AAC 50.326(e) and actual emissions become greater than any of those thresholds; and

d. No other monitoring, recordkeeping or reporting is required.

[18 AAC 50.346(b)(4)]

Section 4. Federal Requirements

Emission Units Subject to Federal NSPS, Subpart A

17. **NSPS Subpart A.** In accordance with 40 C.F.R. 60.4218, Emission Unit 10 listed in Table A - Emission Unit Inventory is subject to the applicable NSPS General Provisions as described by Table 8 to Subpart IIII of Part 60 as follows:

    17.1. The definitions and informational requirements of 40 C.F.R. 60.1, 60.2, 60.3, 60.4, 60.5, 60.6, 60.9, 60.10, 60.12, 60.14, 60.15, 60.16, 60.17, and 60.19 apply in their entirety. The requirements of 40 C.F.R. 60.8(a), (f), and (g) apply

    17.2. The requirements of 40 C.F.R. 60.8(b)-(e), 60.11, 60.13, and 60.18 do not apply.

    [18 AAC 50.035 & 50.040(a)(1)]
    [40 C.F.R. 60.4218, Subpart IIII]

18. **Recordkeeping.** The emission unit-specific recordkeeping provisions of 40 C.F.R. 60.7 do not apply, and are replaced by the requirements of 40 C.F.R. 60.4214(a) as follows:

    [18 AAC 50.035 & 50.040(a)(1)]
    [40 C.F.R. 60.4214(a), Subpart IIII]

    18.1. The Permittee shall keep records of the following information:

    a. All notifications submitted to comply with this subpart and all documentation supporting any notification.

    b. Maintenance conducted on the engine.

    c. If the stationary Compression Ignition (CI) internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

    d. If the stationary CI internal combustion engine is not a certified engine, documentation that the engine meets the emission standards.

19. **NSPS Subpart A, Notification.** The Permittee shall furnish the Department and EPA in written or electronic form a notification of any proposed replacement of an existing facility, for which the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, postmarked as soon as practicable, but no less than 60 days before commencement of replacement, and including the following information:

    [40 C.F.R. 60.15(d)]

    19.1. the name and address of owner or operator,

    19.2. the location of the existing facility,

    19.3. a brief description of the existing facility and the components that are to be replaced,

    19.4. a description of the existing and proposed air pollution control equipment,

19.5. an estimate of the fixed capital cost of the replacements, and of constructing a comparable entirely new facility,

19.6. the estimated life of the existing facility after the replacements, and

19.7. a discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.

20 **NSPS Subpart A, Startup, Shutdown, & Malfunction Requirements.** The Permittee shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of EU ID 10, any malfunctions of associated air-pollution control equipment, or any periods during which a continuous monitoring system or monitoring device for EU ID 10 is inoperative.

[18 AAC 50.040(a)(1)]
[40 C.F.R. 60.7(b), Subpart A]

21 **NSPS Subpart A, Performance (Source) Tests.** The Permittee shall conduct source tests according to 40 CFR 60.8 and Section 6 on any affected facility at such times as may be required by EPA, and shall provide the Department and EPA with a written report of the results of the source test.

[18 AAC 50.040(a)(1)]
[40 C.F.R. 60.8(a), Subpart A]

22 **NSPS Subpart A, Good Air Pollution Control Practice.** At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate EU ID 10 including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. The Administrator will determine whether acceptable operating and maintenance procedures are being used based on information available, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance records, and inspections of EU ID 10.

[18 AAC 50.040(a)(1)]
[40 C.F.R. 60.11(d), Subpart A]

23 **NSPS Subpart A, Credible Evidence.** For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of the standards set forth in Condition 26, nothing in 40 C.F.R. Part 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether EU ID 10 would have been in compliance with applicable requirements of 40 C.F.R. Part 60 if the appropriate performance or compliance test or procedure had been performed.

[18 AAC 50.040(a)(1)]
[40 C.F.R. 60.11(g), Subpart A]

24 **NSPS Subpart A, Concealment of Emissions.** The Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of a standard set forth in Condition 26. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard that is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[18 AAC 50.040(a)(1)]
[40 C.F.R. 60.12, Subpart A]

Compression Ignition CI ICE Subject to NSPS Subpart IIII

25 **NSPS Subpart IIII Applicability Requirements.** For EU ID 10, the Permittee shall comply with any applicable requirement for stationary compression ignition (CI) internal combustion engine (ICE) whose construction[2], modification[3], or reconstruction[4] commences after July 11, 2005. The Permittee shall comply with the applicable provisions of Subpart A as specified in Table 8 to Subpart IIII and Conditions 17, 18, and 19.

[40 C.F.R. 60.4200(a) & 60.4218 & Table 8, Subpart IIII, 7/11/06]
[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

26 **NSPS Subpart IIII Emission Standards.** The Permittee shall comply with the applicable emission standards for EU ID 10, as listed below.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.4200(a)(2)(i), Subpart IIII, 7/11/06]

26.1 For EU ID 10, the Permittee shall certify to the certification emission standards for new marine CI engines in 40 C.F.R. 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power, as specified in Table D.

Table D – Emission Standards for EU ID 10 (g/kW-hr)

Engine Size (liters/cylinder)	Category	Model Year [a]	THC+NOx	CO	PM
5.0 ≤ disp. <15.0 all power levels	Category 2	2007	7.8	5.0	0.27

[a] The model year listed indicates the model year for which the specified standard starts.

[40 C.F.R. 60.4204(b) & 4201(d), Subpart IIII, 7/11/06]
[40 C.F.R. 94.8(a)(2), 12/5/07]

[2] For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.
[3] As defined in 18 AAC 50.990(59).
[4] As defined in 18 AAC 50.990(88).

26.2 EU ID 10, listed in Table A, shall be certified by the manufacturer to meet the applicable emission standards found in Table D of Condition 26.1. The Permittee must operate and maintain EU ID 10 to achieve the emission standards found in Table D of Condition 26.1 as required in 40 C.F.R. 60.4204 and 60.4205 over the entire life of the engine.

[40 C.F.R. 60.4201 & 60.4206, Subpart IIII, 7/11/06]
[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

26.3 Any modified or reconstructed CI ICE shall be certified by the entity that conducts the modification or reconstruction, via the appropriate testing, according to 40 C.F.R. 60.4212. This certification shall state that emissions will be at or below the applicable emission standards found in Table D of Condition 26.1 and the unit shall continue to meet them for the useful life of the engine.

[40 C.F.R. 60.4205(f), Subpart IIII, 7/11/06]
[18 AAC 50.040(j)(4) & 50.326(j)]

27 **NSPS Subpart IIII Fuel Requirements.** For EU ID 10, the Permittee shall comply with the following:

27.1 Beginning December 1, 2010, for EU ID 10, use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, as specified in Conditions 27.1a through 27.1c below:

a. Sulfur content of 15 parts per million (ppm) maximum;

b. A minimum Cetane index or aromatic content of 40; or

c. A maximum aromatic content of 35 volume percent.

[40 C.F.R. 60.4207(b), Subpart IIII, 7/11/06]
[40 C.F.R. 80.510(b), Subpart I, 7/15/05]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

27.2 For EU ID 10, the Permittee may petition the Administrator for approval to use any fuels mixed with used lubricating oil that do not meet the fuel requirements of Condition 27.1. The Permittee must demonstrate in the petition to the Administrator that there is no other place to use the lubricating oil. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.

27.3 Any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 60.4207(b), 60.4216, Subpart IIII, 7/11/06]
[40 C.F.R. 80.510(b), Subpart I, 7/15/05]

28 **NSPS Subpart IIII Compliance, Monitoring, and Recordkeeping Requirements.** The Permittee shall meet the compliance, monitoring, and recordkeeping requirements, as follows:

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(i & ii)]

28.1 Operate and maintain the stationary CI ICE and control device according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer over the entire life of the engine. The Permittee may only change those settings that are permitted by the manufacturer.

[40 C.F.R. 60.4211(a), Subpart IIII, 7/11/06]
[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

28.2 If EU 10 is equipped with a diesel particulate filter to comply with the emission standards in § 60.4204 and Table D of Condition 26.1, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. The Permittee shall keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

[40 C.F.R. 60.4209(b) & 60.4214(c), Subpart IIII, 7/11/06]

28.3 For EU ID 10, demonstrate compliance by purchasing an engine certified to the emission standards in 40 C.F.R. 60.4204(b), as specified in Table D of Condition 26.1, according to 40 C.F.R. Part 89 or 40 C.F.R. Part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications, except as permitted in 40 C.F.R. 60.4211(g).

