DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ1190TVP03 Issue Date: PUBLIC COMMENT - February 19, 2021
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, **Alaska Electric and Energy Cooperative, Inc.**, for the operation of the **Nikiski Combined Cycle 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).

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 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.

This operating permit becomes effective <insert date—30 days after issue date>.

Upon effective date of this permit, Operating Permit No. AQ1190TVP02 expires.

James R. Plosay, Manager
Air Permits Program

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Abbreviations and Acronyms

AAC.....Alaska Administrative Code
ADEC .....Alaska Department of Environmental Conservation
AS.....Alaska Statutes
ASTM.....American Society for Testing and Materials
BACT .....best available control technology
bHp .....brake horsepower
CAA or The Act .Clean Air Act
CDX.....Central Data Exchange
CEDRI .....Compliance and Emissions Data Reporting Interface
CFR .....Code of Federal Regulations
CI.....compression ignition
CO .....carbon monoxide
COM.....continuous opacity monitor
dscf .....dry standard cubic foot
EPA .....US Environmental Protection Agency
EU.....emissions unit
gph.....gallons per hour
gr/dscf.....grain per dry standard cubic foot (1 pound = 7000 grains)
HAPs .....hazardous air pollutants [as defined in AS 46.14.990]
hp.....horsepower
ICE.....internal combustion engine
ID.....emissions unit identification number
kPa.....kiloPascals
kW .....kilowatts
LAER.....lowest achievable emission rate
MACT .....maximum achievable control technology [as defined in 40 CFR 63]
MMBtu/hr.....million British thermal units per hour
MMscf .....million standard cubic feet
MR&R .....monitoring, recordkeeping, and reporting
NAICS.....North American Industrial Classification System
NESHAP .....National Emission Standards for Hazardous Air Pollutants [as contained in 40 CFR 61 and 63]
NH_3.....ammonia
NOx.....nitrogen oxides
NSPS .....New Source Performance Standards [as contained in 40 CFR 60]
O_2 .....oxygen
PAL .....plantwide applicability limitation
Pb .....lead
$PM_{2.5}$.....particulate matter less than or equal to a nominal 2.5 microns in diameter
PM_{10} .....particulate matter less than or equal to a nominal 10 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
SIP.....State Implementation Plan
SO_2 .....sulfur dioxide
tph .....tons per hour
tpy .....tons per year
VOC .....volatile organic compound [as defined in 40 CFR 51.100(s)]
VOL .....volatile organic liquid [as defined in 40 CFR 60.111b, Subpart Kb]
vol%.....volume percent
wt% .....weight percent

Section 1. Stationary Source Information

Identification

Permittee:		Alaska Electric and Energy Cooperative, Inc. 3977 Lake Street Homer, AK 99603
Stationary Source Name:		Nikiski Combined Cycle Plant
Location:		60º 40´ 32" North; 151º 22´ 58" West
Physical Address:		48169 Kenai Spur Highway Kenai, AK 99611
Owner and Operator:		Alaska Electric and Energy Cooperative 3977 Lake Street Homer, AK 99603
Permittee's Responsible Officials:		Ed Oliver, Plant Superintendent Andrew Patrick, Manager of Power Production and Dispatch 3977 Lake Street Homer, AK 99603
Designated Agent:		Bruce Linton, Environmental Compliance Officer 280 Airport Way Kenai, AK 99611
Stationary Source and Building Contact:		Bruce Linton, Environmental Compliance Officer 280 Airport Way Kenai, AK 99611 (907) 335-6176 blinton@homerelectric.com
Permit and Fee Contact:		Bruce Linton, Environmental Compliance Officer 280 Airport Way Kenai, AK 99611 (907) 335-6176 blinton@homerelectric.com
Process Description:	SIC Code	4911 Electric Services
	NAICS Code:	221112 Fossil Fuel Electric Power Generation

[18 AAC 50.040(j)(3) & 50.326(a)]
[40 CFR 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. Except as noted elsewhere in the permit, emissions unit descriptions and ratings are given for identification purposes only.

Table A - Emissions Unit Inventory

EU ID	Emissions Unit Name	Emissions Unit Description	Rating/Size	Fuel	Installation Date
1	Combustion Turbine Generator	GE Frame 6B MS60001B	437.1 MMBtu/hr	Natural Gas	2001
2	Startup Engine	Detroit Diesel GSE-1745	650 hp	Diesel	2001
3	Heat Recovery Steam Generator	Deltak B-707	471 MMBtu/hr	Natural Gas	2001
4	Backup Generator	Caterpillar 3516C HD	2,937 hp (2 MW)	Diesel	2013
5	Emergency Firewater Pump	John Deere JU4H-UFADW8	150 hp	Diesel	2013
6	Glycol Heater	Tulsa Combustion	1.4 MMBtu/hr	Natural Gas	2013

[18 AAC 50.326(a)]
[40 CFR 71.5(c)(3)]

Section 3. State Requirements

Visible Emissions Standard

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 through 6 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 CFR 71.6(a)(1)]

1.1. For EU IDs 1, 3, and 6, burn only gas as fuel. In each operating report under Condition 70 indicate whether each of these emissions units burned only gas during the period covered by the report. Report under Condition 69 if any fuel other than gas is burned in any of these emissions units.

1.2. For each of EU IDs 2 and 5, as long as the emissions unit does not exceed the limits in Conditions 18 and 15.2, monitoring shall consist of an annual compliance certification under Condition 71 for the visible emissions standard based on reasonable inquiry. Otherwise, comply with Condition 1.3.

1.3. For each of EU IDs 2, 4, and 5, as long as actual emissions from the emissions unit are less than the significant emissions thresholds listed in 18 AAC 50.326(e) during any consecutive 12-month period, monitoring shall consist of an annual compliance certification under Condition 71 with the visible emissions standard based on reasonable inquiry. The Permittee shall report in the operating report under Condition 75 if any of EU IDs 2, 4, and 5 reaches any of the significant emissions thresholds listed in 18 AAC 50.326(e) and monitor, record, and report in accordance with Conditions 2 through 4 for the remainder of the permit term for that emissions unit.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3) & (c)(6)]

Visible Emissions Monitoring, Recordkeeping, and Reporting (MR&R)

Liquid Fuel-Burning Equipment

2. Visible Emissions Monitoring. When required by Condition 1.3, or in the event of replacement[1] during the permit term, the Permittee shall observe the exhaust of EU IDs 2, 4, and 5 for visible emissions using either the Method 9 Plan under Condition 2.3 or the Smoke/No-Smoke Plan under Condition 2.4.

2.1. The Permittee may change the visible emissions monitoring plan for an emissions unit at any time unless prohibited from doing so by Condition 2.5.

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.e or Conditions 2.4.b through 2.5 as applicable that remains in effect from a previous permit.

2.3. **Method 9 Plan.** For all observations in this plan, observe the emissions unit exhaust following 40 CFR 60, Appendix A-4, Method 9 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 2.5.c(ii), observe the exhausts of EU IDs 2, 4, and 5 according to the following criteria.

(i) For any unit, observe emissions unit exhaust within 14 calendar days after changing from the Smoke/No-Smoke Plan of Condition 2.4.

(ii) For any unit replaced, observe exhaust within 60 days of the newly installed emissions unit becoming fully operational.[3] Except as provided in Condition 2.3.e, after the first Method 9 observation:

(A) For EU IDs 2, 4, and 5, comply with Conditions 1.2 and 1.3 as applicable.

(iii) For each of EU IDs 2, 4, and 5, observe the exhaust of the emissions unit within 30 days after the end of the calendar month during which monitoring was triggered under Conditions 1.2 or 1.3; or for an emissions unit with intermittent operations, within the first 30 days during the unit's next scheduled operation.

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

[1] "*Replacement*," as defined in 40 C.F.R. 51.166(b)(32).
[2] Visible emissions observations are not required during emergency operations.
[3] "*Fully operational*" means upon completion of all functionality checks and commissioning after unit installation. "*Installation*" is complete when the unit is ready for functionality checks to begin.

c. Semiannual Method 9 Observations. After at least three monthly observations under Condition 2.3.b, unless a six-consecutive-minute average opacity is greater than 15 percent and one or more individual observations are greater than 20 percent, perform semiannual observations

(i) no later than seven months, but not earlier than five months, after the preceding observation, or

(ii) for an emissions unit with intermittent operations, during the next scheduled operation immediately following seven months after the preceding observation.

d. Annual Method 9 Observations. After at least two semiannual observations under Condition 2.3.c, unless a six-consecutive-minute average opacity is greater than 15 percent and one or more individual observations are greater than 20 percent, perform annual observations

(i) no later than 12 months, but not earlier than 10 months, after the preceding observation; or

(ii) for an emissions unit with intermittent operations, during the next scheduled operation immediately following 14 months after the preceding observation.

e. Increased Method 9 Frequency. If a six-consecutive-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more individual 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.

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

a. Initial Monitoring Frequency. Observe the emissions unit exhaust during each calendar day that the emissions unit operates for a minimum of 30 days.

b. Reduced Monitoring Frequency. If the emissions unit operates without visible emissions for 30 consecutive operating days as required in Condition 2.4.a, observe the emissions unit exhaust at least once in every calendar month that the emissions unit operates.

c. Smoke Observed. If visible emissions are observed, comply with Condition Condition 2.5.

