DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ0211TVP04 Issue Date: Public Comment - September 17, 2019
Expiration Date: Five Years

The Alaska Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the Permittee, **Kodiak Electric Association, Inc.**, for the operation of the **Kodiak Generating Station**.

This permit satisfies the obligation of the owner and operator to obtain an operating permit as set out in AS 46.14.130(b).

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

All stationary source-specific terms and conditions of Minor Permit No. AQ0211MSS01 have been incorporated into this permit.

Citations listed herein are contained within the effective version of 18 AAC 50 at permit issuance. 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. AQ0211TVP03 Revision 2 expires.

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

James R. Plosay, Manager
Air Permits Program

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List of Abbreviations Used in this Permit

AAC.....Alaska Administrative Code
ADEC .....Alaska Department of Environmental Conservation
Administrator.....EPA and the Department.
AMHS .....Alaska Marine Highway System
AS .....Alaska Statutes
ASTM.....American Society for Testing and Materials
Btu .....British thermal unit
CAA or The Act .Clean Air Act
CBS .....City and Borough of Sitka
CDX.....Central Data Exchange
CEDRI .....Compliance and Emissions Data Reporting Interface
C.F.R. .....Code of Federal Regulations
CI .....Compression Ignition
The Act .....Clean Air Act
CO .....Carbon Monoxide
CO_2 .....Carbon Dioxide
CO_2e .....CO_2 equivalent emissions
EPA .....US Environmental Protection Agency
EU ID .....Emissions Unit Identification number
gr/dscf .....grain per dry standard cubic foot (1 pound = 7000 grains)
FAHS.....Federal Aid Highway System
GHG .....Greenhouse Gas
gph .....gallons per hour
HAP .....hazardous air pollutant [as defined in AS 46.14.990]
hp .....horsepower
ICE.....Internal Combustion Engine
ID.....Emissions unit Identification Number
kW .....kilowatts
lb/hr .....pounds per hour
lb/gal .....pounds per gallon
lb/MMBtu .....pounds per million British thermal unit
lb/MWh.....pounds per megawatt-hour
MMBtu/hr.....Million British thermal units per hour
MR&R.....Monitoring, Recordkeeping, and Reporting
NAICS.....North American Industrial Classification System
N/A.....Not applicable
NESHAPs.....Federal National Emission Standards for Hazardous Air Pollutants [as contained in 40 C.F.R. 61 and 63]
ng/J .....nanograms per joule
NO_x.....Nitrogen Oxides
NSPS .....Federal New Source Performance Standards [NSPS as contained in 40 C.F.R. 60]
O_2 .....Oxygen
ORL.....Owner Requested Limit
PM.....Particulate Matter
Pb .....lead
PM_{10} .....particulate matter less than or equal to a nominal ten microns in diameter
$PM_{2.5}$.....particulate matter less than or equal to a nominal 2.5 microns in diameter
ppm .....parts per million
ppmv, ppmvd .....parts per million by volume on a dry basis
ppmw .....parts per million by weight
PSD .....Prevention of Significant Deterioration
PTE .....Potential to Emit
RICE .....Reciprocating Internal Combustion Engine
SIC. .....Standard Industrial Classification
SIP.....State Implementation Plan
SO_2 .....Sulfur dioxide
SPC .....Standard Permit Condition or Standard Operating Permit Condition
TPY .....Tons per year
VOC .....volatile organic compound [as defined in 40 C.F.R. 51.100(s)]
vol% .....volume percent
wt% .....weight percent
wt%S_{fuel} .....weight percent of sulfur in fuel

Section 1. Stationary Source Information

Identification

Permittee:	**Kodiak Electric Association, Inc.** P.O. Box 787 Kodiak, AK 99615-0787
Stationary Source Name:	**Kodiak Generating Station**
Location:	57° 6' 7.5" N Latitude, 135° 18' 23.5" W Longitude
Physical Address:	615 Sargent Drive Kodiak, Alaska 99615
Owner:	Kodiak Electric Association, Inc. P.O. Box 787 Kodiak, AK 99615-0787
Operator:	Kodiak Electric Association, Inc. P.O. Box 787 Kodiak, AK 99615-0787
Permittee's Responsible Official:	Darron Scott, President/CEO P.O. Box 787 Kodiak, AK 99615-0787
Stationary Source and Building Contact:	Jennifer King, Regulatory Specialist P.O. Box 787 Kodiak, AK 99615-0787 (907) 654-7667 jking@kodiak.coop
Fee Contact:	Jennifer King, Regulatory Specialist P.O. Box 787 Kodiak, AK 99615-0787 (907) 654-7667 jking@kodiak.coop
Permit Contact:	Jennifer King, Regulatory Specialist P.O. Box 787 Kodiak, AK 99615-0787 (907) 654-7667 jking@kodiak.coop
Process Description SIC Code: NAICS Code:	4911 - Electrical Services 221112 - Fossil Fuel Electric Power Generation

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

Section 2. Emissions Unit Inventory and Description

Emissions units listed in Table A have specific monitoring, recordkeeping, or reporting conditions in this permit. Unless noted elsewhere in the permit, emissions unit descriptions and ratings are given for identification purposes only.

Table A - Emissions unit Inventory

EU ID	Description	Model No.	EU Description	Fuel	Rating (kW)	Manufacture / Install Date
1	DeLaval	DSRS 12-3	Diesel Electric Generator	Diesel	2,500	Prior to 1976
2C	Caterpillar	3616	Diesel Electric Generator	Diesel	4,400	May 24, 2005
3C	Caterpillar	3616	Diesel Electric Generator	Diesel	4,400	May 25, 2005
4	DeLaval	DSRS 16-4	Diesel Electric Generator	Diesel	7,070	1981

[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, 2c, 3c, and 4 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)(4), 50.055(a)(1), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(1)]

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

[18 AAC 50.040(j)(4), 50.326(j)(3) & (4), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)]

Visible Emissions Monitoring, Recordkeeping and Reporting

Liquid Fuel-Fired Emissions units (EU IDs 1, 2c, 3c, and 4)

2. Visible Emissions Monitoring. The Permittee shall observe the exhaust of EU IDs 1, 2c, 3c, and 4 for visible emissions using the Method 9 Plan under Condition 2.3.