[40 C.F.R. 60.4211(c), Subpart IIII, 7/11/06]

28.4 Keep records of the information in Conditions 28.4a through 28.4c:

a. Records that verify compliance with the diesel fuel requirements in Conditions 8 and 27;

b. Maintenance conducted on the engine; and

c. Documentation from the manufacturer that the engine is certified to meet the emission standards, as required by Condition 28.3.

[40 C.F.R. 60.4214(a)(2), Subpart IIII, 7/11/06]

29 **NSPS Subpart IIII Notification and Reporting Requirements.**

29.1 The Permittee shall comply with the notification requirements as specified in Conditions 18 and 19.

[40 C.F.R. 60.4218, Table 8, Subpart IIII, 7/11/06]

29.2 The Permittee shall report in the operating report required by Condition 73 the following:

a. Upon initial startup, provide a copy of the records required in Condition 28.4c in the next operating report;

b. The method of compliance used to demonstrate compliance with Condition 28.3;

c. The records required in Conditions 28.1, and 28.4b; and

d. Compliance with the fuel sulfur standards in Conditions 8 and 27.

[40 C.F.R. 60.4214, Subpart IIII, 7/11/06]
[18 AAC 50.040(j) & 50.326(j)(4)]
[40 C.F.R. 71.6(a)(3)(iii) & (c)(6)]

30 **NSPS Subpart IIII Other Requirements.**

[40 C.F.R. 60.4208, Subpart IIII, 7/11/06]
[18 AAC 50.040(j) & 50.326(j)(4)]
[40 C.F.R. 71.6(a)(3)(iii) & (c)(6)]

30.1 After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

30.2 After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.

30.3 After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.

30.4 After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.

30.5 After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.

30.6 After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.

30.7 After December 31, 2018, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power greater than or equal to 600 KW (804 HP) and less than 2,000 KW (2,680 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that do not meet the applicable requirements for 2017 model year non-emergency engines.

30.8 In addition to the requirements specified in §§ 60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in Conditions 30.1 through 30.7 after the dates specified in Conditions 30.1 through 30.7.

30.9 The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

Emission Units Subject to Federal National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart A (EU IDs 1, 2, 3, 4, 5, 6, and 10)

31 **NESHAP Subpart A, Requirements**

31.1 The Permittee shall comply with the applicable requirements of 40 C.F.R. 63 Subpart A in accordance with the provisions for applicability of Subpart A for Subpart ZZZZ (Table 8), as set out by Condition 32.

31.2 The Permittee shall comply with the applicable requirements of 40 C.F.R. 63 Subpart A in accordance with the provisions for applicability of Subpart A for Subpart JJJJJJ (Table 8), as set out by Condition 36.

Stationary RICE Subject to NESHAPs Subpart ZZZZ

EU IDs 1, 2, 3, 4, and 10

32 **NESHAPs Subpart ZZZZ Applicability.**

32.1 For EU ID 10 listed in Table A, the Permittee shall comply with applicable requirements for new stationary CI-RICE located at an area source of HAP emissions that commenced construction on or after June 12, 2006. For EU ID 10, an affected emission unit that is a new stationary compression ignition reciprocating internal combustion engine (CI-RICE) located at an area source, the unit shall meet the requirements of Subpart ZZZZ by meeting the requirements of 40 C.F.R. 60 Subpart IIII in Conditions 25 through 29. No further requirements apply for this engine under 40 C.F.R. 63.

[40 C.F.R. 63.6590(c)(1), Subpart ZZZZ, 01/30/13]
[40 C.F.R. 63.6585(c) & 63.6590(a)(2)(iii), Subpart ZZZZ, 01/30/13]
[18 AAC 50.040(c)(23) & (j); 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

32.2For EU IDs 1, 2, 3, and 4 listed in Table A, the Permittee shall comply with applicable requirements for existing compression ignition stationary reciprocating internal combustion engine (CI-RICE) located at an area source of HAP emissions that commenced construction before June 12, 2006.

[40 C.F.R. 63.6585(c) & 63.6590(a)(1)(iii), Subpart ZZZZ, 01/30/13]
[18 AAC 50.040(c)(23) & (j); 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

EU IDs 1, 2, 3, and 4

33 **NESHAP Subpart ZZZZ Compliance Requirements.**

33.1 **Compliance Date.** For EU IDs 1, 2, 3, and 4 (existing non-emergency, non-black start compression ignition diesel engines with ratings greater than 500 Hp each located at an area source), the Permittee shall meet the applicable emission standards, operating limitations, and other requirements no later than May 3, 2013.

[40 C.F.R. 63.6595(a)(1), Subpart ZZZZ, 01/30/13]

33.2 **Operating Requirements.** For EU IDs 1, 2, 3, and 4, the Permittee shall be in compliance with the following operating requirements at all times, except during periods of startup.

[40 C.F.R. 63.6603(b) & Table 2d, Subpart ZZZZ, 01/30/13]
[18 AAC 50.040(c)(23) & (j); 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first. The Permittee has the option to utilize an oil analysis program as described in § 63.6625(i) or (j) in order to extend the specified oil change requirement.

b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

33.3 **Operating Requirements - Startup.** For EU IDs 1, 2, 3, and 4, during periods of startup, the Permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.

[40 C.F.R. 63.6603(b) & Table 2d, Subpart ZZZZ, 01/30/13]
[18 AAC 50.040(c)(23) & (j); 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

33.4 **General Requirements.** For EU IDs 1, 2, 3, and 4, the Permittee shall comply with the following requirements:

[40 C.F.R. 63.6605(a) & (b), Subpart ZZZZ, 01/30/13]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

a. You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.

b. At all times operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

34 **NESHAP Subpart ZZZZ Continuous Compliance Requirements.** For each of EU IDs 1, 2, 3, and 4, demonstrate continuous compliance with each applicable work and management practice as follows:

[40 C.F.R. 63.6640(a) & Table 6, Subpart ZZZZ, 01/30/13]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

34.1 Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or

34.2 Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

35 **NESHAP Subpart ZZZZ Recordkeeping Requirements.** For EU IDs 1, 2, 3, and 4, the Permittee shall keep records as follows:

35.1 Keep records of the maintenance conducted on the stationary RICE, as required in Conditions 33 and 34 in order to demonstrate that you operated and maintained the stationary RICE according to your own maintenance plan.

35.2 Records must be in a form suitable and readily available for expeditious review according to § 63.10(b)(1).

35.3 As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

35.4 Keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1).

[40 C.F.R. 63.6655(e)(3) & 63.6660, Subpart ZZZZ]
[18 AAC 50.040(c)(23) & (j); 18 AAC 50.326(j)]
[40 C.F.R. 71.6(c)(3)(ii)]

Oil-Fired Boilers Subject to NESHAPs Subpart JJJJJJ

EU IDs 5 and 6

36 **NESHAPs Subpart JJJJJJ Applicability and General Requirements.** For EU IDs 5 and 6 listed in Table A, the Permittee shall comply with applicable requirements for existing oil-fired boilers located at an area source of HAP emissions that commenced construction before June 4, 2010.

[18 AAC 50.040(c)(23) & (j); 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.11193, 40 C.F.R. 63.11194(a)(1) & (b), 40 C.F.R. 63.11200(e), Subpart JJJJJJ]

36.1 The Permittee shall be in compliance with the applicable emission limitations and operating limitations at all times.

36.2 At all times operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 C.F.R. 63.11205(a), Subpart JJJJJJ]

37 **NESHAP Subpart JJJJJJ Initial Compliance Requirements.** For each of EU IDs 5 and 6, demonstrate initial compliance with each work practice standard, management practice, or emission reduction measure that applies as follows:

37.1 Demonstrate initial compliance no later than March 21, 2014 and according to the applicable provisions in 40 C.F.R. 63.7(a)(2).

[40 C.F.R. 63.11210(c), Subpart JJJJJJ]

37.2 Demonstrate initial compliance by conducting a performance tune-up according to Condition 38.1b.

[40 C.F.R. 63.11214(c), Subpart JJJJJJ]

37.3 Demonstrate initial compliance by submitting a signed statement in the Notification of Compliance Status report that indicates that you conducted a tune-up of the boiler.

[40 C.F.R. 63.11214(b), Subpart JJJJJJ]

38 **NESHAP Subpart JJJJJJ Continued Compliance Requirements.** For each of EU IDs 5 and 6, demonstrate continued compliance with each work practice standard, management practice, or emission reduction measure that applies as follows:

38.1 Demonstrate continuous compliance by conducting a performance tune-up according to Condition 38.1b and keep records as required in Condition 40. You must conduct the tune-up while burning the type of fuel that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.