2.5. **Corrective Actions Based on Smoke/No Smoke Observations**. If visible emissions are present in the emissions unit exhaust during an observation performed under the Smoke/No Smoke Plan of Condition 2.4, then the Permittee shall either begin the Method 9 Plan of Condition 2.3 or

a. initiate actions to eliminate visible emissions from the emissions unit exhaust 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 visible emissions; and

c. after completing the actions required under Condition 2.5.a,

(i) conduct smoke/no smoke observations in accordance with Condition 2.4

(A) at least once per day for the next seven operating days and, if applicable, until the initial 30-day observation period of Condition 2.4.a is completed; and

(B) continue as described in Condition 2.4.b; or

(ii) if the actions taken under Condition 2.5.a do not eliminate the visible emissions, or if subsequent visible emissions are observed under the schedule of Condition 2.5.c(i)(A), then observe the emissions unit exhaust using the Method 9 Plan unless the Department gives written approval to resume observations under the Smoke/No Smoke Plan. After observing visible emissions and making observations under the Method 9 Plan, the Permittee may at any time take corrective action that eliminates visible emissions and restart the Smoke/No Smoke Plan under Condition 2.4.a.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(i)]

3. Visible Emissions Recordkeeping. The Permittee shall keep records as follows:

3.1. For all Method 9 Plan observations,

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 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 rate (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 Emission Observation Form 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-consecutive-minute average opacity,

(i) divide the observations recorded on the record sheet into sets of 24 consecutive observations;

(ii) sets need not be consecutive in time and in no case shall two sets overlap;

(iii) for each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24; and

(iv) record the average opacity on the sheet.

c. Calculate and record the highest six-consecutive- and 18-consecutive-minute average opacities observed.

3.2. If using the Smoke/No Smoke Plan of Condition 2.4, 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. the EU ID of the emissions unit observed;

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

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

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

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

g. operating rate (load or fuel consumption rate or best estimate, if unknown).

3.3. The records required by Conditions 3.1 and 3.2 may be kept in electronic format.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(ii)]

4. Visible Emissions Reporting. The Permittee shall report as follows:

4.1. In the first operating report required in Condition 70 under this permit term, the Permittee shall state the intention to either continue the visible emissions monitoring schedule in effect from the previous permit or reset the visible emissions monitoring schedule.

4.2. Include in each operating report required under Condition 70 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 all Method 9 Plan observations,

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

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

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

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

4.3. Report under Condition 69:

a. the results of Method 9 observations that exceed 20 percent average opacity for any six-consecutive-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.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(iii)]

Particulate Matter (PM) Emissions Standard

5. Industrial Process and Fuel-Burning Equipment Particulate Matter. The Permittee shall not cause or allow particulate matter emitted from EU IDs 1 through 6 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)(4), 50.055(b)(1), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(1)]

5.1. For EU IDs 1, 3, and 6, the Permittee shall comply with Condition 1.1.

5.2. For each of EU IDs 2 and 5, as long as the emissions unit does not exceed the limits in Conditions 18 and 15.2, monitoring shall consist of an annual compliance certification under Condition 71 for the PM emissions standard based on reasonable inquiry. Otherwise, comply with Condition 5.3.

5.3. For each of EU IDs 2, 4, and 5, as long as actual emissions from the emissions unit are less than the significant emissions thresholds listed in 18 AAC 50.326(e) during any consecutive 12-month period, monitoring shall consist of an annual compliance certification under Condition 71 for the PM emissions standard based on reasonable inquiry. The Permittee shall report in the operating report under Condition 70 if any of EU IDs 2, 4, and 5 reaches any of the significant emissions thresholds and monitor, record, and report in accordance with Conditions 6 through 8 for the remainder of the permit term for that emissions unit.

[18 AAC 50.040(j)(4), 50.326(j)(3) & 50.346(c)]
[40 CFR 71.6(a)(3)]

PM MR&R

Liquid Fuel-Burning Engines

6. PM Monitoring. The Permittee shall conduct source tests on diesel engines, EU IDs 2, 4, and 5 to determine the concentration of PM in the exhaust of each of the emissions units as follows:

6.1. If the result of any Method 9 observation conducted under Condition 2.3 for any of EU IDs 2, 4, and 5 is greater than the criteria of Conditions 6.2.a or 6.2.b, the Permittee shall, within six months of that Method 9 observation, either

a. take corrective action and observe the emissions unit exhaust under load conditions comparable to those when the criteria were exceeded, following 40 CFR 60, Appendix A-4 Method 9 for 18 minutes to obtain 72 consecutive 15-second opacity observations, to show that emissions are no longer greater than the criteria of Condition 6.2; or

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

6.2. Take corrective action or conduct a PM source test, in accordance with Condition 6.1, if any Method 9 observation under Condition 2.3 results in an 18-minute average opacity greater than

a. 20 percent for an emissions unit with an exhaust stack diameter that is equal to or greater than 18 inches; or

b. 15 percent for an emissions unit with an exhaust stack diameter that is less than 18 inches, unless the Department has waived this requirement in writing.

6.3. During each one-hour PM source test run under Condition 6.1.b, observe the emissions unit exhaust for 60 minutes in accordance with Method 9 and calculate the highest 18-consecutive-minute average opacity measured during each one-hour test run. Submit a copy of these observations with the source test report.

6.4. The PM source test requirements in Condition 6.1.b are waived for an emissions unit if:

a. a source test on that unit has shown compliance with the PM standard during this permit term; or

b. corrective action was taken to reduce visible emissions and two consecutive 18-minute Method 9 visible emissions observations (as described in Condition 2.3) conducted thereafter within a six-month period show visible emissions less than the threshold in Condition 6.2.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(i)]

7. PM Recordkeeping. The Permittee shall comply with the following:

7.1. Keep records of the results of any source test and visible emissions observations conducted under Condition 6.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(ii)]

8. PM Reporting. The Permittee shall report as follows:

8.1. Notify the Department of any Method 9 observation results that are greater than the threshold of either Condition 6.2.a or 6.2.b within 30 days of the end of the month in which the observations occurred. 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.

8.2. In each operating report under Condition 70, include:

a. a summary of the results of any PM source test and visible emissions observations 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.

8.3. Report in accordance with Condition 69:

a. anytime the results of a PM source test exceed the PM emissions standard in Condition 5; or

b. if the requirements under Condition 6.1 were triggered 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.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(iii)]

Sulfur Compound Emissions Standard

9. Sulfur Compound Emissions. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EU IDs 1 through 6 to exceed 500 ppm averaged over three hours.

[18 AAC 50.040(j), 50.055(c) & 50.326(j)]
[40 CFR 71.6(a)(1)]

Sulfur Compound MR&R

Fuel Oil[4](EU IDs 2, 4, and 5)

10. Sulfur Compound Monitoring and Recordkeeping. The Permittee shall monitor and keep records, as follows:

10.1. Comply with either Condition 10.1.a or Condition 10.1.b:

a. For each shipment of fuel:

(i) If the fuel grade requires a sulfur content 0.5 percent by weight ($wt\%S_{fuel}$) or less, keep receipts that specify fuel grade and amount; or

(ii) If the fuel grade does not require a sulfur content 0.5 $wt\%S_{fuel}$ or less, keep receipts that specify fuel grade and amount, and

(A) test the fuel for sulfur content; or

(B) 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; or

b. Test the sulfur content of the fuel in each storage tank that supplies fuel to EU IDs 2, 4, and 5 at least monthly.

10.2. Fuel testing under Condition 10.1.a or 10.1.b must follow an appropriate method listed in 18 AAC 50.035(b)-(c) or 40 CFR 60.17 incorporated by reference in 18 AAC 50.040(a)(1).

[4] *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 CFR 60.41b.

10.3. If a shipment of fuel contains greater than 0.75 wt%S_{fuel} or if the results of a fuel sulfur content test indicate that the fuel contains greater than 0.75 wt%S_{fuel}, the Permittee shall calculate SO_2 emissions in parts per million (ppm) using either the SO_2 material balance calculation in Section 12 or Method 19 of 40 CFR 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a)(3).

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(i) & (ii)]

11. Sulfur Compound Reporting. The Permittee shall report as follows:

11.1. If SO_2 emissions calculated under Condition 10.3 exceed 500 ppm, the Permittee shall report in accordance with Condition 69. When reporting under this condition, include the calculation under Condition 10.3.

11.2. The Permittee shall include in the operating report required by Condition 70 for each month covered by the report:

a. a list of the fuel grades received at the stationary source;

b. for any fuel received with a fuel sulfur content greater than 0.5 wt%S_{fuel}, the fuel sulfur content of the shipment;

c. the results of all fuel sulfur analyses conducted under Condition 10.1.a or Condition 10.1.b and documentation of the method(s) used to complete the analyses; and

d. for any fuel received with a sulfur content greater than 0.75 wt%S_{fuel}, the SO_2 emissions in ppm calculated under Condition 10.3.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(iii)]

Fuel Gas (EU IDs 1, 3, and 6)

12. Sulfur Compound Monitoring. The Permittee shall either

12.1. obtain a semiannual statement from the fuel supplier of the fuel total sulfur level in ppm; or

12.2. analyze a representative sample of the fuel semiannually to determine the sulfur content using either ASTM D4084, D5504, D4810, D4913, D6228 or GPA Standard 2377, or other listed method approved in 18 AAC 50.035(b)-(c) or 40 CFR 60.17 incorporated by reference in 18 AAC 50.040(a)(1).

13. Sulfur Compound Recordkeeping. The Permittee shall keep records of the statement from the fuel supplier or the sulfur content analysis required under Conditions 12.1 or 12.2.

14. Sulfur Compound Reporting. The Permittee shall report as follows:

14.1. Report in accordance with Condition 69 whenever the fuel combusted causes sulfur compound emissions to exceed the standard of Condition 9.

14.2. Include copies of the records required by Condition 13 with the operating report required by Condition 70 for the period covered by the report.