2.1. In the event of replacement[1] of any of EU IDs 1, 2c, 3c, and 4, the Permittee shall observe the exhaust of the newly installed emissions unit(s) using either the Method 9 Plan under Condition 2.3.

2.2. The Permittee may for each unit elect to continue the visible emissions monitoring schedule specified in Conditions 2.3.b through 2.3.d that remain in effect from a previous permit, if applicable.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(i)]

2.3. **Method 9 Plan.** For all observations in this plan, observe emissions unit 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.[2]

a. First Method 9 Observation. Except as provided in Condition 2.2 or Condition **Error! Reference source not found.**, observe the exhausts of EU IDs 1, 2c, 3c, and 4 for 18 minutes within six months after the issue date of this permit.

(i) For any of EU IDs 1, 2c, 3c, and 4 replaced, observe exhaust for 18 minutes within 30 days of startup.

[1] *"Replacement,"* as defined in 40 C.F.R. 51.166(b)(32).

[2] Emergency operations are exempt from the visible emissions observations deadlines associated with emissions unit "operation" under this condition.

b. Monthly Method 9 Observations. After the first Method 9 observation conducted under Condition 2.3.a, perform 18-minute observations at least once in each calendar month that the emissions unit operates.

c. Semiannual Method 9 Observations. After observing emissions for three consecutive operating months under Condition 2.3.b, 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 six months after the preceding observation, or

(ii) for an emissions 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 under Condition 2.3.c, unless a six-minute average opacity is greater than 15 percent and one or more individual observations are greater than 20 percent, perform 18-minute observations

(i) within twelve months after the preceding observation; or

(ii) for an emissions unit with intermittent operations, during the next scheduled operation immediately following twelve 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 observation frequency for that emissions unit to at least monthly intervals as described in Condition 2.3.b, and continue monitoring in accordance with the Method 9 Plan until the criteria in Condition 2.3.c for semiannual monitoring are met.

3. Visible Emissions Recordkeeping. 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. When using the Method 9 Plan of Condition 2.3,

a. the observer shall record the following:

(i) the name of the stationary source, emissions unit and location, emissions unit type, observer's name and affiliation, and the date on the Visible Emissions Observation Form in Section 10;

(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 Form in Section 10, 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 six-minute and 18-consecutive-minute average opacities observed.

3.2. The records may be kept in electronic format.

4. Visible Emissions Reporting. When required by Condition 1.1, or in the event of replacement of any of EU IDs 1, 2c, 3c, and 4 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 operating report under Condition 53 for the period covered by the report:

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

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

(i) copies of the observation results (i.e. opacity observations) for each emissions 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- and 18-consecutive minute average opacities observed; and

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

c. a summary of any monitoring or recordkeeping required under Conditions 2 and 3 that was not done.

4.2. Report under Condition 52:

a. the results of Method 9 observations that exceed 20 percent average 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 (PM) Emissions Standard

5. Industrial Process and Fuel-Burning Equipment PM. The Permittee shall not cause or allow particulate matter emitted from EU IDs 1, 2c, 3c, and 4 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), 50.055(b)(1) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

5.1. For EU IDs 1, 2c, 3c, and 4, monitor, record and report in accordance with Conditions 6 through 8.

[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, 2c, 3c, and 4)

6. PM Monitoring. The Permittee shall conduct source tests on EU IDs 1, 2c, 3c, and 4, to determine the concentration of particulate matter (PM) in the exhaust of an emissions unit as follows:

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

6.1. If any of EU IDs 1, 2c, 3c, and 4 exceeds the criteria of Condition 6.2.a or 6.2.b, the Permittee shall, within six months of the exceedance, either

a. except as exempted under Condition 6.4, conduct a PM source test according to requirements set out in Section 6; or

b. make repairs and observe visible emissions as described in Condition 2.3 to show that emissions no longer exceed the criteria of Condition 6.2 under load conditions comparable to those when the criteria were exceeded.

6.2. Conduct the PM source test or make repairs in accordance with 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 emissions 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 highest 18-minute 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. PM Recordkeeping. Keep records of the results of any source test and visible emissions observations conducted under Condition 6.

[18 AAC 50.040(j)(4) and 50.326(j)(4)]
[40 C.F.R. 71.6(a)(3)(ii) and 71.6(c)(6)]

8. PM Reporting. 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)]

8.1. Report in accordance with Condition 52

a. if the results of any source test exceed the PM emissions limit in Condition 5; or

b. if one of the criteria of Condition 6.2 was exceeded and the Permittee did not comply on time with either Condition 6.1.a or 6.1.b. Report the deviation within 24 hours of the date compliance with Condition 6.1 was required.

8.2. Notify the Department of any Method 9 observation results that are greater than the threshold of either Condition 6.2.a or Condition 6.2.b within 30 days of the end of the month in which the observations occur. Include the dates, EU ID(s), and results when an observed 18-minute average opacity was greater than an applicable threshold in Condition 6.2.

8.3. In each operating report under Condition 53, include for the period covered by the report

a. a summary of the results of any PM source test and visible emissions observation conducted under Condition 6; and

b. copies of any visible emissions observation results greater than the thresholds of Condition 6.2, if they were not already submitted.

Sulfur Compound Emissions Standard

9. Sulfur Compound Emissions. The Permittee shall not cause or allow sulfur compound emissions, expressed as sulfur dioxide (SO_2), from EU IDs 1, 2c, 3c, and 4 listed in Table A to exceed 500 ppm averaged over three hours.

[18 AAC 50.040(j)(4), 50.055(c), &50.326(j)(3)]
[40 C.F.R. 71.6(a)(1)]

Sulfur Compound MR&R

9.1. For EU IDs 1, 2c, 3c, and 4, the Permittee shall:

a. Limit the sulfur content of the fuel as set out by Condition 12.1.

b. Monitor, record, and report according to Conditions 12 and 13.