[40 C.F.R. 63.11223(a), Subpart JJJJJJ]

a. The performance tune-up must be conducted every five years. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. You may delay the burner inspection specified in Condition 38.1b(i) and inspection of the system controlling the air-to-fuel ratio specified in Condition 38.1b(iii) until the next scheduled unit shutdown, but you must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months.

[40 C.F.R. 63.11223(e), Subpart JJJJJJ]

b. The performance tune-up shall be conducted as follows:

[40 C.F.R. 63.11223(b), Subpart JJJJJJ]

(i) As applicable, inspect the burner and clean or replace any components as necessary

(ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.

(iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.

(iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available.

(v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

(vi) Maintain on-site and submit, if requested by the Administrator, a report containing the following information:

(A) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.

(B) A description of any corrective actions taken as a part of the tune-up of the boiler.

(C) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

(vii) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

39 **NESHAP Subpart JJJJJJ Notification Requirements.** For EU IDs 5 and 6, the Permittee shall submit to the Department and EPA all the applicable notifications in 40 C.F.R. 63.7(b) and (c), 63.8(e) and (f), 63.9(b) through (e), (g) and (h) by the dates specified, and the following:

[40 C.F.R. 63. 11225(a), Subpart JJJJJJ]

39.1 Submit an Initial Notification no later than January 20, 2014.

[40 C.F.R. 63.11225(a)(2), Subpart JJJJJJ]

39.2 Submit the Notification of Compliance Status no later than July 19, 2014. The Notification of Compliance Status must include: the information in Condition 39.2a , the certification of compliance statement in Condition 39.2b, and be signed by a responsible official.

[40 C.F.R. 63.11225(a)(4) & (5), Subpart JJJJJJ]

a. You must submit the information required in § 63.9(h)(2), except the information listed in § 63.9(h)(2)(i)(B), (D), (E), and (F).

b. "This facility complies with the requirements in § 63.11214 to conduct an initial tune-up of the boiler."

40 **NESHAP Subpart JJJJJJ Recordkeeping Requirements.** For EU IDs 5 and 6, the Permittee shall maintain records as follows:

[18 AAC 50.040(c)(23) & (j); 18 AAC 50.326(j)]
[40 C.F.R. 71.6(c)(3)(ii)]
[40 C.F.R. 63.11225(c) & (d), Subpart JJJJJJ]

40.1 Keep a copy of each notification and report that you submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted.

40.2 You must keep records to document conformance with the work practices, emission reduction measures, and management practices. Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.

40.3 Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.

40.4 Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in § 63.11205(a)(Condition 36.2), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

40.5 Your records must be in a form suitable and readily available for expeditious review. You must keep each record for 5 years following the date of each recorded action. You must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. You may keep the records off site for the remaining 3 years.

41 **NESHAP Subpart JJJJJJ Reporting Requirements.** For EU IDs 5 and 6, the Permittee shall report, as follows:

[18 AAC 50.040(c)(23) & (j); 18 AAC 50.326(j)]
[40 C.F.R. 71.6(c)(3)(iii)]
[40 C.F.R. 63.11225(b), Subpart JJJJJJ]

41.1 Prepare, by March 1 of the year following the year in which the performance tune-up was conducted, and submit to the delegated authority upon request, a 5-year compliance certification report for the previous five years containing the information specified below:

a. Company name and address.

b. Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart. Your notification must include the following certification of compliance, and be signed by a responsible official:

(i) “This facility complies with the requirements in § 63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler.”

Section 5. General Conditions

Standard Terms and Conditions

42 Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of the permit.

[18 AAC 50.326(j)(3), 50.345(a) & (e)]

43 The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and re-issuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

[18 AAC 50.326(j)(3), 50.345(a) & (f)]

44 The permit does not convey any property rights of any sort, nor any exclusive privilege.

[18 AAC 50.326(j)(3), 50.345(a) & (g)]

45 **Administration Fees.** The Permittee shall pay to the Department all assessed permit administration fees. Administration fee rates are set out in 18 AAC 50.400-405.

[18 AAC 50.326(j)(1), 50.400, 50.403, & 50.405]
[AS 37.10.052(b), 11/04; AS 46.14.240, 6/7/03]

46 **Assessable Emissions.** The Permittee shall pay to the Department an annual emission fee based on the stationary source's assessable emissions as determined by the Department under 18 AAC 50.410. The assessable emission fee rate is set out in 18 AAC 50.410. The Department will assess fees per ton of each air pollutant that the stationary source emits or has the potential to emit in quantities greater than 10 tons per year. The quantity for which fees will be assessed is the lesser of

46.1 the stationary source's assessable potential to emit of 324 TPY; or

46.2 the stationary source's projected annual rate of emissions that will occur from July 1 to the following June 30, based upon actual annual emissions emitted during the most recent calendar year or another 12-month period approved in writing by the Department, when demonstrated by

a. an enforceable test method described in 18 AAC 50.220;

b. material balance calculations;

c. emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or

d. other methods and calculations approved by the Department.

[Condition 1.1, Minor Permit AQ0221MSS03 Issued xx/xx/2013]
[18 AAC 50.040(j)(3), 50.035, 50.326(j)(1), 50.346(b)(1), 50.410, & 50.420]
[40 C.F.R. 71.5(c)(3)(ii)]

47 **Assessable Emission Estimates.** Emission fees will be assessed as follows:

47.1 no later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions to ADEC, Air Permits Program, ATTN: Assessable Emissions Estimate, 410 Willoughby Ave., Juneau, AK 99801-1795; the submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates; or

47.2 if no estimate is submitted on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit set forth in Condition 46.1.

[18 AAC 50.040(j)(3), 50.326(j)(1), 50.346(b)(1), 50.410, & 50.420]
[40 C.F.R. 71.5(c)(3)(ii)]

48 **Good Air Pollution Control Practice.** Except as noted in Condition 48.4, the Permittee shall do the following for EU IDs 1, 2, 3, and 4:

48.1 perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;

48.2 keep records of any maintenance that would have a significant effect on emissions; the records may be kept in electronic format; and

48.3 keep a copy of either the manufacturer's or the operator's maintenance procedures.

48.4 EU IDs 1, 2, 3, and 4 are subject to this condition only until the applicable compliance date as set forth in Condition 33.1

[18 AAC 50.030, 50.326(j)(3), & 50.346(b)(5)]

49 **Dilution.** The Permittee shall not dilute emissions with air to comply with this permit. Monitoring shall consist of an annual certification that the Permittee does not dilute emissions to comply with this permit.

[18 AAC 50.045(a)]

50 **Reasonable Precautions to Prevent Fugitive Dust.** A person who causes or permits bulk materials to be handled, transported, or stored, or who engages in an industrial activity or construction project shall take reasonable precautions to prevent particulate matter from being emitted into the ambient air.

[18 AAC 50.045(d), 50.040(e), 50. 326(j)(3), & 50.346(c)]

51 **Stack Injection.** The Permittee shall not release materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack at a source constructed or modified after November 1, 1982, except as authorized by a construction permit, Title V permit, or air quality control permit issued before October 1, 2004.

[18 AAC 50.055(g)]

52 **Air Pollution Prohibited.** No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.

[18 AAC 50.110, 50.040(e), 50.326(j)(3), and 50.346(a)]
[40 C.F.R. 71.6(a)(3)]

52.1 Monitoring, Recordkeeping, and Reporting for Condition 52:

a. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 72.

b. As soon as practicable after becoming aware of a complaint that is attributable to emissions from the stationary source, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of Condition 52.

52.2 The Permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if

a. after an investigation because of a complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of Condition 52; or

b. the Department notifies the Permittee that it has found a violation of Condition 52.

52.3 The Permittee shall keep records of

a. the date, time, and nature of all emissions complaints received;

b. the name of the person or persons that complained, if known;

c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 52; and

d. any corrective actions taken or planned for complaints attributable to emissions from the stationary source.

52.4 With each operating report under Condition 73, the Permittee shall include a brief summary report which must include

a. the number of complaints received;

b. the number of times the Permittee or the Department found corrective action necessary;

c. the number of times action was taken on a complaint within 24 hours; and

d. the status of corrective actions the Permittee or Department found necessary that were not taken within 24 hours.

52.5 The Permittee shall notify the Department of a complaint that is attributable to emissions from the stationary source within 24 hours after receiving the complaint, unless the Permittee has initiated corrective action within 24 hours of receiving the complaint.

53 **Technology-Based Emission Standard.** If an unavoidable emergency, malfunction, or non-routine repair, as defined in 18 AAC 50.235(d), causes emissions in excess of a technology-based emission standard[5] listed in Conditions 26 and 55, the Permittee shall take all reasonable steps to minimize levels of emissions that exceed the standard. Excess emissions reporting under Condition 72 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 72.