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]
[40 CFR 71.6(a)(3) & (c)(6)]

Preconstruction Permit [5] Requirements

Owner Requested Limits to Avoid Classification under 18 AAC 50.502(c)(3)

15. The Permittee shall operate EU IDs 4 and 5 as follows:

[Condition 4, Minor Permit AQ1190MSS01, 4/25/2011]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

15.1. Limit the operation of EU ID 4 to no more than 500 hours per 12 consecutive month period.

15.2. Limit the operation of EU ID 5 to no more than 100 hours per 12 consecutive month period.

[Conditions 4.1 & 4.2, Minor Permit AQ1190MSS01, 4/25/2011]

15.3. The Permittee shall install and maintain non-resettable hour meters on each of EU IDs 4 and 5.

15.4. At the end of each month, the Permittee shall:

[Conditions 4.3 & 4.4, Minor Permit AQ1190MSS01, 4/25/2011]
[40 CFR 71.6(a)(3)(i) & (ii)]

a. record the hour meter reading for each of EU IDs 4 and 5 for each month;

b. calculate and record the number of hours each of EU IDs 4 and 5 was operated by subtracting the hour meter reading of the previous month from the hour meter reading of the current month;

c. calculate and record the number of hours each of EU IDs 4 and 5 was operated for the previous 12 consecutive months.

[Conditions 4.4(a) through 4.4(c), Minor Permit AQ1190MSS01, 4/25/2011]

15.5. Report in the operating report required in Condition 70 the 12-consecutive month operating hours for EU IDs 4 and 5 recorded in Condition 15.4.c for each month of the reporting period.

15.6. Report excess emissions and permit deviations as required in Condition 69 if the operating hours of EU ID 4 or 5 calculated in Condition 15.4.c exceeds the limits in Condition 15.1 or Condition 15.2.

[Conditions 4.5 & 4.6, Minor Permit AQ1190MSS01, 4/25/2011]
[40 CFR 71.6(a)(3)(iii)]

[5] *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.

Ambient Air Quality Protection Requirements

16. The Permittee shall only burn natural gas with a hydrogen sulfide (H_2S) concentration not exceeding 40 parts per million by volume (ppmv) in EU IDs 1, 3, and 6.

[Condition 5.1, Minor Permit AQ1190MSS01, 4/25/2011]
[Condition 7, Operating Permit AQ1190TVP01, 9/30/2009]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

16.1. Monitor, record, and report in accordance with Conditions 12, 13, and 14.2.

16.2. Report in accordance with Condition 69 whenever the limit in Condition 16 is exceeded.

[40 CFR 71.6(a)(3) & 71.6(c)(6)]

17. The Permittee shall only burn No. 1 or No. 2 diesel fuel oil in EU IDs 2, 4 and 5.

[Condition 5.1, Minor Permit AQ1190MSS01, 4/25/2011]
[Condition 9, Operating Permit AQ1190TVP01, 9/30/2009]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

17.1. Monitor, record, and report in accordance with Conditions 10.1, 10.2, and 11.2.a.

17.2. Report in accordance with Condition 69 whenever fuel other than No. 1 or No. 2 diesel fuel oil is burned in EU ID 4 or 5.

[40 CFR 71.6(a)(3) & 71.6(c)(6)]

18. The Permittee shall burn no more than 2,000 gallons of fuel oil per 12-month period in EU ID 2.

[Condition 8, Operating Permit AQ1190TVP01, 9/30/2009]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

18.1. At the end of each month, calculate and record the total fuel oil (gallons) consumed by EU ID 2 in the previous month and the 12-month rolling total fuel oil consumption.

18.2. Report in the operating report required by Condition 70 the monthly fuel oil consumption and 12-month rolling total consumption for EU ID 2 for each month of the reporting period.

18.3. Report in accordance with Condition 69 whenever the limit in Condition 18 is exceeded.

[40 CFR 71.6(a)(3) & 71.6(c)(6)]

Insignificant Emissions Units

19. 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:

19.1. **Visible Emissions 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)]

19.2. **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)]

19.3. **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)]

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

a. Submit the compliance certifications of Condition 71 based on reasonable inquiry;

b. Comply with the requirements of Condition 52; and

c. Report in the operating report required by Condition 70 if an emissions unit has historically been classified as insignificant because of actual emissions less than the thresholds of 18 AAC 50.326(e) and current actual emissions have become greater than any of those thresholds.

d. No other monitoring, recordkeeping or reporting is required for insignificant emissions units to demonstrate compliance with the emissions standards under Conditions 19.1, 19.2, and 19.3.

[18 AAC 50.040(j)(3), 50.32(j)(3), & 50.346(b)(4)]
[40 CFR 71.6(a)(1) & (3)]

Section 4. Federal Requirements

40 CFR Part 60 New Source Performance Standards

Subpart A

20. New Source Performance Standards (NSPS) Subpart A Notification. Unless exempted by a specific subpart, for any affected facility[6] or existing facility[7] regulated under NSPS requirements in 40 CFR 60, the Permittee shall furnish the Administrator written notification or, if acceptable to both the Administrator[8] and the Permittee, electronic notification, as follows:

[18 AAC 50.035 & 50.040(a)(1)]
[40 CFR 60.7(a) & 60.15(d), Subpart A]

20.1. A notification of the date construction (or reconstruction as defined under 40 CFR 60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.

[40 CFR 60.7(a)(1), Subpart A]

20.2. A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

[40 CFR 60.7(a)(3), Subpart A]

20.3. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include:

a. information describing the precise nature of the change,

b. present and proposed emission control systems,

c. productive capacity of the facility before and after the change, and

d. the expected completion date of the change.

[40 CFR 60.7(a)(4), Subpart A]

20.4. A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with 40 CFR 60.13(c). Notification shall be postmarked not less than 30 days prior to such date.

[40 CFR 60.7(a)(5), Subpart A]

[6] *Affected facility* means, with reference to a stationary source, any apparatus to which a standard applies, as defined in 40 CFR 60.2.

[7] *Existing facility* means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in this part, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type, as defined in 40 CFR 60.2.

[8] For Section 4 of this permit, the Department defines *Administrator* to mean the EPA Administrator and the Department.

20.5. A notification of any proposed replacement of components 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 CFR 60.15(d), Subpart A]

a. the name and address of owner or operator,

b. the location of the existing facility,

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

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

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

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

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

21. NSPS Subpart A Startup, Shutdown, & Malfunction Requirements. Maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of EU IDs 1 and 3, any malfunction of the air-pollution control equipment, or any periods during which a continuous monitoring system or monitoring device for EU ID 1 or 3 is inoperative.

[18 AAC 50.040(a)(1)]
[40 CFR 60.7(b), Subpart A]

22. NSPS Subpart A Excess Emissions and Monitoring Systems Performance Report. Each Permittee required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts and limits are in Conditions 30.1 and 30.6) and-or summary report form (see Condition 23) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:

[18 AAC 50.040(a)(1)]
[40 CFR 60.7(c), Subpart A]

22.1. The magnitude of excess emissions computed in accordance with Condition 29.4, any conversion factors used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period.

[40 CFR 60.7(c)(1), Subpart A]

22.2. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of EU ID 1; the nature and cause of any malfunction (if known), and the corrective action taken or preventative measures adopted.

[40 CFR 60.7(c)(2), Subpart A]

22.3. The date and time identifying each period during which a Continuous Monitoring System (CMS) was inoperative except for zero and span checks and the nature of any repairs or adjustments.

[40 CFR 60.7(c)(3), Subpart A]

22.4. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[40 CFR 60.7(c)(4), Subpart A]

23. NSPS Subpart A Summary Report Form. The summary report form shall contain the information and be in the format shown in figure 1 of 40 CFR 60.7 (see Attachment 1) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

[18 AAC 50.040(a)(1)]
[40 CFR 60.7(c) & (d), Subpart A]

23.1. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in Condition 22 need not be submitted unless requested by the Administrator.

[40 CFR 60.7(d)(1), Subpart A]

23.2. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in Condition 22 shall both be submitted.

[40 CFR 60.7(d)(2), Subpart A]

24. **NSPS Subpart A Recordkeeping**. Any owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

[18 AAC 50.040(a)(1)]
[40 CFR 60.7(f), Subpart A]

25. **NSPS Subpart A Performance (Source) Tests.** Conduct source tests according to Section 6 and as required in this condition on any affected facility.

[18 AAC 50.040(a)(1)]

25.1. Except as specified in paragraphs (a)(1),(a)(2), (a)(3), and (a)(4) of 40 CFR 60.8, within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, or at such other times specified by 40 CFR Part 60, and at such other times as may be required by the Administrator, the Permittee shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).

[40 CFR 60.8(a), Subpart A]

25.2. Tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors.

[40 CFR 60.8(b), Subpart A]

25.3. Tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

[40 CFR 60.8(c), Subpart A]

25.4. Provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the Permittee shall notify the Administrator as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator by mutual agreement.

[40 CFR 60.8(d), Subpart A]

25.5. Provide or cause to be provided, performance testing facilities as follows:

a. Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

b. Safe sampling platform(s),

c. Safe access to sampling platform(s), and

d. Utilities for sampling and testing equipment.

[40 CFR 60.8(e), Subpart A]

25.6. Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method.

[40 CFR 60.8(f), Subpart A]

a. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator’s approval, be determined using the arithmetic mean of the results of the two other runs.

b. Contents of report (electronic or paper submitted copy). Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, the report for a performance test shall include the elements identified in 40 CFR 60.8(f)(2)(i) through (vi).

[40 CFR 60.8(f)(1) & (2), Subpart A]

25.7. The performance testing shall include a test method performance audit (PA) during the performance test in accordance with 40 CFR 60.8(g).