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

Preconstruction Permit [3] Requirements

Owner Requested Limits to Avoid PSD Modification

10. The Permittee shall limit EU IDs 1, 2c, 3c, and 4 to a total of 549.26 tons NOx and 36.55 tons SO_2 for each twelve consecutive calendar month period.

[Condition 9, Minor Permit No. AQ0211MSS01, 5/9/12]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

11. Monitoring NOx Emissions. The Permittee shall monitor compliance with the NOx limit in Condition 10 as set out below:

11.1. Equip each of EU IDs 1, 2c, 3c, and 4 with instrumentation that records hours of operation and power production with an accuracy of 1 percent;

11.2. Monitor and record the engine hours of operation and power production (load) in 15-minute intervals for each of EU IDs 1, 2c, 3c, and 4 using the instrument as set out by Condition 11.1;

11.3. Calculate and record the monthly NOx emission rates (tons/month) for each of EU IDs 1, 2c, 3c, and 4, as follows:

a. Based on the hours of operation recorded in Condition 11.2 and the emission rate as set out in Table B, expressed as lb/hr; or

b. Based on the hours of operation and power production (kW) recorded in Condition 11.2, a load-factor (L) derived by dividing the power production by the maximum nominal rating of the emission unit as set out in Table XX, and the emission rate equation as set out in Table B expressed as lb/kW-hr.

[3] *Preconstruction Permit* refers to federal PSD permits, state-issued permits-to-operate issued on or before January 17, 1997 (these permits cover both construction and operations), construction permits issued on or after January 18, 1997, and minor permits issued on or after October 1, 2004.

[Condition 10, Minor Permit No. AQ0211MSS01, 5/9/12]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

11.4. Within two years of the effective date of this permit, the Permittee shall conduct NOx emission source tests on EU IDs 1, 2c, 3c, and 4 in accordance with Section 6 in order to verify the lb/hr emission factors in Table B.

a. Unless otherwise specified in this permit, each performance test required in Condition 11.4 shall consist of three separate one hour runs using the applicable test method. For the purpose of determining the lb/hr emission factors, the arithmetic means of results of the three runs shall be used.

b. In the source test report required by Condition 46, the Permittee shall compare the NOx lb/hr emission factors from the test results to the NOx lb/hr emission factors in Table B.

c. If a NOx lb/hr emission factor from a source test required by Condition 11.4 exceeds the corresponding NOx lb/hr emission factor in Table B, the Permittee shall propose for Department approval under Condition 11.5, a revised NOx lb/hr emission factor.

d. If a NOx lb/hr emission factor from a source test required by Condition 11.4 is less than the corresponding NOx lb/hr emission factor in Table B, the Permittee may use the lb/hr value in Table B or propose for Department approval under Condition 11.5, a revised NOx lb/hr emission factor.

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

11.5. Procedure for Revised Emission Factors. The Permittee must submit all requests for revised NOx lb/hr emission factors established in a title I permit to the Department in writing, and each revised emission factor will be considered a Title I permit modification under AS 46.14.285(a)(3).

a. The Department will treat all requests to increase emission factors as a Title I permit amendment. If approved, the Department will issue a written amendment, but will not reopen the permit for public comment.

b. The Department will treat all requests to decrease emission factors as an application to revise or rescind the terms and condition of a Title I permit under 18 AAC 50.508(6).

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

Table B – Emission Factors for Diesel Electric Generators, EU IDs 1 through 4

EU ID	Description	Maximum Nominal Rating/Size	NOx Emission Factors	
			lb/hr	lb/kW-hr (L = % Load)

1[1]	DeLaval DSRS-12-3	2,500 kW	79	$0.0452 – 0.0135*L^{1.966}$
2c[2]	Caterpillar 3616	4,400 kW	140.5	1.3674*L – 3.624
3c[2]	Caterpillar 3616	4,400 kW	140.5	1.3674*L – 3.624
4[1]	DeLaval DSRS 16-4	7,070 kW	238	$-0.0768 + 0.11*L^{0.029}$

Table Notes:
1. For EU IDs 1 and 4, NOx emissions are based on source test results and AP-42 factors
2. For EU IDs 2c and 3c, NOx emissions are based on June 2005 internal testing.

11.6. Calculate and record the monthly total emissions (tons/month) and total emissions for twelve consecutive calendar month periods using data derived from Condition 11.3.

a. For EU IDs 1 and 4, the monthly NOx emission rate may be calculated by Condition 11.3.a using the NOx emission factor expressed as lb/hr or calculated by Condition 11.3.b using the NOx emission factor versus load (L) expressed as lb/kW-hr. In the NOx emission factor versus load, L is input as a decimal fraction of percent load (i.e. 100% = 1)

b. For EU IDs 2c and 3c, the monthly NOx emission rate may be calculated by Condition 11.3.a using the NOx emission factor expressed as lb/hr or calculated by Condition 11.3.b using the NOx emission factor versus load (L) expressed as lb/kW-hr. In the NOx emission factor versus load, L is the percent of full load (i.e. 100% = 100).

[Condition 10, Minor Permit No. AQ0211MSS01, 5/9/12]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

12. Monitoring SO_2 Emissions. The Permittee shall monitor compliance with the SO_2 limit in Condition 10 as set out below:

12.1. For EU IDs 1, 2c, 3c, and 4, the Permittee shall not allow the sulfur content of the burned fuel to exceed 0.5 percent by weight at any time;

12.2. Obtain a certificate or receipt from the fuel supplier certifying the sulfur content and density of the fuel for each shipment of fuel delivered to the facility. If a receipt is not available from the supplier, analyze a representative sample of the fuel to determine the sulfur content using ASTM method D 129-00, D 1266-98, D 1552-95, D 2622-98, D 4294-98, D 4045-99, or an alternative method approved by the Department.

12.3. Monitor and record the total monthly diesel fuel consumption (gallons/month) at a consistent time each month for EU IDs 1, 2c, 3c, and 4. Calculate and record the total diesel fuel consumption for each consecutive 12-month period (gallons/12 months) for EU IDs 1, 2c, 3c, and 4.