[18 AAC 50.235(a), 50.326(j)(4), & 50.040(j)(4)]
[40 C.F.R. 71.6(c)(6)]

54 **Asbestos NESHAP.** The Permittee shall comply with the requirements set forth in 40 C.F.R. 61.145, 61.150, and 61.152 of Subpart M, and the applicable sections set forth in 40 C.F.R. 61, Subpart A and Appendix A.

[18 AAC 50.040(b)(1) & (2)(F), & 50.326(j)]
[40 C.F.R. 61, Subparts A & M, and Appendix A]

55 **Refrigerant Recycling and Disposal.** The Permittee shall comply with the standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F.

[18 AAC 50.040(d) & 50.326(j)]
[40 C.F.R. 82, Subpart F]

NESHAPs Applicability Determinations

56 The Permittee shall determine rule applicability and designation of affected sources under National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories (40 C.F.R. 63) in accordance with the procedures described in 40 C.F.R. 63.1(b) and 63.10(b)(3). If a source becomes affected by an applicable subpart of 40 C.F.R. 63, the Permittee shall comply with such standard by the compliance date established by the Administrator in the applicable subpart, in accordance with 40 C.F.R. 63.6(c).

[5] *Technology-based emission standard* means a best available control technology standard (BACT); a lowest achievable emission rate standard (LAER); a maximum achievable control technology standard established under 40 C.F.R. 63, Subpart B, adopted by reference in 18 AAC 50.040(c); a standard adopted by reference in 18 AAC 50.040(a) or (c); and any other similar standard for which the stringency of the standard is based on determinations of what is technologically feasible, considering relevant factors.

56.1 After the effective date of any relevant standard promulgated by the Administrator under this part, an owner or operator who constructs a new affected source that is not major-emitting or reconstructs an affected source that is not major-emitting that is subject to such standard, or reconstructs a source such that the source becomes an affected source subject to the standard, must notify the Administrator and the Department of the intended construction or reconstruction. The notification must be submitted in accordance with the procedures in §63.9(b).

[18 AAC 50.040(c)(1), 50.040(j), & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(ii)]
[40 C.F.R. 63.1(b), 63.5(b)(4), 63.6(c)(1), & 63.10(b)(3)]

Open Burning Requirements

57 **Open Burning.** If the Permittee conducts open burning at this stationary source, the Permittee shall comply with the requirements of 18 AAC 50.065.

57.1 The Permittee shall keep written records to demonstrate that the Permittee complies with the limitations in this condition and the requirements of 18 AAC 50.065. Upon request by the Department, submit copies of the records.

57.2 Compliance with this condition shall be an annual certification conducted under Condition 74.

[18 AAC 50.065, 50.040(j), & 50.326(j)]
[40 C.F.R. 71.6(a)(3)]

Section 6. General Source Testing and Monitoring Requirements

58 **Requested Source Tests.** In addition to any source testing explicitly required by the permit, the Permittee shall conduct source testing as requested by the Department to determine compliance with applicable permit requirements.

[18 AAC 50.220(a) & 50.345(a) & (k)]

59 **Operating Conditions.** Unless otherwise specified by an applicable requirement or test method, the Permittee shall conduct source testing

[18 AAC 50.220(b)]

59.1 at a point or points that characterize the actual discharge into the ambient air; and

59.2 at the maximum rated burning or operating capacity of the emission unit or another rate determined by the Department to characterize the actual discharge into the ambient air.

60 **Reference Test Methods.** The Permittee shall use the following as reference test methods when conducting source testing for compliance with this permit:

60.1 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(a) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60.

[18 AAC 50.220(c)(1)(A) & 50.040(a)]
[40 C.F.R. 60]

60.2 Source testing for the reduction in visibility through the exhaust effluent must be conducted in accordance with the procedures set out in Reference Method 9 and may use the form in Section 11 to record data.

[18 AAC 50.030 & 50.220(c)(1)(D)]

60.3 Source testing for emissions of total particulate matter, sulfur compounds, nitrogen compounds, carbon monoxide, lead, volatile organic compounds, fluorides, sulfuric acid mist, municipal waste combustor organics, metals, and acid gases must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60, Appendix A.

[18 AAC 50.040(a)(3) & 50.220(c)(1)(E)]
[40 C.F.R. 60, Appendix A]

60.4 Source testing for emissions of PM-10 must be conducted in accordance with the procedures specified in 40 C.F.R. 51, Appendix M, Methods 201 or 201A and 202.

[18 AAC 50.035(b)(2) & 50.220(c)(1)(F)]
[40 C.F.R. 51, Appendix M]

60.5 Source testing for emissions of any pollutant may be determined using an alternative method approved by the Department in accordance with 40 C.F.R. 63 Appendix A, Method 301.

[18 AAC 50.040(c)(24) & 50.220(c)(2)]
[40 C.F.R. 63, Appendix A, Method 301]

61 **Excess Air Requirements.** To determine compliance with this permit, standard exhaust gas volumes must include only the volume of gases formed from the theoretical combustion of the fuel, plus the excess air volume normal for the specific emission unit type, corrected to standard conditions (dry gas at 68° F and an absolute pressure of 760 millimeters of mercury).

[18 AAC 50.220(c)(3) & 50.990(102)]

62 **Test Exemption.** The Permittee is not required to comply with Conditions 64, 65 and 66 when the exhaust is observed for visible emissions by Method 9 Plan (Condition 2.1) or Smoke/No Smoke Plan (Condition 2.2).

[18 AAC 50.345(a)]

63 **Test Deadline Extension.** The Permittee may request an extension to a source test deadline established by the Department. The Permittee may delay a source test beyond the original deadline only if the extension is approved in writing by the Department's appropriate division director or designee.

[18 AAC 50.345(a) & (l)]

64 **Test Plans.** Except as provided in Condition 62, before conducting any source tests, the Permittee shall submit a plan to the Department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance and must specify how the emission unit will operate during the test and how the Permittee will document that operation. The Permittee shall submit a complete plan within 60 days after receiving a request under Condition 58 and at least 30 days before the scheduled date of any test unless the Department agrees in writing to some other time period. Retesting may be performed without resubmitting the plan.

[18 AAC 50.345(a) & (m)]

65 **Test Notification.** Except as provided in Condition 62, at least 10 days before conducting a source test, the Permittee shall give the Department written notice of the date and the time the source test will begin.

[18 AAC 50.345(a) & (n)]

66 **Test Reports.** Except as provided in Condition 62, within 60 days after completing a source test, the Permittee shall submit two copies of the results in the format set out in the Source Test Report Outline, adopted by reference in 18 AAC 50.030. The Permittee shall additionally certify the results in the manner set out in Condition 69. If requested in writing by the Department, the Permittee must provide preliminary results in a shorter period of time specified by the Department.

[18 AAC 50.345(a) & (o)]

67 **Particulate Matter Calculations.** In source testing for compliance with the particulate matter standards in Conditions 5 and 16.2, the three-hour average is determined using the average of three one-hour test runs.

[18 AAC 50.220(f)]

Section 7. General Recordkeeping and Reporting Requirements

Recordkeeping Requirements

68 **Recordkeeping Requirements.** The Permittee shall keep all records required by this permit for at least five years after the date of collection, including:

[18 AAC 50.326(j)]
[40 C.F.R 60.7(f), Subpart A, 40 C.F.R 71.6(a)(3)(ii)(B)]

68.1 Copies of all reports and certifications submitted pursuant to this section of the permit; and

68.2 Records of all monitoring required by this permit, and information about the monitoring including:

a. the date, place, and time of sampling or measurements;

b. the date(s) analyses were performed;

c. the company or entity that performed the analyses;

d. the analytical techniques or methods used;

e. the results of such analyses; and,

f. the operating conditions as existing at the time of sampling or measurement.

Reporting Requirements

69 **Certification.** The Permittee shall certify any permit application, report, affirmation, or compliance certification submitted to the Department and required under the permit by including the signature of a responsible official for the permitted stationary source following the statement: *"Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete."* Excess emission reports must be certified either upon submittal or with an operating report required for the same reporting period. All other reports and other documents must be certified upon submittal.

69.1 The Department may accept an electronic signature on an electronic application or other electronic record required by the Department if

a. a certifying authority registered under AS 09.25.510 verifies that the electronic signature is authentic; and

b. the person providing the electronic signature has made an agreement, with the certifying authority described in Condition 69.1a, that the person accepts or agrees to be bound by an electronic record executed or adopted with that signature.