[40 CFR 60.8(g), Subpart A]

25.8. Unless otherwise specified in the applicable subpart, each test location must be verified to be free of cyclonic flow and evaluated for the existence of emission gas stratification and the required number of sampling traverse points. If other procedures are not specified in the applicable subpart to the regulations, use the appropriate procedures in Method 1 to check for cyclonic flow and Method 7E to evaluate emission gas stratification and selection of sampling points.

[40 CFR 60.8(h), Subpart A]

25.9. Whenever the use of multiple calibration gases is required by a test method, performance specification, or quality assurance procedure in a part 60 standard or appendix, Method 205 of 40 CFR part 51, appendix M of this chapter, "Verification of Gas Dilution Systems for Field Instrument Calibrations," may be used.

[40 CFR 60.8(i), Subpart A]

26. 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 IDs 1 and 3 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 IDs 1 and 3.

[18 AAC 50.040(a)(1)]
[40 CFR 60.11(d), Subpart A]

27. 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 Conditions 30 and 31, nothing in 40 CFR Part 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether EU IDs 1 and 3 would have been in compliance with applicable requirements of 40 CFR Part 60 if the appropriate performance or compliance test or procedure had been performed.

[18 AAC 50.040(a)(1)]
[40 CFR 60.11(g), Subpart A]

28. 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 30, 31, or 32. 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 CFR 60.12, Subpart A]

29. NSPS Subpart A Monitoring. For the Continuous Monitoring System (CMS) required under Condition 30.3:

[18 AAC 50.040(a)(1)]
[40 CFR 60.13(a) Subpart A]

29.1. All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under Condition 25. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.

[40 CFR 60.13(b), Subpart A]

29.2. Except for system breakdowns, repairs, and calibration checks, all continuous monitoring systems shall be in continuous operation.

[40 CFR 60.13(e), Subpart A]

29.3. All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained.

[40 CFR 60.13(f), Subpart A]

29.4. Reduce data in accordance with the following:

a. Owners or operators of all continuous monitoring systems shall reduce all data to 1-hour averages for time periods as defined in 40 CFR 60.2.

b. 1-hour averages shall be computed as follows, except that the provisions pertaining to the validation of partial operating hours are only applicable for affected facilities that are required by the applicable subpart to include partial hours in the emission calculations:

[40 CFR 60.13(h)(1) & (2), Subpart A]

(i) Except as provided under Condition 29.4.b(iii), for a full operating hour (any clock hour with 60 minutes of unit operation), at least four valid data points are required to calculate the hourly average, i.e., one data point in each of the 15-minute quadrants of the hour.

(ii) Except as provided under Condition 29.4.b(iii), for a partial operating hour (any clock hour with less than 60 minutes of unit operation), at least one valid data point in each 15-minute quadrant of the hour in which the unit operates is required to calculate the hourly average.

(iii) For any operating hour in which required maintenance or quality-assurance activities are performed:

[40 CFR 60.13(h)(2)(i) through (iii), Subpart A]

(A) If the unit operates in two or more quadrants of the hour, a minimum of two valid data points, separated by at least 15 minutes, is required to calculate the hourly average; or

(B) If the unit operates in only one quadrant of the hour, at least one valid data point is required to calculate the hourly average.

[40 CFR 60.13(h)(2)(iii)(A) & (B), Subpart A]

(iv) For each full or partial operating hour, all valid data points shall be used to calculate the hourly average.

(v) Data recorded during periods of continuous monitoring system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph.

[40 CFR 60.13(h)(2)(v) & (vi), Subpart A]

(vi) Either arithmetic or integrated averaging of all data may be used to calculate the hourly averages. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O_2 or ng/J of pollutant).

[40 CFR 60.13(h)(2)(ix), Subpart A]

Subpart GG

30. NSPS Subpart GG Applicability. For EU ID 1, comply with the following applicable requirements of NSPS Subpart GG.

[18 AAC 50.040(a)(2)(V), 50.040(j)(4), & 50.326(j)]
[40 CFR 60.330, Subpart GG]
[40 CFR 71.6(a)(1)]

NSPS Subpart GG Standard for Nitrogen Oxides

30.1. The Permittee shall not allow the exhaust gas concentration of NOx to exceed 91 ppmv (at 15 percent O_2 and on a dry basis).

[40 CFR 60.332(a)(1) & 60.332(b), Subpart GG]
[40 CFR 71.6(a)(1)]

30.2. Stationary gas turbines using water or steam injection for control of NOx emissions are exempt from Condition 30.1 when ice fog is deemed a traffic hazard by the owner or operator of the gas turbine.

[40 CFR 60.332(f), Subpart GG]

30.3. The owner or operator of any stationary gas turbine subject to the provisions of NSPS Subpart GG and using water or steam injection to control NOx emissions shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine.

[40 CFR 60.334(a), Subpart GG]
[40 CFR 71.6(a)(3)(i)]

30.4. The steam or water to fuel ratio that are continuously monitored as described in Condition 30.3 shall be monitored during the performance test required under Condition 25, to establish acceptable values and ranges. The owner or operator may supplement the performance test data with engineering analyses, design specifications, manufacturer's recommendations and other relevant information to define the acceptable parametric ranges more precisely. The owner or operator shall develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NOx emission controls. The plan shall include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). Any supplemental data such as engineering analyses, design specifications, manufacturer's recommendations and other relevant information shall be included in the monitoring plan.

[40 CFR 60.334(g), Subpart GG]
[40 CFR 71.6(a)(3)(i)]

30.5. Conduct a NOx source test in accordance with Conditions 25, 30.10, 30.11, and Section 6 no later than three years after the effective date of this permit.

a. If the results of the testing required in Condition 30.5 are greater than 90 percent of the limit in Condition 30.1, conduct NOx testing annually until the results of two consecutive tests are less than or equal to 90 percent of the limit in Condition 30.1.

[40 CFR 71.6(a)(3)(i) & 71.6(c)(6)]

NSPS Subpart GG Standard for Sulfur Dioxide.

30.6. No owner or operator subject to the provisions of NSPS Subpart GG shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw).

[40 CFR 60.333(b), Subpart GG]
[40 CFR 71.6(a)(1)]

30.7. The owner or operator of any stationary gas turbine subject to the provisions of NSPS Subpart GG:

[40 CFR 60.334(h), Subpart GG]
[40 CFR 71.6(a)(3)]

a. Shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in Condition 30.7.b.

[40 CFR 60.334(h)(1), Subpart GG]

b. Notwithstanding the provisions of Condition 30.7.a, the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u), regardless of whether an existing custom schedule approved by the Administrator for Subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:

[40 CFR 60.334(h)(3), Subpart GG]

(i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or

(ii) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to 40 CFR 75 is required.

[40 CFR 60.334(h)(3)(i) & (ii), Subpart GG]

c. For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and for which a custom fuel monitoring schedule has previously been approved, the owner or operator may, without submitting a special petition to the Administrator, continue monitoring on this schedule.

[40 CFR 60.334(h)(4), Subpart GG]

(i) Monitor the sulfur content of the natural gas semi-annually using the length-of stain detector tube protocol covered by ASTM Method D 4810-88, or an alternative method approved by EPA. This semi-annual monitoring shall be conducted during the first regular business day of the first and third calendar quarters.

(ii) Should any fuel sulfur monitoring indicate noncompliance with the standard in Condition 30.6, the Permittee shall notify EPA and the Department within 15 days of the occurrence. Fuel sulfur monitoring shall be conducted weekly during the interim period while the custom schedule is being re-examined by EPA.

[EPA Alternative Monitoring Schedule, 1/14/98]

NSPS Subpart GG Reporting

30.8. For each affected unit that elects to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under NSPS Subpart GG, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with Condition 22. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under Condition 22, periods of excess emissions and monitor downtime that shall be reported are defined as follows:

[40 CFR 60.334(j), Subpart GG]
[40 CFR 71.6(a)(3)]

a. Nitrogen oxides.

[40 CFR 60.334(j)(1)(i), Subpart GG]

(i) An excess emission shall be any unit operating hour for which the average steam or water to fuel ratio, as measured by the continuous monitoring system, falls below the acceptable steam or water to fuel ratio needed to demonstrate compliance with Condition 30.1, as established during the performance test required in Condition 25. Any unit operating hour in which no water or steam is injected into the turbine shall also be considered an excess emission.

(ii) A period of monitor downtime shall be any unit operating hour in which water or steam is injected into the turbine, but the essential parametric data needed to determine the steam or water to fuel ratio are unavailable or invalid.

(iii) Each report shall include the average steam or water to fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), and gas turbine load, during each excess emission.

[40 CFR 60.334(j)(1)(i)(A) through (C), Subpart GG]

b. Sulfur dioxide. If the owner or operator is required to monitor the sulfur content of the fuel under Condition 30.7:

[40 CFR 60.334(j)(2), Subpart GG]

(i) An excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 weight percent and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.

[40 CFR 60.334(j)(2)(i), Subpart GG]

(ii) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours, and ends on the date and hour of the next valid sample.

[40 CFR 60.334(j)(2)(iii), Subpart GG]

30.9. *Ice fog*. Each period during which an exemption provided in Condition 30.2 is in effect shall be reported in writing to the Administrator quarterly. For each period the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated shall be reported. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter.

[40 CFR 60.334(j)(3), Subpart GG]
[40 CFR 71.6(a)(3)]

NSPS Subpart GG Test Methods and Procedures

30.10. The owner or operator shall conduct the performance tests required in Conditions 25 and 30.5 as follows;

[40 CFR 60.335(a), Subpart GG]
[40 CFR 71.6(a)(3)]

a. Use either EPA Method 20, ASTM D6522-00, or EPA Method 7E and either EPA Method 3 or 3A in appendix A to 40 CFR 60, to determine NOx and diluent concentration.