12.4. Calculate and record the total SO_2 emissions (tons/12 months) for EU IDs 1, 2c, 3c, and 4 using the formula below.

SO_2 Emissions (tons/12-month period) = ((TCF*DFD)/2000)/(100))*S*2

Where:

TFC = total fuel consumption per Condition 12.3 (gallons/12-month)

DFD = diesel fuel density per Condition 12.2 (lb/gallon fuel)

S = percent sulfur content of diesel fuel by weight per Condition 12.2 (%)

[Condition 11, Minor Permit No. AQ0211MSS01, 5/9/12]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

13. NOx and SO_2 Emissions Reporting. The Permittee shall report compliance with Condition 10 as set out below:

13.1. Report the total SO_2 and NOx emissions for each twelve consecutive calendar months calculated from Condition 11.6 and Condition 12.4 in the operating report required by Condition 53.

13.2. Report as an excess emission and permit deviation under Condition 52, if the total emissions exceed the limits in Condition 10.

[Conditions 10.5, 11.5, & 12, Minor Permit No. AQ0211MSS01, 5/9/12]
[18 AAC 50.040(jP & 50.326(j)]
[40 C.F.R. 71.6(a)]

Insignificant Emissions units

14. For emissions 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:

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

[18 AAC 50.055(a)(1)]

14.2. **Particulate Matter 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)]

14.3. **Sulfur Compound 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)]

14.4. **General MR&R for Insignificant Emissions Units.** The Permittee shall comply with the following:

a. Submit the compliance certification of Condition 54 based on reasonable inquiry;

b. Comply with the requirements of Condition 35;

c. Report in the operating report required by Condition 53 if current actual emissions of an emissions unit that has historically been classified as insignificant have become greater than any of the significant emissions thresholds of 18 AAC 50.326(e).

d. No other monitoring, recordkeeping or reporting is required for insignificant emissions units to demonstrate compliance with the emissions standards under Conditions 14.1, 14.2, and 14.3.

[18 AAC 50.346(b)(4)]

Section 4. Federal Requirements

National Emission Standards for Hazardous Air Pollutants (NESHAP)

Subpart A – General Provisions

15. NESHAP Subpart A Requirements. 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 in Table 8 to Subpart ZZZZ for EU IDs 1 – 4.

[18 AAC 50.040(c)(1) & (23), 50.040((j)(4) and 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.1-63.15, Subpart A]
[40 C.F.R. 63.6665 & Table 8, Subpart ZZZZ]

NESHAP Subpart ZZZZ[4] – Reciprocating Internal Combustion Engines, EU IDs 1 - 4

16. NESHAPs Subpart ZZZZ Applicability. For EU IDs 1 – 4 listed in Table A, the Permittee shall, at all times, be in compliance with all Subpart ZZZZ requirements that apply to existing stationary non-emergency CI RICE with a site rating of more than 300 hp located at an area source of HAP that are located in remote area sources in Alaska,[5] as set out in Conditions 17 through 20.

[18 AAC 50.040(c)(23) & (j)(4) and 50.326(j)]
[40 C.F.R. 71.6(a)(1) & (3)]
[40 C.F.R. 63.6590(a)(1)(iii) and 63.6605(a), Subpart ZZZZ]

17. NESHAPs Subpart ZZZZ Good Air Pollution Control Practices, Operation and Maintenance Requirements. The Permittee shall comply with the following:

[18 AAC 50.040(c)(23) & (j)(4) and 50.326(j)]
[40 C.F.R. 71.6(a)(1) & (3)(i)]

17.1. At all times operate and maintain EU IDs 1 – 4, 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 EU IDs 1 – 4.

[40 C.F.R. 63.6605(b), Subpart ZZZZ]

[4] The provisions of NESHAP Subpart ZZZZ listed in Conditions 16 through 20 are current as amended through February 27, 2014. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

[5] Per 40 C.F.R. 63.6603(b), existing stationary non-emergency CI RICE with a site rating of more than 300 hp located at an area source of HAP that meets either 40 C.F.R. 63.6603(b)(1) or (2) do not have to meet the numerical CO emission limitations specified in Subpart ZZZZ Table 2d but must meet the management practices for stationary non-emergency CI RICE with a site rating of less than or equal to 300 hp in Table 2d. Jarvis Street Diesel Plant meets the criteria in 40 C.F.R. 63.6603(b)(2), as follows: (i) the only connection to the FAHS is through the Alaska Marine Highway System (AMHS); (ii) at least 10 percent of the power generated by the stationary RICE, EU IDs 1 – 4, on an annual basis is used for residential purposes; and (iii) the stationary RICE are used exclusively for backup power for renewable energy.

17.2. The Permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to either:

a. the manufacturer's emission-related written instructions for operation and maintenance of the stationary RICE and after-treatment control device (if any); or

b. a maintenance plan developed by the Permittee which must provide, to the extent practicable, for the maintenance and operation of the engine(s) in a manner consistent with good air pollution control practice for minimizing emissions.

[40 C.F.R. 63.6625(e)(4), 63.6640(a) and Table 6 (item 9), Subpart ZZZZ]

17.3. 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.

[40 C.F.R. 63.6625(h) and Table 2d (item 1), Subpart ZZZZ]

18. NESHAP Subpart ZZZZ Management Practices Standards. For EU IDs 1 – 4, the Permittee shall comply with the following management practices:

[18 AAC 50.040(c)(23) & (j)(4) and 50.326(j)]
[40 C.F.R. 71.6(a)(1) & (3)(i)]

18.1. Except during periods of startup, the Permittee shall meet the following requirements:

a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first, except as allowed by Condition 18.4;

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

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

[40 C.F.R. 63.6603(b) and Table 2d (item 1 & Footnote 1), Subpart ZZZZ]

18.2. During periods of startup, the Permittee shall comply with Condition 17.3.

[40 C.F.R. 63.6603(b) and Table 2d (item 1 & Footnote 1), Subpart ZZZZ]

18.3. Demonstrate continuous compliance with the requirements in Condition 18.1 by complying with Condition 17.2.

[40 C.F.R. 63.6640(a) and Table 6 (item 9), Subpart ZZZZ]