[18 AAC 50.345(a) & (j), 50.205, & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii)(A)]

70 **Submittals.** Unless otherwise directed by the Department or this permit, the Permittee shall send an original and one copy of reports, compliance certifications, and other submittals required by this permit to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician. The Permittee may, upon consultation with the Compliance Technician regarding software compatibility, provide electronic copies of data reports, emission source test reports, or other records under a cover letter certified in accordance with Condition 69.

[18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii)(A)]

71 **Information Requests.** The Permittee shall furnish to the Department, within a reasonable time, any information the Department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the Permittee shall furnish to the Department copies of records required to be kept by the permit. The Department may require the Permittee to furnish copies of those records directly to the Federal Administrator.

[18 AAC 50.345(a) & (i), 50.200, & 50.326(a) & (j)]
[40 C.F.R. 71.5(a)(2) & 71.6(a)(3)]

72 **Excess Emissions and Permit Deviation Reports**.

72.1 Except as provided in Condition 52, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

a. in accordance with 18 AAC 50.240(c), as soon as possible after the event commenced or is discovered, report

(i) emissions that present a potential threat to human health or safety; and

(ii) excess emissions that the Permittee believes to be unavoidable;

b. in accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or nonroutine repair that causes emissions in excess of a technology based emission standard;

c. report all other excess emissions and permit deviations

(i) within 30 days of the end of the month in which the emissions or deviation occurs, except as provided in Condition 72.1c(ii); and

(ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the Department provides written permission to report under Condition 72.1c(i).

72.2 When reporting either excess emissions or permit deviations, the Permittee shall report using either the Department's on-line form, which can be found at http://www.dec.state.ak.us/air/ap/site.htm or https://myalaska.state.ak.us/deca/air/airtoolsweb/, or if the Permittee prefers, the form contained in Section 13 of this permit. The Permittee must provide all information called for by the form that is used.

72.3 If requested by the Department, the Permittee shall provide a more detailed written report as requested to follow up an excess emissions report.

[18 AAC 50.235(a)(2), 50.240(c), 50.326(j)(3), & 50.346(b)(2) & (3)]

73 **Operating Reports.** During the life of this permit[6], the Permittee shall submit to the Department an original and one copy of an operating report by August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year.

73.1 The operating report must include all information required to be in operating reports by other conditions of this permit. The Permittee may, upon consultation with the Compliance Technician regarding software compatibility, provide electronic copies of data reports, emission source test reports, or other records under a cover letter certified in accordance with Departmental submission requirements.

73.2 If excess emissions or permit deviations that occurred during the reporting period are not reported under Condition 73.1, either

a. The Permittee shall identify

(i) the date of the deviation;

(ii) the equipment involved;

(iii) the permit condition affected;

(iv) a description of the excess emissions or permit deviation; and

(v) any corrective action or preventive measures taken and the date of such actions; or

b. When excess emissions or permit deviations have already been reported under Condition 72 the Permittee shall cite the date or dates of those reports.

73.3 The operating report must include a listing of emissions monitored under Condition 3.2.c which trigger additional testing or monitoring, whether or not the emissions monitored exceed an emission standard. The Permittee shall include in the report.

a. the date of the emissions;

b. the equipment involved;

[6] *Life of this permit* is defined as the permit effective dates, including any periods of reporting obligations that extend beyond the permit effective dates. For example if a permit expires prior to the end of a calendar year, there is still a reporting obligation to provide operating reports for the periods when the permit was in effect.

c. the permit condition affected; and

d. the monitoring result which triggered the additional monitoring.

73.4 **Transition from expired to renewed permit**. For the first period of this renewed operating permit, also provide the previous permit's facility operating report elements covering that partial period immediately preceding the effective date of this renewed permit.

[18 AAC 50.346(a) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii)(A)]

74 **Annual Compliance Certification.** Each year by March 31, the Permittee shall compile and submit to the Department an original and one copy of an annual compliance certification report[7]. The Permittee, at their discretion, may submit one copy in electronic format (PDF or other Department compatible image format).

74.1 Certify the compliance status of the stationary source over the preceding calendar year consistent with the monitoring required by this permit, as follows:

a. identify each term or condition set forth in Section 3 through Section 9, that is the basis of the certification;

b. briefly describe each method used to determine the compliance status;

c. state whether compliance is intermittent or continuous; and

d. identify each deviation and take it into account in the compliance certification;

74.2 **Transition from expired to renewed permit**. For the first period of this renewed operating permit, also provide the previous permit's annual compliance certification report elements covering that partial period immediately preceding the effective date of this renewed permit.

74.3 In addition, submit a copy of the report directly to the EPA-Region 10, Office of Air Quality, M/S OAQ-107, 1200 Sixth Avenue, Seattle, WA 98101.

[18 AAC 50.205, 50.345(a) & (j), & 50.326(j)]
[40 C.F.R. 71.6(c)(5)]

75 **NSPS and NESHAP Reports**. The Permittee shall:

75.1 **Reports:** Attach to the operating report required by Condition 73 for the period covered by the report, a copy of any NSPS and NESHAPs reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10; and

[7] See Condition 74.2 for clarification on the number of reports required.

75.2 **Waivers**: Upon request by the Department, provide a written copy of any EPA-granted alternative monitoring requirement, custom monitoring schedule or waiver of the Federal emission standards, recordkeeping, monitoring, performance testing, or reporting requirements. The Permittee shall keep a copy of each U.S. EPA issued monitoring waiver or custom monitoring schedule with the permit.

[18 AAC 50.326(j)(4) & 50.040(j)]
[40 C.F.R. 60.13, 63.10(d and f), and 71.6(c)(6)]

76 **Emission Inventory Reporting.** The Permittee shall submit to the Department reports of actual emissions, by emission unit, of CO, NH_3, NO_X, PM_{10}, $PM_{2.5}$, SO_2, VOCs and Lead (Pb) (and lead compounds) using the form in Section 14 of this permit, as follows:

76.1 Each year by March 31, if the stationary source's potential to emit emissions for the previous calendar year:

a. equal or exceed 250 tons per year (TPY) of NH_3, PM_{10}, $PM_{2.5}$ or VOCs; or

b. equal or exceed 2500 TPY of CO, NO_X or SO_2.

76.2 Every third year by March 31 if the stationary source's potential to emit emissions for the previous calendar year exceed:

a. 5 tons per year of lead (Pb), 1000 TPY of CO; or

b. 100 TPY of SO_2, NH_3, PM_{10}, $PM_{2.5}$, NO_X or VOCs.

c. The Permittee shall commence reporting in 2013 for the calendar year of 2012, 2016 for calendar year 2015, etc.

76.3 Include in the report required by this condition, the required data elements contained within the form in Section 14 or those contained in Table 2A of Appendix A to Subpart A of 40 CFR 51 (final rule published in 73 FR 76556 (December 17, 2008)) for each stack associated with an emission unit.

[18 AAC 50.346(b)(8) and18 AAC 50.200]
[40 CFR 51.15, 51.30(a)(1) & (b)(1) and
40 CFR 51, Appendix A to Subpart A, 73 FR 76556 (12/17/08)]

Section 8. Permit Changes and Renewal

77 **Permit Applications and Submittals.** The Permittee shall comply with the following requirements for submitting application information to the EPA Region 10:

77.1 The Permittee shall provide a copy of each application for modification or renewal of this permit, including any compliance plan, or application addenda, at the time the application or addendum is submitted to the Department[8];

77.2 The information shall be submitted to the same address as in Condition 74.3.

77.3 To the extent practicable, the Permittee shall provide to EPA applications in portable document format (PDF); MS Word format (.doc); or other computer-readable format compatible with EPA's national database management system; and

77.4 The Permittee shall maintain records as necessary to demonstrate compliance with this condition.

[18 AAC 50.040(j)(7) & 50.326(b)]
[40 C.F.R. 71.10(d)(1)]

78 **Emissions Trading.** No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(8)]

79 **Off Permit Changes.** The Permittee may make changes that are not addressed or prohibited by this permit other than those subject to the requirements of 40 C.F.R. Part 72 through 78 or those that are modifications under any provision of Title I of the Act to be made without a permit revision, provided that the following requirements are met:

79.1 Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition;

79.2 Provide contemporaneous written notice to EPA and the Department of each such change, except for changes that qualify as insignificant under 18 AAC 50.326(d) – (i). Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change;

79.3 The change shall not qualify for the shield under 40 C.F.R. 71.6(f);

79.4 The Permittee shall keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(12)]

[8] The documents required in this permit are submitted to the Department's Anchorage office. The current address for the Anchorage office is: ADEC, 619 East Ship Creek, Suite 249, Anchorage, AK 99501.