[40 CFR 60.335(a)(1) through (3), Subpart GG]

b. Sampling traverse points are to be selected following Method 20 or Method 1, (non-particulate procedures) and sampled for equal time intervals. The sampling shall be performed with a traversing single-hole probe or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.

[40 CFR 60.335(a)(4), Subpart GG]

c. Notwithstanding Condition 30.10.b, the owner or operator may test at few points than are specified in Method 1 or Method 20 if the following conditions are met:

[40 CFR 60.335(a)(5), Subpart GG]

(i) You may perform a stratification test for NOx and diluent pursuant to the procedures specified in section 6.5.6.1(a) through (e) appendix A to 40 CFR 75.

[40 CFR 60.335(a)(5)(i)(B), Subpart GG]

(ii) Once the stratification sampling is completed, the owner or operator may use the following alternative sample point selection criteria for the performance test:

[40 CFR 60.335(a)(5)(ii), Subpart GG]

(A) If each of the individual traverse point NOx concentrations, normalized to 15 percent O_2, is within 10 percent of the mean normalized concentration for all traverse points, then you may use 3 points (located either 16.7, 50.0, and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The 3 points shall be located along the measurement line that exhibited the highest average normalized NOx concentration during the stratification test; or

(B) If each of the individual traverse point NOx concentrations, normalized to 15 percent O_2, is within 5 percent of the mean normalized concentration for all traverse points, then you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid.

[40 CFR 60.335(a)(5)(ii)(A) & (B), Subpart GG]

30.11. The owner or operator shall determine compliance with the nitrogen oxides emission limitation in Condition 30.1 and shall meet the performance test requirements of Condition 25 as follows:

[40 CFR 60.335(b), Subpart GG]
[40 CFR 71.6(a)(3)]

a. For each run of the performance test, the mean nitrogen oxides emission concentration (NO_{Xo}) corrected to 15 percent O_2 shall be corrected to ISO standard conditions using the equation in 40 CFR 60.335(b)(1). Notwithstanding this requirement, use of the ISO correction equation is optional for: Lean premix stationary combustion turbines; units used in association with heat recovery steam generators (HRSG) equipped with duct burners; and units equipped with add-on emission control devices.

[40 CFR 60.335(b)(1), Subpart GG]

(i) Instead of using the equation in 40 CFR 60.335(b)(1), manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in Condition 25 to ISO standard day conditions.

[40 CFR 60.335(a)(6), 60.335(c) & (c)(1), Subpart GG]

b. The 3-run performance test required by Condition 25 must be performed within 5 percent at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. If the turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel. Notwithstanding these requirements, performance testing is not required for any emergency fuel (as defined in 40 CFR 60.331).

c. For a combined cycle turbine system with supplemental heat (duct burner), the owner or operator may elect to measure the turbine NOx emissions after the duct burner rather than directly after the turbine. If the owner or operator elects to use this alternative sampling location, the NOx emission limit in Condition 30.1 for the combustion turbine must still be met.

d. The monitoring system required in Condition 30.3 must be operated concurrently with each EPA Method 20, ASTM D6522-00, or EPA Method 7E run and shall be used to determine the fuel consumption and the steam or water to fuel ratio necessary to comply with the NOx emission limit in Condition 30.1.

[40 CFR 60.335(b)(2) through (4), Subpart GG]

e. Each test run required in Condition 30.11.b shall be no less than 21 minutes.

[40 CFR 71.6(a)(3)(i) & 71.6(c)(6)]

Subpart Db

31. NSPS Subpart Db Applicability. For EU ID 3, comply with the following applicable requirements of NSPS Subpart Db.

[18 AAC 50.040(a)(2)(C), 50.040(j)(4), & 50.326(j)]
[40 CFR 71.6(a)(1)]
[40 CFR 60.40b(a), Subpart Db]

31.1. Only emissions resulting from combustion of fuels in the steam generating unit are subject to NSPS Subpart Db. (The stationary combustion turbine emissions are subject to NSPS Subpart GG.)

[40 CFR 60.40b(i), Subpart Db]
[40 CFR 71.6(a)(1)]

NSPS Subpart Db Standard for NOx

31.2. No owner or operator of an affected facility shall cause to be discharged into the atmosphere from that affected facility any gases that contain NOx (expressed as NO_2) in excess of 0.20 lb/MMBtu.

[40 CFR 60.44b(a)(4) & 60.44b(l), Subpart Db]
[40 CFR 71.6(a)(1)]

31.3. The NOx standard in Condition 31.2 applies at all times including periods of startup, shutdown, or malfunction.

[40 CFR 60.44b(h) & 60.46b(a), Subpart Db]
[40 CFR 71.6(a)(1)]

NSPS Subpart Db Compliance and Performance Test Methods and Procedures for NOx

31.4. To determine compliance with the emissions limits for NOx required by Condition 31.2, the owner or operator of an affected facility shall conduct the performance tests required under Condition 25 as follows:

[40 CFR 60.46b(c), 60.46b(f) & 60.46b(f)(1), Subpart Db]
[40 CFR 71.6(a)(3)]

a. The emissions rate (E) of NOx shall be computed using Equation 1 in 40 CFR 60.46b(f)(1).

b. Method 7E of appendix A of 40 CFR 60 or Method 320 of appendix A of 40 CFR 63 shall be used to determine the NOx concentrations. Method 3A or 3B of appendix A of 40 CFR 60 shall be used to determine O_2 concentration.

c. The owner or operator shall identify and demonstrate to the Administrator's satisfaction suitable methods to determine the average hourly heat input rate to the combustion turbine and the average hourly heat input rate to the affected duct burner.

d. Compliance with the emissions limits under Condition 31.2 is determined by the three-run average (nominal 1-hour runs) for the initial and subsequent performance tests.

[40 CFR 60.46b(f)(1)(i) through (iv), Subpart Db]

e. Testing shall also be conducted in accordance with Section 6.

f. Testing for EU ID 3 shall be conducted when testing for EU ID 1 is conducted as required in Condition 30.5.

(i) If EU ID 3 is not operating when testing under Condition 31.4.f is required, testing shall be conducted within 120 days of the next startup of EU ID 3.

[40 CFR 71.6(a)(3)(i) & 71.6(c)(6)]

Subpart IIII

32. NSPS Subpart IIII Applicability. For EU IDs 4 and 5, comply with the following applicable requirements of NSPS Subpart IIII.

[18 AAC 50.040(a)(2)(OO), 50.040(j)(4), & 50.326(j)]
[40 CFR 71.6(a)(1)]
[40 CFR 60.4200(a), Subpart IIII]

NSPS Subpart IIII Emission Standards

32.1. For EU ID 4, the Permittee must comply with the following emission standards:

[40 CFR 60.4201(a) & 60.4204(b), Subpart IIII]
[40 CFR 71.6(a)(1)]

a. NMHC + NOx: 6.4 g/kW-hr

b. CO: 3.5 g/kW-hr

c. PM: 0.20 g/kW-hr

[40 CFR 89 Subpart B, Table 1]

32.2. For EU ID 5, the Permittee must comply with the following emission standards:

[40 CFR 60.4205(c), Subpart IIII]
[40 CFR 71.6(a)(1)]

a. NMHC + NOx: 4.0 g/kW-hr (3.0 g/hp-hr)

b. CO: 5.0 g/kW-hr (3.7 g/hp-hr)

c. PM: 0.30 g/kW-hr (0.22 g/hp-hr)

[40 CFR 60 Subpart IIII, Table 4]

32.3. Performance tests conducted in-use must meet the NTE standards as indicated in 40 CFR 60.4212.

[40 CFR 60.4204(d) & 60.4205(e), Subpart IIII]
[40 CFR 71.6(a)(3)]

32.4. Owners and operators of stationary compression ignition (CI) internal combustion engines (ICE) must operate and maintain stationary CI ICE that achieve the emission standards as required in Conditions 32.1 and 32.2 over the entire life of the engine.

[40 CFR 60.4206, Subpart IIII]
[40 CFR 71.6(a)(1)]

NSPS Subpart IIII Compliance Requirements

32.5. Owners and operators must use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel.

[40 CFR 60.4207(b), Subpart IIII]
[40 CFR 71.6(a)(1)]

a. Diesel fuel must meet the ULSD per-gallon standards of Conditions 32.5.a(i) and 32.5.a(ii).

[40 CFR 1090.305(a), Subpart D]

(i) *Sulfur standard*. Maximum sulfur content of 15 ppm.

(ii) *Cetane index or aromatic content*. Diesel fuel must meet one of the following standards:

[40 CFR 1090.305(b) & (c), Subpart D]

(A) Minimum cetane index of 40.

(B) Maximum aromatic content of 35 volume percent.

[40 CFR 1090.305(c)(1) & (2), Subpart D]

32.6. Do all of the following, except as permitted under Condition 32.8:

[40 CFR 60.4211(a), Subpart IIII]
[40 CFR 71.6(a)(1)]

a. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

b. Change only those emission-related settings that are permitted by the manufacturer; and

c. Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

[40 CFR 60.4211(a)(1) through (3), Subpart IIII]

32.7. Comply with the emission standards in Conditions 32.1 and 32.2 by purchasing an engine certified to the emission standards in Conditions 32.1 and 32.2. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in Condition 32.8.

[40 CFR 60.4211(c), Subpart IIII]
[40 CFR 71.6(a)(1)]

32.8. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

[40 CFR 60.4211(g), Subpart IIII]
[40 CFR 71.6(a)(3)]

a. For EU ID 5, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

[40 CFR 60.4211(g)(2), Subpart IIII]

b. For EU ID 4, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

[40 CFR 60.4211(g)(3), Subpart IIII]

NSPS Subpart IIII Testing Requirements

32.9. Owners and operators who conduct performance tests pursuant to NSPS Subpart IIII must do so according to paragraphs (a) through (e) of 40 CFR 60.4212.