18.4. The Permittee has the option to utilize an oil analysis program in order to extend the specified oil change requirement in Condition 18.1.a, as described below:

a. The oil analysis must be performed at the same frequency specified for changing the oil in 18.1.a.

b. The analysis program must, at a minimum, analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows:

(i) Total Base Number is less than 30 percent of the Total Base Number of the oil when new;

(ii) viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or

(iii) percent water content (by volume) is greater than 0.5.

c. If all of the condemning limits in Conditions 18.4.b(i) through 18.4.b(iii) are not exceeded, the Permittee is not required to change the oil.

d. If any of the limits in Conditions 18.4.b(i) through 18.4.b(iii) is exceeded, the Permittee must change the oil within 2 business days of receiving the results of the analysis:

(i) If the engine is not in operation when the results of the analysis are received, the Permittee must change the oil within 2 business days or before commencing operation, whichever is later.

e. The analysis program must be part of the maintenance plan for the engine.

[40 C.F.R. 63.6625(i) and Table 2d (Footnote 1), Subpart ZZZZ]

19. NESHAP Subpart ZZZZ Recordkeeping Requirements. The Permittee shall keep records, as follows:

[18 AAC 50.040(c)(23) & (j)(4 and 50.326(j)]
[40 C.F.R. 71.6(a) (3)(ii)]

19.1. If electing to operate and maintain EU IDs 1 – 4 according to a maintenance plan developed by the Permittee as allowed under Condition 17.2.b, keep records of the maintenance conducted on EU IDs 1 – 4 in order to demonstrate that the stationary RICE and after-treatment control device (if any) are operated and maintained according to the maintenance plan.

[40 C.F.R. 63.6655(e)(3), Subpart ZZZZ]

19.2. If electing to utilize the oil analysis program described in Condition 18.3, keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine.

[40 C.F.R. 63.6625(i), Subpart ZZZZ]

19.3. Keep records in a form suitable and readily available for expeditious review. Keep each record 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 40 C.F.R. 63.10(b)(1), except that all records may be retained off site.

[40 C.F.R. 63.6660 and Table 8, Subpart ZZZZ]
[40 C.F.R. 63.10(b)(1), Subpart A]

20. NESHAP Subpart ZZZZ Reporting Requirements. The Permittee shall report, as follows:

[18 AAC 50.040(c)(23) & (j)(4) and 50.326(j)]
[40 C.F.R. 71.6(c)(3)(iii) & (c)(6)]

20.1. Include in the operating report required by Condition 53 a report of all deviations as defined in 40 C.F.R. 63.6675 and of each instance in which an applicable requirement in 40 C.F.R. 63, Subpart A (Table 8 to Subpart ZZZZ) was not met.

[40 C.F.R. 63.6640(e) & 63.6650(f), Subpart ZZZZ]

20.2. Notify the Department in accordance with Condition 52 if any of the requirements in Conditions 16 through 20 were not met.

[18 AAC 50.040(j)(4) and 18 AAC 50.326(j)(4)]
[40 C.F.R. 71.6(a)(3)(iii) & (c)(6)]

40 C.F.R. Part 61 National Emission Standards for Hazardous Air Pollutants (NESHAP)

Subpart A – General Provisions & Subpart M – Asbestos

21. The Permittee shall comply with the applicable 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]

40 C.F.R. Part 82 Protection of Stratospheric Ozone

22. Subpart F – Recycling and Emissions Reduction. The Permittee shall comply with the applicable 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]

23. Subpart G – Significant New Alternatives. The Permittee shall comply with the applicable prohibitions set out in 40 C.F.R. 82.174 (Protection of Stratospheric Ozone Subpart G – Significant New Alternatives Policy Program).

[18 AAC 50.040(d) & 50.326(j)]
[40 C.F.R. 82.174(b) through (d), Subpart G]

General NSPS and NESHAP Requirements

24. NESHAP Applicability Determinations. 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).

24.1. If an owner or operator of a stationary source who is in the relevant source category determines that the source is not subject to a relevant standard or other requirement established under 40 C.F.R. 63, the owner or operator must keep a record as specified in 40 C.F.R. 63.10(b)(3).

24.2. If a source becomes affected by an applicable subpart of 40 C.F.R. 63, the owner or operator 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).

24.3. 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 40 C.F.R. 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), 63.9(b), & 63.10(b)(3), Subpart A]

25. NSPS and NESHAP Reports. The Permittee shall comply with the following:

25.1. **Reports:** Except for previously submitted reports and federal reports and notices submitted through EPA's Central Data Exchange (CDX) and Compliance and Emissions Data Reporting Interface (CEDRI) online reporting system, attach to the operating report required by Condition 53 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. For reports previously submitted to ADEC or submitted through CDX/CEDRI, state in the operating report the date and a brief description of each of the reports submitted during the reporting period; and

25.2. **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) & (f) & 40 C.F.R. 71.6(c)(6)]

Section 5. General Conditions

Standard Terms and Conditions

26. 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)]

27. 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)]

28. 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)]

29. Administration Fees. The Permittee shall pay to the Department all assessed permit administration fees. Administration fee rates are set out in 18 AAC 50.400-403.

[18 AAC 50.326(j)(1), 50.400, & 50.403]
[AS 37.10.052(b) & AS 46.14.240]

30. Assessable Emissions. The Permittee shall pay to the Department annual emission fees 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

30.1. the stationary source's assessable potential to emit of 790 TPY; or

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

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, including appropriate vendor-provided emissions factors when sufficient documentation is provided.

[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)]

31. Assessable Emission Estimates. Emission fees will be assessed as follows:

31.1. no later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions via the Department's Air Online Services (AOS) System at http://dec.alaska.gov/applications/air/airtoolsweb using the Permittee Portal option and filling out the Emission Fee Estimate form. Alternatively, the report may be submitted by:

a. E-mail under a cover letter using dec.aq.airreports@alaska.gov; or

b. hard copy to the following address: ADEC Air Permits Program, ATTN: Assessable Emissions Estimate, 555 Cordova Street, Anchorage, Alaska 99501.