80 **Operational Flexibility.** The Permittee may make changes within the permitted stationary source without requiring a permit revision if the changes are not modifications under any provision of Title I of the Act and the changes do not exceed the emissions allowable under this permit (whether expressed therein as a rate of emissions or in terms of total emissions):

80.1 The Permittee shall provide EPA and the Department with a notification no less than 7 days in advance of the proposed change.

80.2 For each such change, the written notification required above shall include a brief description of the change within the permitted stationary source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

80.3 The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made pursuant to Condition 80.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(13)]

81 **Permit Renewal.** To renew this permit, the Permittee shall submit an application under 18 AAC 50.326 no sooner than[18 months before] and no later than[6 months before] the expiration date of this permit. The renewal application shall be complete before the permit expiration date listed on the cover page of this permit. Permit expiration terminates the stationary source's right to operate unless a timely and complete renewal application has been submitted consistent with 40 C.F.R. 71.7(b) and 71.5(a)(1)(iii).

[18 AAC 50.040(j)(3), 50.326(c)(2) & (j)(2)]
[40 C.F.R. 71.5(a)(1)(iii) & 71.7(b) & (c)(1)(ii)]

Section 9. Compliance Requirements

General Compliance Requirements

82 Compliance with permit terms and conditions is considered to be compliance with those requirements that are

82.1 included and specifically identified in the permit; or

82.2 determined in writing in the permit to be inapplicable.

[18 AAC 50.326(j)(3) & 50.345(a) & (b)]
[40 C.F.R. 71.6(f)(1)]

83 The Permittee must comply with each permit term and condition.

83.1 For applicable requirements with which the stationary source is in compliance, the Permittee will continue to comply with such requirements

83.2 Noncompliance with a permit term or condition constitutes a violation of AS 46.14.120(c), 18 AAC 50, and, except for those terms or conditions designated in the permit as not Federally enforceable, the Clean Air Act, and is grounds for

a. an enforcement action;

b. permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or

c. denial of an operating permit renewal application.

[18 AAC 50.040(j), 326(j) & 50.345(a) & (c)]
[40 C.F.R. 71.6(c)(3) & 71.5(c)(8)(iii)(A)]

84 It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.

[18 AAC 50.326(j)(3) & 50.345(a) & (d)]

85 The Permittee shall allow the Department or an inspector authorized by the Department, upon presentation of credentials and at reasonable times with the consent of the owner or operator to

85.1 enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;

85.2 have access to and copy any records required by the permit;

85.3 inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and

85.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

[18 AAC 50.326(j)(3) & 50.345(a) & (h)]

86 For applicable requirements that will become effective during the permit term, the Permittee shall meet such requirements on a timely basis, as specified in Conditions 33.1 and 37.1.

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(c)(3) & 71.5(c)(8)(iii)(B)]

Section 10. Permit As Shield from Inapplicable Requirements

In accordance with AS 46.14.290, and based on information supplied in the permit application, this section of the permit contains the requirements determined by the Department not to be applicable to the stationary source.

87 Nothing in this permit shall alter or affect the following:

87.1 The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section; or

87.2 The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance.

[18 AAC 50.326(j)]
[40 C.F.R. 71.6(f)(3)(i)) & (ii)]

88 Table E identifies the emission units that are not subject to the specified requirements at the time of permit issuance. If any of the requirements listed in Table E becomes applicable during the permit term, the Permittee shall comply with such requirements on a timely basis including, but not limited to, providing appropriate notification to EPA, obtaining a construction permit and/or an operating permit revision.

[18 AAC 50.326(j)]
[40 C.F.R. 71.6(f)(1)(ii)]

Table E - Permit Shields Granted

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
Entire Source	40 CFRs 51, 52, 53, 54, 56, 57, 58	Apply to regulatory authorities.
Entire Source	40 CFR 55	No "affected facilities" within the permitted facility.
Entire Source	40. CFR. 60 Subparts A, B, C, Ca, Cb, Da, Db, Dc, Ea, Eb, F, G, H, I, J, L, M, N, Na, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AAa, BB, CC, DD, EE, HH, KK, LL, MM, NN, PP, QQ, RR, SS, TT, UU, VV, VVa, WW, XX, AAA, BBB, DDD, FFF, GGG, GGGa, HHH, III, JJJ, KKK, LLL, NNN, OOO, PPP, QQQ, RRR, SSS, TTT, UUU, VVV, WWW, AAAA, BBBB, CCCC, DDDD, EEEE, FFFF, JJJJ, KKKK, LLLL, MMMM, OOOO,	No "affected facilities" within the permitted facility.
EU IDs 7, 8, and 9	40 CFR 60, Subparts K and Ka	Permittee commenced construction of the insignificant diesel oil storage tanks and lube oil storage tank after July 24, 1984.
EU IDs 7, 8, and 9	40 CFR 60, Subparts Kb	The insignificant diesel fuel storage tanks and lube oil storage tank at this source were constructed after July 24, 1984 and each has a storage capacity less than 75 cubic meters (19,813 gallons). 40 CFR 60 Subpart Kb was revised October 15, 2003.

EU IDs 1, 2, 3, and 4	40 CFR 60, Subpart IIII	These stationary compression ignition reciprocating internal combustion engines were constructed prior to July 11, 2005, and have not been modified or reconstructed since that time.
EU ID 10	40 CFR 60.8(b) through (e).	The Permittee has already complied with the initial notification requirements for this engine. The shield will be applicable for emissions unit as currently installed until modified, reconstructed or replaced.
Entire Source	40 CFR 61 Subparts B, C, D, E, F, H, I, J, K, L, N, O, P, Q, R, T, V, W, Y, BB and FF.	No "affected facilities" within the permitted facility.
Entire Source	40 CFR 63 Subparts B, F, G, H, L, M, N, O, Q, R, S, T, U, W, X, AA, BB, CC, EE, GG, II, JJ, KK, LL, MM, PP, QQ, RR, WW, XX, YY, CCC, DDD, EEE, GGG, III, JJJ, LLL, MMM, NNN, OOO, PPP, QQQ, RRR, TTT, UUU, VVV, XXX, AAAA, CCCC, DDDD, EEEE, FFFF, GGGG, HHHH, IIII, JJJJ, KKKK, MMMM, NNNN, OOOO, PPPP, QQQQ, RRRR, SSSS, TTTT, UUUU, VVVV, WWWW, XXXX, AAAAA, BBBBB, CCCCC, DDDDD, EEEEE, FFFFF, GGGGG, HHHHH, IIIII, JJJJJ, KKKKK, LLLLL, MMMMM, NNNNN, PPPPP, QQQQQ, RRRRR, SSSSS, TTTTT, UUUUU, WWWWW, YYYYY, ZZZZZ, BBBBBB, CCCCCC, DDDDDD, EEEEEE, FFFFFF, GGGGGG, HHHHHH, LLLLLL, MMMMMM, NNNNNN, OOOOOO, PPPPPP, QQQQQQ, RRRRRR, SSSSSS, TTTTTT, VVVVVV, WWWWWW, XXXXXX, YYYYYY, ZZZZZZ, AAAAAAA, BBBBBBB, CCCCCCC, DDDDDDD, EEEEEEE, AND HHHHHHH	No "affected facilities" within the permitted facility. This source is not a major source of HAPs, as defined in 40 CFR 63.2, and therefore, is not subject to any federal standards applicable to major sources of HAP.
EU IDs 1, 2, 3, and 4	40 CFR 63, Subpart ZZZZ, numerical CO emission limits in Table 2d.	Pursuant to 40 CFR 63.6603(b), these emission units do not have to meet the numerical CO emission limits in Table 2d because this source is an area source whose only connection to the Federal Aid Highway System (FAHS) is through the Alaska Marine Highway System (AMHS), more than 10 percent of the power generated is used for residential purposes, and the generating capacity of this source is less than 12 megawatts.
EU IDs 1, 2, 3, and 4	40 CFR Part 63, Subpart ZZZZ, paragraphs 63.6600, 6601, 6602, 6603(a), (c), (d), (e), and (f), 6610, 6611, 6612, 6615, 6620, 6625, 6630, 6635, 6640, 6645, 6650, and 6655(a), (b), (c), (d), and (f)	These engines are existing, non-emergency, stationary compression ignition RICE located at an area source of HAP with no applicable emission standards. These requirements do not apply.