[40 CFR 60.4212, Subpart IIII]
[40 CFR 71.6(a)(3)]

NSPS Subpart IIII General Requirements

32.10. Table 8 to NSPS Subpart IIII shows which parts of the General Provisions in 40 CFR 60.1 through 60.19 apply to you.

[40 CFR 60.4218, Subpart IIII]
[40 CFR 71.6(a)(1)]

40 CFR Part 61 National Emission Standards for Hazardous Air Pollutants

Subparts A & M

33. Comply with the applicable requirements set forth in 40 CFR 61.145, 61.146, 61.148, 61.150, and 61.152 of Subpart M, and the applicable sections set forth in 40 CFR 61, Subpart A and Appendix A.

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

40 CFR Part 63 National Emission Standards for Hazardous Air Pollutants

Subpart A

34. For EU ID 2, comply with the applicable requirements of 40 CFR 63 Subpart A in accordance with the provisions for applicability of Subpart A in Subpart ZZZZ, Table 8.

[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]
[40 CFR 63.6665 & Table 8, Subpart ZZZZ]

Subpart ZZZZ

35. NESHAP Subpart ZZZZ Applicability. For EU IDs 2, 4, and 5, comply with the following applicable requirements of NESHAP Subpart ZZZZ.

[18 AAC 50.040(c)(23), 50.040(j), & 50.326(j)]
[40 CFR 71.6(a)(1)]
[40 CFR 63.6585(c) & 63.6590(a)(1)(iii), Subpart ZZZZ]

35.1. For EU IDs 4 and 5, meet the requirements of 40 CFR 63 by meeting the requirements of Condition 32. No further requirements apply under 40 CFR 63.

[40 CFR 63.6590(c), Subpart ZZZZ]

NESHAP Subpart ZZZZ Emission Limitations, Operating Limitations, and Other Requirements

35.2. For EU ID 2,

a. Meet the following requirements, except during periods of startup:

[40 CFR 63.6603(a), Subpart ZZZZ]
[40 CFR 71.6(a)(1)]

(i) Change oil and filter every 500 hours of operation or annually, whichever comes first;

(ii) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and

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

[Table 2d, Item 4; NESHAP Subpart ZZZZ]

b. Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in Condition 35.2.a(i).

[Table 2d, NESHAP Subpart ZZZZ]

c. 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 CFR 63.6625(h) & Table 2d, Subpart ZZZZ]
[40 CFR 71.6(a)(1)]

NESHAP Subpart ZZZZ General Requirements

35.3. Comply with the requirements under Condition 35 at all times.

35.4. At all times you must 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 you to make 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 CFR 63.6605(a) & (b), Subpart ZZZZ]
[40 CFR 71.6(a)(1)]

NESHAP Subpart ZZZZ Requirements for Demonstration of Continuous Compliance with Emission Limitations, Operating Limitations, and Other Requirements

35.5. Demonstrate continuous compliance with each requirement under Condition 35.2 by:

[40 CFR 63.6640(a), Subpart ZZZZ]
[40 CFR 71.6(a)(3)]

a. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or

b. 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.

[40 CFR 63.6625(e) & Table 6, Item 9, Subpart ZZZZ]

NESHAP Subpart ZZZZ Reporting Requirements

35.6. Report each instance in which you did not meet the requirements in Table 8 to NESHAP Subpart ZZZZ that apply to you.

[40 CFR 63.6640(e), Subpart ZZZZ]
[40 CFR 71.6(a)(3)(iii)]

35.7. Report all deviations as defined in NESHAP Subpart ZZZZ in the monitoring report required by Condition 70.

[40 CFR 63.6650(f), Subpart ZZZZ]
[40 CFR 71.6(a)(3)(iii)]

NESHAP Subpart ZZZZ Recordkeeping Requirements

35.8. For EU ID 2, keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan.

[40 CFR 63.6655(e), Subpart ZZZZ]
[40 CFR 71.6(a)(3)(ii)]

35.9. Your records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

35.10. As specified in 40 CFR 63.10(b)(1), keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

35.11. 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 40 CFR 63.10(b)(1).

[40 CFR 63.6660(a) through (c), Subpart ZZZZ]
[40 CFR 71.6(a)(3)(ii)]

40 CFR Part 82 Protection of Stratospheric Ozone

Subparts F, G, & H

36. Subpart F – Recycling and Emissions Reduction. Comply with the applicable standards for recycling and emission reduction of refrigerants in 40 CFR 82 Subpart F.

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

37. Subpart G – Significant New Alternatives. Comply with the applicable prohibitions in 40 CFR 82.174.

[18 AAC 50.040(d) & 50.326(j)]

[40 CFR 82.174(b) through (d), Subpart G]

38. Subpart H – Halons Emissions Reduction. Comply with the applicable prohibitions in 40 CFR 82.270.

[18 AAC 50.040(d) & 50.326(j)]
[40 CFR 82.270(b) through (f), Subpart H]

NESHAP Applicability Determination Requirements

39. Determine rule applicability and designation of affected sources under National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories (40 CFR 63) in accordance with the procedures in 40 CFR 63.1(b).

[18 AAC 50.040(c)(1), 50.040(j), & 50.326(j)]

39.1. An owner or operator of a stationary source who is in the relevant source category and who determines that the source is not subject to a relevant standard or other requirement established under 40 CFR 63 must keep a record as specified in 40 CFR 63.10(b)(3).

[40 CFR 71.6(a)(3)(ii)]
[40 CFR 63.1(b)(3), Subpart A]

40. If an existing source becomes affected by an applicable subpart of 40 CFR 63, the Permittee shall comply with such standard by the compliance date established by the Administrator in the applicable subpart, in accordance with 40 CFR 63.6(c).

[18 AAC 50.040(c)(1), 50.040(j), & 50.326(j)]

41. After the effective date of any relevant standard promulgated by the Administrator under 40 CFR 63, 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 CFR 63.9(b).

[18 AAC 50.040(c)(1), 50.040(j), & 50.326(j)]
[40 CFR 71.6(a)(3)(iii)]
[40 CFR 63.5(b)(4), Subpart A]

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 through 403.

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

46. **Assessable Emissions.** For each period from July 1 through the following June 30, 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 Department will assess fees per ton of each air pollutant that the stationary source emits or has the potential to emit in quantities 10 tons per year or greater. The quantity for which fees will be assessed is the lesser of the stationary source's

46.1. potential to emit of 1,059 tpy; or

46.2. projected annual rate of emissions, in tpy, based upon actual annual emissions for the most recent calendar year, or another 12-month period approved in writing by the Department, when demonstrated by credible evidence of actual emissions, based upon the most representative information available from 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)(4), 50.035, 50.326(j)(1) & (3), 50.346(b)(1), 50.410, & 50.420]

47. Assessable Emission Estimates. The Permittee shall comply 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, as determined in Condition 1.2. Submit actual emissions estimates in accordance with the submission instructions on the Department's Standard Permit Conditions web page at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-condition-i-submission-instructions/.

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

47.3. If the stationary source has not commenced construction or operation on or before March 31st, the Permittee may submit to the Department's Anchorage office a waiver letter certified under 18 AAC 50.205 that states the stationary source's actual annual emissions for the previous calendar year are zero tpy and provides estimates for when construction or operation will commence.

47.4. If no estimate or waiver letter 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 in Condition 46.1.

[18 AAC 50.040(j)(4), 50.326(j)(1) & (3), 50.346(b)(1), 50.410, & 50.420]

48. Good Air Pollution Control Practice. The Permittee shall do the following for EU ID 6:

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.

[18 AAC 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), 50.326(j)(3), & 50.346(c)]

50.1. The Permittee shall keep records of:

a. complaints received by the Permittee and complaints received by the Department and conveyed to the Permittee; and

b. any additional precautions that are taken

(i) to address complaints described in Condition 50.1.a or to address the results of Department inspections that found potential problems; and

(ii) to prevent future dust problems.

50.2. The Permittee shall report according to Condition 52.

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 stationary 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 50.040(j)(4), 50.110, 50.326(j)(3) & 50.346(a)]
[40 CFR 71.6(a)(3)]

52.1. **Monitoring**. The Permittee shall monitor as follows:

a. 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.

b. 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 52; or

(ii) the Department notifies the Permittee that it has found a violation of Condition 52.

52.2. **Recordkeeping**. 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.

52.3. **Reporting**. The Permittee shall report as follows:

a. With each operating report under Condition 70, the Permittee shall include a brief summary report which must include the following for the period covered by the report:

(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.

b. 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.

c. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 69.

53. Technology-Based Emission Standard. If an unavoidable emergency, malfunction (as defined in 18 AAC 50.235(d)), or non-routine repair (as defined in 18 AAC 50.990(64)), causes emissions in excess of a technology-based emission standard[9] listed in Conditions 30, 31, 32, or 36 (refrigerants),

53.1. take all reasonable steps to minimize levels of emissions that exceed the standard, and

53.2. report in accordance with Condition 69; 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 CFR 71.6(c)(6)]

[9] 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 CFR 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.

Open Burning Requirements

54. Open Burning. If open burning is conducted at this stationary source, comply with the requirements of 18 AAC 50.065.

54.1. Keep written records to demonstrate compliance with the limitations in this condition and the requirements of 18 AAC 50.065. Submit copies of the records to the Department upon request.