31.2. The Permittee shall include with the assessable emissions report all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates.

31.3. 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 30.1.

[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)]

32. 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)]

33. 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)]

34. 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)]

35. 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), & 50.346(a)]
[40 C.F.R. 71.6(a)(3)]

35.1. Monitoring, Recordkeeping, and Reporting:

a. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 52.

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 35.

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

(i) 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 35; or

(ii) the Department notifies the Permittee that it has found a violation of Condition 35.

d. The Permittee shall keep records of

(i) the date, time, and nature of all emissions complaints received;

(ii) the name of the person or persons that complained, if known;

(iii) a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 35; and

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

e. With each stationary source operating report under Condition 53, the Permittee shall include a brief summary report which must include

(i) the number of complaints received;

(ii) the number of times the Permittee or the Department found corrective action necessary;

(iii) the number of times action was taken on a complaint within 24 hours; and

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

f. 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.

36. Technology-Based Emission Standard. If an unavoidable emergency, malfunction(as defined in 18 AAC 50.235(d)), or nonroutine repair (as defined in 18 AAC 50.990(64), causes emissions in excess of a technology-based emission standard[6] listed in Condition 22 (refrigerants), the Permittee shall

36.1. take all reasonable steps to minimize levels of emissions that exceed the standard; and

36.2. report in accordance with Condition 52.1.b; the report must include information on the steps taken to mitigate emissions and corrective measures taken or to be taken.

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

Open Burning Requirements

37. Open Burning. If the Permittee conducts open burning at this stationary source, the Permittee shall comply with the requirements of 18 AAC 50.065. The Permittee shall comply as follows:

37.1. 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; and

37.2. Include this condition in the annual certification required under Condition 54.

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

[6] As defined in 18 AAC 50.990(106), the term "*technology-based emission standard*" means a best available control technology (BACT) standard; a lowest achievable emission rate (LAER) standard; a maximum achievable control technology (MACT) 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.

Section 6. General Source Testing and Monitoring Requirements

38. 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)]

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

[18 AAC 50.220(b)]

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

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

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

40.1. 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]

40.2. 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. The Permittee may use the form in Section 10 to record data.

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

40.3. Source testing for emissions of $PM_{2.5}$ and PM_{10}, 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]

40.4. 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]

40.5. 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)(32) & 50.220(c)(2)]
[40 C.F.R. 63, Appendix A, Method 301]

41. 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 emissions 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)]

42. Test Exemption. The Permittee is not required to comply with Conditions 44, 45 and 46 when the exhaust is observed for visible emissions by Method 9 Plan (Condition 2.3) or the Smoke/No Smoke Plan (Condition **Error! Reference source not found.**).

[18 AAC 50.345(a)]

43. 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)]

44. Test Plans. Except as provided in Condition 42, 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 emissions 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 38 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)]

45. Test Notification. Except as provided in Condition 42, 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)]

46. Test Reports. Except as provided in Condition 42, within 60 days after completing a source test, the Permittee shall submit one certified copy 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 certify the results in the manner set out in Condition 49. 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)]

47. Particulate Matter Calculations. In source testing for compliance with the particulate matter standards in Conditions 5 and 14.2, 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

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

[18 AAC 50.040(a)(1) & 50.326(j)]
[40 C.F.R 60.7(f), Subpart A, 40 C.F.R 71.6(a)(3)(ii)(B)]

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

48.2. 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

49. 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.

49.1. 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 09.80.020 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 49.1.a, 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)]

50. Submittals. Unless otherwise directed by the Department or this permit, the Permittee shall submit reports, compliance certifications, and/or other submittals required by this permit, via the Department's Air Online Services (AOS) System at http://dec.alaska.gov/applications/air/airtoolsweb using the Permittee Portal option.

50.1. Alternatively, the documents may be certified in accordance with Condition 49, and submitted either by:

a. E-mail under a cover letter using dec.aq.airreports@alaska.gov; or

b. Certified mail to the following address: ADEC Air Permits Program, ATTN: Compliance Technician, 610 University Ave., Fairbanks, AK 99709-3643.

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

51. 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)]

52. Excess Emissions and Permit Deviation Reports.

52.1. Except as provided in Condition 35, 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 commences 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 during which the excess emissions or deviation occurred, except as provided in Conditions 52.1.c(ii) and 52.1.c(iii);

(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 52.1.c(i); and

(iii) according to the required deadline for failure to monitor, as specified in Conditions 4.2.b and 8.1.b.

52.2. 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://dec.alaska.gov/applications/air/airtoolsweb using the Permittee Portal option, or if the Permittee prefers, the form contained in Section 11 of this permit. The Permittee must provide all information called for by the form that is used.

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

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

53. Operating Reports. During the life of this permit[7], the Permittee shall submit to the Department 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.

53.1. The operating report must include all information required to be in operating reports by other conditions of this permit.

53.2. If excess emissions or permit deviations that occurred during the reporting period are not reported under Condition 53.1, the Permittee shall identify:

a. the date of the deviation;

b. the equipment involved;

c. the permit condition affected;

d. a description of the excess emissions or permit deviation; and

e. any corrective action or preventive measures taken and the date of such actions.

53.3. When excess emissions or permit deviations have already been reported under Condition 52 the Permittee shall cite the date or dates of those reports.

53.4. The operating report shall include, for the period covered by the report, a listing of emissions monitored under Condition 2.3.e 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;

c. the permit condition affected; and

[7] *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.

d. the monitoring result which triggered the additional monitoring.

53.5. **Transition from expired to renewed permit**. For the first period of this renewed operating permit, also provide the previous permit's 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)]

54. Annual Compliance Certification. Each year by March 31, the Permittee shall compile and submit to the Department an annual compliance certification report according to Condition 50.

54.1. 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.

54.2. **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.

54.3. In addition, submit a copy of the report directly to the Clean Air Act Compliance Manager, US EPA Region 10, Mail Stop: OCE-101, 1200 Sixth Avenue, Suite 155, Seattle, WA 98101.