EU IDs 1, 2, 3, and 4	40 CFR Part 63, Subpart ZZZZ, paragraph 63.6604(a)	These engines are existing, non-emergency, stationary compression ignition RICE located at an area source of HAP in an area of Alaska that meets either § 63.6603(b)(1) or § 63.6603(b)(2). This source is an area source located in an area of Alaska that is not accessible by the Federal Aid Highway System (FAHS) and whose only connection to the Federal Aid Highway System (FAHS) is through the Alaska Marine Highway System (AMHS). More than 10 percent of the power generated is used for residential purposes, and the generating capacity of this source is less than 12 megawatts.
EU ID 10	40 CFR 63, Subpart ZZZZ	Pursuant to 40 CFR 63.6590(a)(2)(iii), this emission unit is a new stationary RICE because it was constructed after June 12, 2006. Pursuant to 40 CFR 63.6590(c)(1), this emission unit has no requirements under 40 CFR 63, Subpart ZZZZ because it is a new RICE located at an area source of HAP. This engine meets the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart IIII.
EU IDs 5a and 6	40 CFR 63, Subpart JJJJJJ, paragraphs 63.11205(b) & (c), 63.11210(a), (b), (d) – (j), 63.11211, 63.11212, 63.11213, 63.11214(b) – (d), 63.11220, 63.11221, 63.11222, and 63.11224	These existing oil-fired boilers do not have any applicable emission limits. Further, these boilers are not subject to any of the compliance, monitoring, performance testing, operation, and maintenance requirements for boilers subject to emission limits.
Entire Source	40 C.F.R. 64	Not an affected facility, operation, or industry.
Entire Source	Facility 40 C.F.R. 65, 66, 67	Apply to regulatory authorities.
Entire Source	Facility 40 C.F.R. 68 Subpart G	Not an affected facility, operation, or industry.
Entire Source	Facility 40 C.F.R. 69	Not an affected facility, operation, or industry.
Entire Source	40 CFR 71.6(f)(1)(ii)	This source is not a major source of HAPs
Entire Source	Facility 40 C.F.R. 72, 73, 74, 75, 76, 77, 78, 79 & 80	Not an affected facility, operation, or industry.
Entire Source	Facility 40 C.F.R. 82 Subparts A- E & G	Not an affected facility, operation, or industry.

88.1 The Department has determined that EU IDs 7, 8, and 9 are not subject to the requirements set forth in 40 C.F.R. 60 Subpart Kb. This determination is based upon certification by the Permittee that EU IDs 7, 8, and 9 each has a storage capacity less than 75 cubic meters (19,813 gallons).

88.2 The Department has determined that EU IDs 1, 2, 3, and 4 are not subject to the requirements set forth in 40 C.F.R. 60 Subpart IIII. This determination is based upon certification by the Permittee that EU IDs 1, 2, 3, and 4 were installed prior to the applicability date (July 11, 2005) of Subpart IIII.

[18 AAC 50.326(j)]
[40 C.F.R. 71.6(f)(1)(ii)]

Section 11. Visible Emissions Forms

VISIBLE EMISSION OBSERVATION FORM

This form is designed to be used in conjunction with EPA Method 9, "Visual Determination of the Opacity of Emissions form Stationary Sources." Temporal changes in emission color, plume water droplet content, background color, sky conditions, observer position, etc. should be noted in the comments section adjacent to each minute of readings. Any information not dealt with elsewhere on the form should be noted under additional information. Following are brief descriptions of the type of information that needs to be entered on the form: for a more detailed discussion of each part of the form, refer to "Instructions for Use of Visible Emission Observation Form."

- Source Name: full company name, parent company or division or subsidiary information, if necessary.
- Address: street (not mailing or home office) address of facility where VE observation is being made.
- Phone (Key Contact): number for appropriate contact.
- Source ID Number: number from NEDS, agency file, etc.
- Process Equipment, Operating Mode: brief description of process equipment (include type of facility) and operating rate, % capacity, and/or mode (e.g. charging, tapping, shutdown).
- Control Equipment, Operating Mode: specify type of control device(s) and % utilization, control efficiency.
- Describe Emission Point: for identification purposes, stack or emission point appearance, location, and geometry; and whether emissions are confined (have a specifically designed outlet) or unconfined (fugitive).
- Height Above Ground Level: stack or emission point height relative to ground level; can use engineering drawings, Abney level, or clineometer.
- Height Relative to Observer: indicate height of emission point relative to the observation point.
- Distance from Observer: distance to emission point; can use rangefinder or map.
- Direction from Observer: direction plume is traveling from observer.
- Describe Emissions and Color: include physical characteristics, plume behavior (e.g., looping, lacy, condensing, fumigating, secondary particle formation, distance plume visible, etc.), and color of emissions (gray, brown, white, red, black, etc.). Note color changes in comments section.
- Visible Water Vapor Present?: check "yes" if visible water vapor is present.
- If Present, is Plume…: check "attached" if water droplet plume forms prior to exiting stack, and "detached" if water droplet plume forms after exiting stack.
- Point in Plume at Which Opacity was Determined: describe physical location in plume where readings were made (e.g., 1 ft above stack exit or 10 ft. after dissipation of water plume).
- Describe Plume Background: object plume is read against, include texture and atmospheric conditions (e.g., hazy).
- Background Color: sky blue, gray-white, new leaf green, etc.
- Sky Conditions: indicate cloud cover by percentage or by description (clear, scattered, broken, overcast).
- Wind Speed: record wind speed; can use Beaufort wind scale or hand-held anemometer to estimate.
- Wind Direction From: direction from which wind is blowing; can use compass to estimate to eight points.
- Ambient Temperature: in degrees Fahrenheit or Celsius.

  Wet Bulb Temperature: can be measured using a sling psychrometer

  RH Percent: relative humidity measured using a sling psychrometer; use local US Weather Bureau measurements only if nearby.
- Source Layout Sketch: include wind direction, sun position, associated stacks, roads, and other landmarks to fully identify location of emission point and observer position.

  Draw North Arrow: to determine, point line of sight in direction of emission point, place compass beside circle, and draw in arrow parallel to compass needle.

  Sun's Location: point line of sight in direction of emission point, move pen upright along sun location line, mark location of sun when pen's shadow crosses the observer's position.
- Observation Date: date observations conducted.
- Start Time, End Time: beginning and end times of observation period (e.g., 1635 or 4:35 p.m.).
- Data Set: percent opacity to nearest 5%; enter from left to right starting in left column. Use a second (third, etc.) form, if readings continue beyond 30 minutes. Use dash (-) for readings not made; explain in adjacent comments section.

  Comments: note changing observation conditions, plume characteristics, and/or reasons for missed readings.

  Range of Opacity: note highest and lowest opacity number.
- Observer's Name: print in full.

  Observer's Signature, Date: sign and date after performing VE observation.
- Organization: observer's employer.

Certified By, Date: name of "smoke school" certifying observer and date of most recent certification.

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY DIVISION - VISIBLE EMISSIONS OBSERVATION FORM

Page No._____

Source Name		Type of Source			Observation Date			Start Time	End Time
					Sec / Min	0	15	30	45	Comments
Address					1					
City	State	Zip			2					
Phone # (Key Contact)		Source ID Number			3					
Process Equipment		Operating Mode			4					
Control Equipment		Operating Mode			5					
Describe Emission Point					6					
Height above ground level	Height relative to observer	Inclinometer Reading			7					
Distance From Observer		Direction From Observer			8					
		Start	End							
Describe Emissions & Color					9					
Start		End								
Visible Water Vapor Present? If yes, determine approximate distance from the					10					
No Yes	stack exit to where the plume was read									
Point in Plume at Which Opacity Was Determined					11					
Describe Plume Background		Background Color			12					
Start		Start			13					
End		End								
Sky Conditions: Start					14					
End										
Wind Speed		Wind Direction From			15					
		Start	End							
Ambient Temperature		Wet Bulb Temp		RH percent	16					
NOTES: 1 Stack or Point Being Read		2 Wind Direction From			17					
3 Observer Location	4 Sun Location	5 North Arrow	6 Other Stacks		18					
					19					
					20					
					21					
					22					
					23					
					24					
					25					
					26					
					27					
					28					
					29					
					30					
					Range of Opacity					
					Minimum			Maximum		
I have received a copy of these opacity observations					Print Observer's Name					
Print Name:					Observer's Signature			Date		
Signature:										
Title		Date			Organization					
					Certified By:				Date	

Section 12. Material Balance Calculation

If the sulfur content of a fuel shipment is greater than 0.75 percent by weight, calculate the three-hour exhaust concentration of SO_2 using the following equations:

A. = 31,200 x[**wt%S_{fuel}**] = 31,200 x _____ = _____

B. = 0.148 x[**wt%S_{fuel}**] = 0.148 x _____ = _____

C. = 0.396 x[**wt%C_{fuel}**] = 0.396 x _____ = _____

D. = 0.933 x[**wt%H_{fuel}**] = 0.933 x _____ = _____

E. = B + C + D = _____ + _____ + _____ = _____

F. = 21 –[**vol%$_{dry}O_{2,\ exhaust}$**] = 21 - _____ = _____

G. =[**vol%$_{dry}O_{2,\ exhaust}$**] ÷ F = _____ ÷ _____ = _____

H. = 1 + G = 1 + _____ = _____

I. = E x H = _____ x _____ = _____

SO_2 concentration = A ÷ I = _____ ÷ _____ = _____ ppm

The wt%S_{fuel}, wt%C_{fuel}, and wt%H_{fuel} are equal to the weight percents of sulfur, carbon, and hydrogen in the fuel. These percentages should total 100%.