54.2. Include this condition in the annual certification required under Condition 71.

[18 AAC 50.065, 50.040(j), & 50.326(j)]
[40 CFR 71.6(a)(3)]

Section 6. General Source Testing and Monitoring Requirements

55. 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)]

56. Operating Conditions. Unless otherwise specified by an applicable requirement or test method, conduct source testing

[18 AAC 50.220(b)]

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

56.2. 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.

57. Reference Test Methods. Use the following test methods when conducting source testing for compliance with this permit:

57.1. 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 CFR 60.

[18 AAC 50.220(c)(1)(A) & 50.040(a)]
[40 CFR 60]

57.2. Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(b) must be conducted in accordance with the methods and procedures specified in 40 CFR 61.

[18 AAC 50.040(b) & 50.220(c)(1)(B)]
[40 CFR 61]

57.3. Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(c) must be conducted in accordance with the source test methods and procedures specified in 40 CFR 63.

[18 AAC 50.040(c) & 50.220(c)(1)(C)]
[40 CFR 63]

57.4. 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 11 to record data.

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

57.5. 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 CFR 60, Appendix A.

[18 AAC 50.040(a)(3) & 50.220(c)(1)(E)]
[40 CFR 60, Appendix A]

57.6. Source testing for emissions of $PM_{2.5}$ and PM_{10} must be conducted in accordance with the procedures specified in 40 CFR 51, Appendix M, Methods 201 or 201A and 202.

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

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

[18 AAC 50.040(c)(32) & 50.220(c)(2)]
[40 CFR 63, Appendix A, Method 301]

58. 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)]

59. Test Exemption. Compliance with Conditions 61, 62 and 63 is not required for Method 9 Plan (Condition 2.3) or Smoke/No Smoke Plan (Condition 2.4) observations.

[18 AAC 50.345(a)]

60. 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)]

61. Test Plans. Except as provided in Condition 59, 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 55 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 done without resubmitting the plan.

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

62. Test Notification. Except as provided in Condition 59, 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)]

63. **Test Reports.** Except as provided in Condition 59, 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 66. 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)]

64. **Particulate Matter Calculations.** In source testing for compliance with the particulate matter standards in Conditions 5 and 19.2, 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

65. 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 CFR 71.6(a)(3)(ii)(B)]

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

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

a. calibration and maintenance records, original strip chart or computer-based recordings for continuous monitoring instrumentation;

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

c. the date(s) analyses were performed;

d. the company or entity that performed the analyses;

e. the analytical techniques or methods used;

f. the results of such analyses; and,

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

Reporting Requirements

66. 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 emissions 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.

66.1. The Department may accept an electronic signature on an electronic application or other electronic record required by the Department if the person providing the electronic signature

a. uses a security procedure, as defined in AS 09.80.190, that the Department has approved; and

b. accepts or agrees to be bound by an electronic record executed or adopted with that signature.

[18 AAC 50.205, 50.326(j)(3), 50.345(a) & (j), & 50.346(b)(10)]

67. Submittals. Unless otherwise directed by the Department or this permit, the Permittee shall submit to the Department one certified copy of reports, compliance certifications, and/or other submittals required by this permit. The Permittee may submit the documents electronically or by hard copy.

67.1. Submit the certified copy of reports, compliance certifications, and/or other submittals in accordance with the submission instructions on the Department's Standard Permit Conditions web page at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-condition-xvii-submission-instructions/.

[18 AAC 50.326(j)(3) & 50.346(b)(10)]

68. 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)]

69. Excess Emissions and Permit Deviation Reports. The Permittee shall report excess emissions and permit deviations as follows:

69.1. **Excess Emissions Reporting**. Except as provided in Condition 52, the Permittee shall report all emissions or operations that exceed emissions standards or limits of this permit, as follows:

a. In accordance with 18 AAC 50.240(c), as soon as possible, report

(i) excess 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. If a continuous or recurring excess emissions is not corrected within 48 hours of discovery, report within 72 hours of discovery unless the Department provides written permission to report under Condition 69.1.d.

d. Report all other excess emissions not described in Conditions 69.1.a, 69.1.b, and 69.1.c within 30 days after the end of the month during which the excess emissions occurred or as part of the next routine operating report in Condition 70 for excess emissions that occurred during the period covered by the report, whichever is sooner.

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

69.2. **Permit Deviations Reporting**. For permit deviations that are not "excess emissions," as defined under 18 AAC 50.990:

a. Report according to the required deadline for failure to monitor, as specified in other applicable conditions of this permit (Conditions 4.3.b and 8.3.b).

b. Report all other permit deviations within 30 days after the end of the month during which the deviation occurred or as part of the next routine operating report in Condition 70 for permit deviations that occurred during the period covered by the report, whichever is sooner.

[18 AAC 50.326(j)(3) & 50.346(b)(2)]

69.3. **Notification Form**. When reporting either excess emissions or permit deviations, the Permittee shall report using either the Department's online form, which can be found at the Division of Air Quality's Air Online Services (AOS) system webpage http://dec.alaska.gov/applications/air/airtoolsweb using the Permittee Portal option, 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. Submit the report in accordance with the submission instructions on the Department's Standard Permit Conditions webpage found at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-iii-and-iv-submission-instructions/.

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

70. Operating Reports. During the life of this permit[10], the Permittee shall submit to the Department an operating report in accordance with Conditions 66 and 67 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.

70.1. The operating report must include all information required to be in operating reports by other conditions of this permit, for the period covered by the report.

70.2. When excess emissions or permit deviations that occurred during the reporting period are not included with the operating report under Condition 70.1, the Permittee shall identify

a. the date of the excess emissions or permit 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(s) of such actions; or

[10] *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.

70.3. when excess emissions or permit deviation reports have already been submitted under Condition 69 during the period covered by the operating report, the Permittee shall either

a. include a copy of those excess emissions or permit deviation reports with the operating report; or

b. cite the date(s) of those reports.

70.4. The operating report must include, for the period covered by the report, a listing of emissions monitored under Conditions 2.3.e, 2.4.c, and 30.5 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

d. the monitoring result which triggered the additional monitoring.

70.5. **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(b)(6) & 50.326(j)]
[40 CFR 71.6(a)(3)(iii)(A)]

71. Annual Compliance Certification. Each year by March 31, compile and submit to the Department an annual compliance certification report according to Condition 67.

71.1. 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;

71.2. **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.

71.3. In addition, submit a copy of the report directly to US EPA Region 10, ATTN: Air Toxics and Enforcement Section, Mail Stop: 20-C04, 1200 Sixth Avenue, Suite 155, Seattle, WA 98101-3188.

[18 AAC 50.205, 50.345(a) & (j), & 50.326(j)]
[40 CFR 71.6(c)(5)]

72. Emission Inventory Reporting. The Permittee shall submit to the Department reports of actual emissions for the previous calendar year, by emissions unit, of CO, NH_3, NOx, PM_{10}, $PM_{2.5}$, SO_2, VOCs and lead (Pb) and lead compounds, as follows:

72.1. **Every-year inventory**. 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, NOx or SO_2.

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

a. For stationary sources located in Attainment and Unclassifiable Areas:

(i) 0.5 tpy of actual Pb, or

(ii) 1,000 tpy of CO; or

(iii) 100 tpy of SO_2, NH_3, PM_{10}, $PM_{2.5}$, NOx or VOCs.

b. For stationary sources located in Nonattainment Areas:

(i) 0.5 tpy of actual Pb; or

(ii) 1,000 tpy of CO or, when located in a CO nonattainment area, 100 tpy of CO; or

(iii) 100 tpy of SO_2, NH_3, PM_{10}, $PM_{2.5}$, NOx, or VOC; or as specified in Conditions 72.2.b(iv) through 72.2.b(viii);

(iv) 70 tpy of SO_2, NH_3, $PM_{2.5}$, NOx, or VOC in $PM_{2.5}$ serious nonattainment; or

(v) 70 tpy of PM_{10} in PM_{10} serious nonattainment areas; or

(vi) 50 tpy of NOx or VOC in O_3 serious nonattainment areas; or

(vii) 25 tpy of NOx or VOC in O_3 severe nonattainment areas; or

(viii) 10 tpy of NOx or VOC O_3 extreme nonattainment areas.

72.3. For reporting under Condition 72.2, the Permittee shall report the annual emissions and the required data elements under Condition 72.4 every third year for the previous calendar year as scheduled by the EPA.[11]

72.4. For each emissions unit and the stationary source, include in the report the required data elements[12] contained within the form included in the Emission Inventory Instructions available at the Department's Air Online Services (AOS) system on the Point Source Emission Inventory webpage at http://dec.alaska.gov/Applications/Air/airtoolsweb/PointSourceEmissionInventory

72.5. Submit the report in accordance with the submission instructions on the Department's Standard Permit Conditions webpage at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-xv-and-xvi-submission-instructions/.

[18 AAC 50.040(j)(4), 50.326(j)(3), 50.346(b)(8), & 50.200]
[40 C.F.R. 51.15, 51.30(a)(1) & (b)(1) and Appendix A to 40 CFR 51 Subpart A]

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

73.1. **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 70 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.

[18 AAC 50.326(j)(4) & 50.040(j)]
[40 CFR 71.6(c)(6)]

73.2. **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 CFR 71.6(c)(6)]

[11] The calendar years for which reports are required are based on the triennial reporting schedule in 40 CFR 51.30(b)(1), which requires states to report emissions data to the EPA for inventory years 2011, 2014, 2017, 2020, and every 3rd year thereafter. Therefore, the Department requires Permittees to report emissions data for the same inventory years by April 30 of the following year (e.g., triennial emission inventory report for 2020 is due April 30, 2021, triennial emission inventory report for 2023 is due April 30, 2024, etc.).