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

55. Emission Inventory Reporting. The Permittee shall submit to the Department reports of actual emissions, by emissions unit, of CO, NH_3, NOx, PM-10, PM-2.5, SO_2, VOCs and Lead (Pb) (and lead compounds) for the previous calendar year using the form in Section 12 of this permit, as follows:

55.1. Each year by April 30, if the stationary source's potential to emit for the previous calendar year equals or exceeds:

a. 250 TPY of NH_3, PM_{10}, $PM_{2.5}$ or VOCs; or

b. 2,500 TPY of CO, NO_X or SO_2.

55.2. Every third year by April 30, if the stationary source's potential to emit for the previous calendar year (except actual emissions for Pb) equals or exceeds:

a. 0.5 TPY of actual Pb, or

b. 1,000 TPY of CO; or

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

55.3. For reporting under Condition 55.2, the Permittee shall report in 2018 for calendar year 2017, 2021 for calendar year 2020, etc., in accordance with the Environmental Protection Agency schedule.

55.4. Include in the report required by this condition, the required data elements contained within the form in Section 12 or those contained in Tables 2a and 2b of Appendix A to Subpart A of 40 C.F.R. 51 and Emission Inventory Instructions available in Air Online Services (AOS) system for each emissions unit.

a. Submit the report through electronic online submission via the Department's AOS system at http://dec.alaska.gov/applications/air/airtoolsweb using the Permittee Portal option.

b. If the AOS system is not available, the report may be submitted by

(i) email using dec.aq.airreports@alaska.gov; or

(ii) hard copy to the following address: ADEC Air Permits Program, ATTN: Emissions Inventory, 555 Cordova Street, Anchorage, Alaska 99501.

[18 AAC 50.040(j)(4), 50.200, & 50.346(b)(8) & (9)]
[40 C.F.R. 51.15, 51.30(a)(1) & (b)(1), & 40 C.F.R. 51, Appendix A to Subpart A]

Section 8. Permit Changes and Renewal

56. Permit Applications and Submittals. The Permittee shall comply with the following requirements for submitting application information to the US Environmental Protection Agency (EPA):

56.1. 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;

56.2. The information shall be submitted to: Part 70 Operating Permit Program, US EPA Region 10, Mail Stop: OAW-150, 1200 Sixth Avenue, Suite 155, Seattle, WA 98101.

56.3. 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

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

[18 AAC 50.040(j)(7), 50.326(a) & (j)(3), and 50.346(b)(7)]
[40 C.F.R. 71.10(d)(1)]

57. 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)]

58. 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:

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

58.2. 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;

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

58.4. The Permittee shall keep a record describing changes made at the stationary 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)]

59. Operational Flexibility. The Permittee may make CAA Section 502(b)(10)[8] 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):

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

59.2. For each such change, the written notification required by Condition 59.1 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.

59.3. The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made pursuant to Condition 59.

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

60. Permit Renewal. To renew this permit, the Permittee shall submit to the Department[9] an application under 18 AAC 50.326 no sooner than **[18 months before the expiration date of this permit]** 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) & (j)(2)]
[40 C.F.R. 71.5(a)(1)(iii) & 71.7(b) & (c)(1)(ii)]

[8] As defined in 40 C.F.R. 71.2, CAA Section 502(b)(10) changes are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[9] Submit permit applications to the Department's Anchorage office. The current address is: Air Permit Intake Clerk, ADEC, 555 Cordova Street, Anchorage, AK 99501.

Section 9. Compliance Requirements

General Compliance Requirements

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

61.1. included and specifically identified in the permit; or

61.2. determined in writing in the permit to be inapplicable.

[18 AAC 50.326(j)(3) & 50.345(a) & (b)

62. The Permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 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

62.1. an enforcement action;

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

62.3. denial of an operating permit renewal application.

[18 AAC 50.040(j), 50.326(j) & 50.345(a) & (c)]

63. For applicable requirements with which the stationary source is in compliance, the Permittee shall continue to comply with such requirements.

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

64. For applicable requirements that will become effective during the permit term, the Permittee shall meet such requirements on a timely basis.

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

65. 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)]

66. 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

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

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

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

66.4. 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)]

Section 10. Visible Emissions Forms

VISIBLE EMISSIONS OBSERVATION FORM

This form is designed to be used in conjunction with EPA Method 9, "Visual Determination of the Opacity of Emissions from 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" (a copy is available in https://www3.epa.gov/ttnemc01/methods/webinar8.pdf).

- 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 visible emissions observation is being made.
- Phone (Key Contact): number for appropriate contact.
- Stationary 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 clinometer.
- 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, note in the Comments column whether the Plume is "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 color of clouds and 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.
- Observer's Affiliation: observer's employer.
- Certifying Organization, Certified By, Date: name of "smoke school," certifying observer, and date of most recent certification.

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR PERMITS PROGRAM - VISIBLE EMISSIONS OBSERVATION FORM

Page No.

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

Data Reduction:

Duration of Observation Period (minutes):	Duration Required by Permit (minutes):
Number of Observations:	Highest Six–Minute Average Opacity (%):
Number of Observations exceeding 20%:	
In compliance with six-minute opacity limit? (Yes or No)	Highest 18-Consecutive –Minute Average Opacity (%)(engines and turbines only)

Average Opacity Summary:

Set Number	Time			Opacity		
	Start	End		Sum	Average	Comments

Section 11. ADEC Notification Form[10]

Kodiak Generating Station — **Stationary Source Name**

AQ0211TVP04 — **Air Quality Permit Number.**

Kodiak Electric Association, Inc. — **Company Name**

When did you discover the Excess Emissions/Permit Deviation?

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

When did the event/deviation occur?

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

End: Date: _____ / _____ / _____ Time: _____ : _____ (please 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.

[10] Revised as of September 27, 2010.