The fuel weight percent (wt%) of sulfur is obtained pursuant to Condition 8.1. The fuel weight percents of carbon and hydrogen are obtained from the fuel refiner.

The volume percent of oxygen in the exhaust (vol%$_{dry}O_2$, exhaust) is obtained from oxygen meters, manufacturer's data, or from the most recent ORSAT analysis at the same engine load used in the calculation.

Enter all of the data in percentages without dividing the percentages by 100. For example, if wt%S_{fuel}l = 1.0%, then enter 1.0 into the equations not 0.01 and if vol%$_{dry}O_2$, exhaust = 3.00%, then enter 3.00, not 0.03.

[18 AAC 50.346(c)]

Section 13. ADEC Notification Form[9]

Orca Power Plant	AQ0221TVP03
Stationary Source Name	**Air Quality Permit No.**
Cordova Electric Cooperative, Inc.	
Company Name	**Date**

When did you discover the Excess Emissions/Permit Deviation?

Date: _____ / _____ / _____ Time: _____ :/ _____

When did the event/deviation occur?

Begin Date: _____ / _____ / _____ Time: _____ : _____ (Use 24-hr clock.)

End Date _____ / _____ / _____ Time: _____ : _____ (Use 24-hr clock.)

What was the duration of the event/deviation? ____ : ____ (hrs:min) or _____ days

(total # of hrs, min, or days, if intermittent then include only the duration of the actual emissions/deviation)

Reason for Notification: (please check only 1 box and go to the corresponding section)

☐ Excess Emissions – Complete Section 1 and Certify

☐ Deviation from Permit Condition – Complete Section 2 and Certify

☐ Deviations from COBC, CO, or Settlement Agreement – Complete Section 2 and Certify

Section 1. Excess Emissions

(a) Was the exceedance: ☐ Intermittent or ☐ Continuous

(b) Cause of Event (Check one that applies):

☐ Start Up/Shut Down ☐ Natural Cause (weather/earthquake/flood)

☐ Control Equipment Failure ☐ Schedule Maintenance/Equipment Adjustment

☐ Bad Fuel/Coal/Gas ☐ Upset Condition ☐ Other _____

(c) Description
Describe briefly, what happened and the cause. Include the parameters/operating conditions exceeded, limits, monitoring data and exceedance.

(d) Emissions Units Involved:
Identify the emission unit involved in the event, using the same identification number and name as in the permit. Identify each emission standard potentially exceeded during the event and the exceedance.

EU ID	EU Name	Permit Condition Exceeded/Limit/Potential Exceedance

[9] Revised as of August 20, 2008.

(e) Type of Incident (please check only one):

☐ Opacity _____ % ☐ Venting _____ gas/scf ☐ Control Equipment Down

☐ Fugitive Emissions ☐ Emission Limit Exceeded ☐ Other _____

☐ Marine Vessel Opacity ☐ Flaring _____

(f) Unavoidable Emissions:

Do you intend to assert that these excess emissions were unavoidable? ☐ Yes ☐ No

Do you intend to assert the affirmative defense of 18 AAC 50.235? ☐ Yes ☐ No

Certify Report (Go to end of form.)

Section 2. Permit Deviations

(a) Permit Deviation Type (check only one box, corresponding with the section in the permit):

☐ Emission Unit-Specific

☐ Failure to Monitor/Report

☐ General Source Test/Monitoring Requirements

☐ Recording/Reporting/Compliance Certification

☐ Standard Conditions Not Included in the Permit

☐ Other Section: _____ (Title of section and section number of your permit).

☐ Generally Applicable Requirements

☐ Reporting/Monitoring for Diesel Engines

☐ Recordkeeping Failure

☐ Insignificant Emission Unit

☐ Stationary Source Wide

(b) Emission Unit Involved:

Identify the emission unit involved in the event, using the same identification number and name as in the permit. List the corresponding permit conditions and the deviation.

EU ID	EU Name	Permit Condition/ Potential Deviation

(c) Description of Potential Deviation:
Describe briefly what happened and the cause. Include the parameters/operating conditions and the potential deviation.

(d) Corrective Actions:
Describe actions taken to correct the deviation or potential deviation and to prevent future recurrence.

Certification:

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name: _____ Title: _____ Date: _____

Signature: _____ Phone Number: _____

NOTE: *This document must be certified in accordance with 18 AAC 50.345(j)*

To Submit this Report:

Fax to: 907-451-2187

Or

Email to: DEC.AQ.Airreports@alaska.gov

If faxed or emailed, the report must be certified within the Operating Report required for the same reporting period per Condition 73.

Or

Mail to: ADEC
Air Permits Program
610 University Avenue
Fairbanks, AK 99709-3643

Or

Phone Notification: 907-451-5173

Phone notifications require a written follow-up report.

Or

Submission of information contained in this report can be made electronically at the following website:

https://myalaska.state.ak.us/dec/air/airtoolsweb/

If submitted online, report must be submitted by an authorized E-Signer for the stationary source.

[18 AAC 50.346(b)(3)]

Section 14. Emission Inventory Form

ADEC Reporting Form Emission Inventory Reporting State of Alaska Department of Environmental Conservation Division of Air Quality	Emission Inventory Year-[ ]

Mandatory information is highlighted. Make additional copies as needed.	
Inventory start date:	
Inventory end date:	
Inventory Type:	
Facility Information:	
ADEC Stationary Source ID:	
(Stationary Source) Facility Name:	
AFS ID:	
Census Area/ Community:	
Line of Business (NAICS):	
Contact/Owner Name:	
Contact Owner Address:	
Contact/Owner Phone Number:	
Facility Physical Address:	
	Lat: Long:
Mailing Address :	

Emission Unit:	
ID:	
Description:	
Manufacturer:	
Model Number:	
Serial Number:	
Year of Manufacture:	
Maximum Nameplate Capacity:	
Design Capacity (BTU/hr):	
Control Equipment (List All):	
	Control Equipment Type(Primary or Secondary):
	ID:
	Type:
	Manufacturer:
	Model:
	Control Efficiency (%):
	Capture Efficiency (%):

	Total Capture Efficiency (%):		
Pollutants Controlled			

Processes (List All):	
	PROCESS:
	SCC Code:
	Material Processed:
	Operational Periods:
	FUEL INFORMATION
	Ash Content (weight %):
	Elem. Sulfur Content (weight %):
	H2S Sulfur Content (ppmv):
	Heat Content (MMBtu/1000 gal or MMBtu/MMscf):
	Heat Input (MMBtu/hr):
	Heat Output (MMBtu/hr):
	THROUGHPUT
	Total Amount:
	Summer %:
	Fall %:
	Winter %:
	Spring %:
	Days/Week of Operation:
	Weeks/Year of Operation:
	Hours/Day of Operation:
	Hours/Year of Operation:

EMISSIONS					
Pollutant	**Emission Factor**	**Emission Factor Numerator**	**Emission Factor Denominator**	**Emission Factor Source**	**Tons Emitted**
CO					
NH3					
NOX					
PM10-PRI					
PM25-PRI					
SO2					
VOC					
Lead and lead compounds					

Stack Description:	
	Stack Detail:
	ID:
	Type:
	Measurement Units:
	Base Elevation:
	Stack Height:
	Stack Diameter:
	Exit Gas Temp:
	Exit Gas Velocity:
	Actual Exit Gas Flow Rate:
	Data Source:
	Description:
	Latitude:
	Longitude:
	Location Description:
	Accuracy (m):
	Datum:

Certification:

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name:_____Title_____Date _____

Signature:_____ Phone number_____

NOTE: ***This document must be certified in accordance with 18 AAC 50.345(j)***

To Submit this report:

1. Fax this form to: 907-465-5129; or
2. E-mail to: DEC.AQ.airreports@alaska.gov; or
3. Mail to: ADEC
   Air Permits Program
   410 Willoughby Ave., Suite 303
   PO Box 111800
   Juneau, AK 99801-1800

[18 AAC 50.346(b)(9)]