[12] The required data elements to be reported to the EPA are outlined in 40 CFR 51.15 and Tables 2a and 2b to Appendix A of 40 CFR 51 Subpart A.

Section 8. Permit Changes and Renewal

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

74.1. 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;

74.2. The information shall be submitted to the Air Permits and Toxics Branch, US EPA Region 10, Mail Stop: 15-H13, 1200 Sixth Avenue, Suite 155, Seattle, WA 98101-3188.

74.3. 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

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

[18 AAC 50.040(j)(7), 50.326(a) & (j)(3), & 50.346(b)(7)]
[40 CFR 71.10(d)(1)]

75. 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 CFR 71.6(a)(8)]

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

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

76.2. 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;

76.3. The change shall not qualify for the shield under 40 CFR 71.6(f);

76.4. 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 CFR 71.6(a)(12)]

77. Operational Flexibility. CAA Section 502(b)(10)[13] changes may be made within the permitted stationary source without 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): Provided, that the Permittee provides EPA and the Department with written notification no less than seven days in advance of the proposed change.

77.1. For each such change, the notification required by Condition 77 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.

77.2. The permit shield described in 40 CFR 71.6(f) shall not apply to any change made pursuant to Condition 77.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 CFR 71.6(a)(13)]

78. Permit Renewal. To renew this permit, the Permittee shall submit to the Department[14] 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 must 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 CFR 71.7(b) and 71.5(a)(1)(iii).

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

[13] As defined in 40 CFR 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.

[14] 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

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

79.1. included and specifically identified in the permit; or

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

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

80. 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

80.1. an enforcement action;

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

80.3. denial of an operating permit renewal application.

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

81. 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 CFR 71.6(c)(3) & 71.5(c)(8)(iii)(A)]

82. 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)]

83. 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

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

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

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

83.4. 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)]

84. 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 CFR 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.

85. Nothing in this permit shall alter or affect the following:

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

85.2. 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 CFR 71.6(f)(3)(i) & (ii)]

86. Table B identifies the emissions units that are not subject to the specified requirements at the time of permit issuance. If any of the requirements listed in Table B becomes applicable during the permit term, 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 CFR 71.6(f)(1)(ii)]

Table B - Permit Shields Granted

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
Stationary source-wide	18 AAC 50.025	Stationary source is not in a special protection area.
1	40 CFR 60.13 (c), (d), (g), and (j)	These regulations pertain to COMS and CEMS. COMS and CEM are not required.
1	40 CFR 60.334(b)	Daily sulfur and nitrogen fuel monitoring waived, per EPA alternative monitoring schedule issued 1/14/98.
1	40 CFR 60 Subpart KKKK	EU ID 1 has not been modified or reconstructed after February 18, 2005. Permit shield applies to EU ID 1 as currently installed and is not valid upon modification, reconstruction or replacement.
1	40 CFR 63 Subpart YYYY	Stationary source is not a major source of HAP emissions.
3	40 CFR 60.42b	SO_2 standard does not apply because unit burns only natural gas.
3	40 CFR 60.43b	Particulate and opacity standards do not apply because unit bums only natural gas.
3	40 CFR 60.48b(a)	COM not required because unit is not subject to opacity standard under 40 C.F.R. 60.43b.
3	40 CFR 60.48b(b)	NOx CEM not required in accordance with 40 C.F.R. 60.48b(h).
3	40 CFR 60.49b(e)	Residual oil nitrogen content records not required because EU ID 3 bums only natural gas.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
3	40 CFR 60.49b(f) and (h)(1)	Opacity records and reporting not required because EU ID 3 is not subject to the opacity standard under 40 C.F.R. 60.43b.
3	40 CFR 60.49b(g), (h)(2), (h)(4), and (i)	NOx emissions records and excess emissions reporting not required for duct burners, per NSPS applicability determination PS15.
3	40 CFR 60.49b(j) through (n)	SO_2 reporting requirements do not apply because EU ID 3 is not subject to the Subpart Db SO_2 standard, per 40 CFR 60.42b.
3	40 CFR 60.49b(p) and (q)	Recordkeeping requirements do not apply because EU ID 3 is not an affected facility described in 40 CFR 60.44b(j) or (k).
3	40 CFR 60.49b(r)	Recordkeeping requirements do not apply because EU ID 3 does not bum very low sulfur oil.
3	40 CFR 60.7(c) and (d) 40 CFR 60.13	No CEM performance requirements apply, and no excess emissions and monitoring system performance reports are required, per 40 CFR 60.7(c), because relevant NSPS subparts do not require CMS for the listed units.

[18 AAC 50.326(j)]
[40 CFR 71.6(f)(1)(ii)]

Section 11. 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 at 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, or "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.
- 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 PERMITS PROGRAM - VISIBLE EMISSIONS OBSERVATION FORM

Page No.

Stationary Source Name	Type of Emission Unit
Emission Unit Location	
City / State / Zip	
Phone # (Key Contact)	Stationary Source ID Number
Process Equipment	Operating Mode
Control Equipment	Operating Mode
Describe Emission Point/Location	
Height above ground level / Height relative to observer / Clinometer Reading	
Distance From Observer Start / End	Direction From Observer Start / End
Describe Emissions & Color Start	End
Visible Water Vapor Present? If yes, determine approximate distance from the stack exit to w here the plume w as read — No / Yes	
Point in Plume at Which Opacity Was Determined	
Describe Plume Background	Background Color
Start	Start
End	End
Sky Conditions: Start	End
Wind Speed Start / End	Wind Direction From Start / End
Ambient Temperature	Wet Bulb Temp / RH percent
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	

Observation Date	Start Time	End Time

Min \ Sec	0	15	30	45	Comments
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
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:	
Signature:	Observer's Signature / Date
	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 12. SO_2 Material Balance Calculation

If a fuel shipment contains more than 0.75 percent sulfur 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. = 20.9 – [**vol%$_{dry}O_{2,\ exhaust}$**] = 20.9 – _____ = _____

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 10. 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 analysis under 40 CFR 60, Appendix A-2, Method 3, adopted by reference in 18 AAC 50.040(a), 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}** = 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[15]

Nikiski Combined Cycle Plant — **Stationary Source (Facility) Name**

AQ1190TVP03 — **Air Quality Permit Number.**

Alaska Electric and Energy Cooperative, 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

Note: All "excess emissions" are also "permit deviations." However, use only Section 1 for events that involve excess emissions.

☐ Deviation from Permit Condition – Complete Section 2 and Certify

Note: Use only Section 2 for permit deviations that do not involve excess emissions.

☐ Deviations from COBC[16], CO[17], or Settlement Agreement – Complete Section 2 and Certify

[15] Revised as of November 7, 2020.
[16] Compliance Order By Consent
[17] Compliance Order

Section 1. Excess Emissions

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

(b) **Cause of Event** (Check one that applies. Complete a separate form for each event, as applicable.):

☐ 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. Attach supporting information if necessary.

(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 ☐ Marine Vessel Opacity

☐ Flaring ☐ Other _____

(f) **Corrective Actions:**

Describe actions taken to restore the system to normal operation and to minimize or eliminate chances of a recurrence. Attach supporting information if necessary.

(g) **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 (<u>go to end of form</u>)

Section 2. Permit Deviations

(a) **Permit Deviation Type:** (Check all boxes that apply per event. Complete a separate form for each event, as applicable.)

- ☐ Emissions Unit-Specific Requirements
- ☐ Stationary Source-Wide Specific Requirements
- ☐ Monitoring/Recordkeeping/Reporting Requirements
- ☐ General Source Test Requirements
- ☐ Compliance Certification Requirements
- ☐ Standard/Generally Applicable Requirements
- ☐ Insignificant Emissions Unit Requirements
- ☐ Other: _____

(b) **Emissions Units 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. Attach supporting information if necessary.

(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). Read and sign the certification in the bottom of the form above. (See Condition 66.)*

Submit this report in accordance with the submission instructions on the Department's Standard Permit Conditions web page at

http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-iii-and-iv-submission-instructions/.

If submitted online, report must be submitted by an authorized E-signer for the stationary source (according to Condition 66).

[18 AAC 50.346(b)(3)]

Attachment 1 - 40 CFR 60 Subpart A Summary Report
Gaseous and Opacity Excess Emission and Monitoring System Performance

[Note: This form is referenced in 40 C.F.R. 60.7, Subpart A-General Provisions]

Pollutant *(Circle One)*: SO_2 NO_X TRS H_2S CO Opacity

Reporting period dates: From _____ to _____

Company:
Emission Limitation: _____

Address: _____

Monitor Manufacturer: _____

Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total source operating time in reporting period [1]: _____

Emission Data Summary [1]	**CMS Performance Summary** [1]
1. Duration of excess emissions in reporting period due to:	1. CMS downtime in reporting period due to:
a. Startup/shutdown ..... ____	a. Monitor equipment malfunctions ..... ____
b. Control equipment problems ..... ____	b. Non-Monitor equipment malfunctions ..... ____
c. Process problems ..... ____	c. Quality assurance calibration ..... ____
d. Other known causes ..... ____	d. Other known causes ..... ____
e. Unknown causes ..... ____	e. Unknown causes ..... ____
2. Total duration of excess emissions ..... ____	2. Total CMS Downtime ..... ____
3. Total duration of excess emissions x (100) / [Total source operating time] ..... ____ % [2]	3. [Total CMS Downtime] x (100) / [Total source operating time] ..... ____ % [2]

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 C.F.R. 60.7(c) shall be submitted.

Note: *On a separate page, describe any changes since last quarter in CMS, process or controls.*

I certify that the information contained in this report is true, accurate, and complete.

Name: _____

Signature: _____ *Date*: _____

Title: _____