(d) **Emissions Units Involved:**
Identify the emissions 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

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

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

☐ Fugitive Emissions ☐ Emission Limit Exceeded ☐ Recordkeeping Failure

☐ Marine Vessel Opacity ☐ Flaring ☐ Other _____

(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):

☐ Emissions Unit-Specific

☐ Failure to Monitor/Report

☐ General Source Test/Monitoring Requirements

☐ Recordkeeping/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

☐ Insignificant Emissions Unit

☐ Stationary Source Wide

(b) **Emissions Units (EU) Involved:**

Identify the emissions units 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:

1. Department's Air Online Services using the Permittee Portal option:
   http://dec.alaska.gov/applications/air/airtoolsweb
   Or
2. Fax to: 907-451-2187
   Or
3. Email to: DEC.AQ.Airreports@alaska.gov
   Or
4. Mail to: ADEC
   Air Permits Program
   610 University Avenue
   Fairbanks, AK 99709-3643
   Or
5. Phone Notifications: 907-451-5173
   Phone notifications require a written follow-up report.

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

[18 AAC 50.346(b)(3)]

Section 12. Emission Inventory Form

Emission Inventory Form

A detailed instruction on development and submission of emission inventory is available at the Department's Air Online Services (AOS) at http://dec.alaska.gov/Applications/Air/airtoolsweb/PointSourceEmissionInventory by clicking on "Emission Inventory Instructions" button.

ADEC Reporting Form Emission Inventory Reporting State of Alaska Department of Environmental Conservation Division of Air Quality	**Emission Inventory** **Year- [ ]** Check one: Annual ☐ Triennial ☐

Mandatory information is highlighted in bright yellow. Make additional copies as needed.

Stationary Source Detail		
Inventory Start Date		
Inventory End Date		
ADEC ID or Permit Number		
EPA ID		
Census Area/Community		
Facility Name		
Facility Physical Location	**Address**	
	City, State, Zip Code	
	Latitude	**Longitude**
	Legal Description:	
Owner Name		
Owner Address		
Owner contact number		
Mailing Contact Information	**Address**	
	City, State, Zip Code	
Line of Business (NAICS)		
Facility Status		

Emission Unit Data			
Specifications			
ID		Design Capacity	
Description			
Emission Unit Status			
Manufacturer		Manufactured Year	
Model Number		Serial Number	
Regulations			
Regulation/Description			
Control Equipment (List All if applicable)			
ID			
System Description			
Equipment Type(s)			
Manufacturer			
Model			
Control Efficiency (%):			
Capture Efficiency (%)			
Pollutants Controlled		Reduction Efficiency (%)	
		Reduction Efficiency (%)	

Processes	
Process	
SCC Code	
Material Processed	
Period Start	
Period End	
Throughput (units):	
Summer %	
Fall %	
Winter %	
Spring %	
Operational Schedule	
Days/Week	
Hours/Day	
Weeks/Year	
Hours/Year	

Fuel Characteristics			
Heat Content	Elem. Sulfur Content (%)	H2S Sulfur Content	Ash Content (if applicable)

Heating		
Heat Input	Heat Output	Heat Values Convention

Emission Operating Type					
Pollutant	**Emission Factor**	**EF Numerator**	**EF Denominator**	**Emission Calculation Method**	**Tons**
Carbon Monoxide (CO)					
Nitrogen Oxides (NOX)					
PM10 Primary (PM10-PRI)					
PM2.5 Filterable (PM25-FIL)[11]					
PM Condensable (PM-CON)[12]					
Sulfur Dioxide (SO2)					
NH3 (Ammonia)					
Lead and lead compounds					
Volatile Organic Compounds (VOC)					
Emissions' Release Point					
Release Point ID					
Apportion%					
Process	**Secondary Process (if applicable)**				
SCC Code	**(ex. 20100201)**				
Material Processed					
Period Start					
Period End					
Throughput (units):					
Summer %					
Fall %					
Winter %					
Spring %					
Operational Schedule					
Days/Week					
Hours/Day					
Weeks/Year					
Hours/Year					
Fuel Characteristics					
Heat Content	**Elem. Sulfur Content**	**H2S Sulfur Content**	**Ash Content (if applicable)**		

[11] Report PM-2.5 filterable and PM condensable portions of the PM-2.5 Primary emissions, as applicable, in accordance with Federal Regulation 40 CFR 51.15(a)(1)(vi). Refer to EPA's May 2017 "Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations" (see Section 4.2.1) for guidance on the reporting of PM-2.5 filterable and condensable emissions.

[12] Please note on the inventory form if there is no available emission factor that can be used for an applicable condensable PM. For example, EPA AP-42 Table 3.3-1 does not contain a condensable PM emission factor for diesel engines smaller than 600 hp.

Heating					
Heat Input		**Heat Output**		**Heat Values Convention**	
Emissions Operating Type:					
Pollutant	**Emission Factor**	**EF Numerator**	**EF Denominator**	**Emission Calculation Method**	**Tons**
Carbon Monoxide (CO)					
Nitrogen Oxides (NOX)					
PM10 Primary (PM10-PRI)					
PM2.5 Primary (PM25-PRI)					
Sulfur Dioxide (SO2)					
Lead and Lead Compounds					
NH3 (Ammonia)					
Volatile Organic Compounds (VOC)					
Emissions' Release Point					
Release Point ID					
Apportion%					

Stack Detail (Release Point)	
> Specifications	
ID	
Type	
Description	
Stack Status	
> Stack Parameters	
Stack Height (ft)	
Stack Diameter (ft)	
Exit Gas Temp (F)	
Exit Gas Velocity (fps)	
Exit Gas Flow Rate (acfm)	
> Geographic Coordinate	
Latitude	
Longitude	
Datum	
Accuracy (meters)	
Base Elevation (meters)	

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. Direct data entry for emission inventory can be done through the Air Online System (AOS) http://dec.alaska.gov/Applications/Air/airtoolsweb/. A myAlaska account is needed to gain access and a profile needs to be set up in Permittee Portal OR

2. E-mail to: DEC.AQ.airreports@alaska.gov

Or

3. Mail to: ADEC
   Air Permits Program
   ATTN: Emissions Inventory
   555 Cordova Street
   Anchorage, Alaska 99501

Or

4. Fax this form to: 907-269-7508

[18 AAC 50.346(b)(9)]