DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ0164TVP03 Issue Date: Public Comment - March 9, 2016

Expiration Date: Five Years

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

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

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

Citations listed herein are contained within 18 AAC 50 dated September 26, 2015 Register 215. All federal regulation citations are from those sections adopted by reference in this version of regulation in 18 AAC 50.040 unless otherwise specified.

Upon effective date of this permit, Operating Permit AQ0164TVP02, including all revisions, expires.

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

John F. Kuterbach, Manager
Air Permits Program

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Abbreviations/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
C.F.R. .....Code of Federal Regulations
The Act .....Clean Air Act
CO .....Carbon Monoxide
DLN.....dry low NOx combustor
dscf .....Dry standard cubic foot
EPA .....US Environmental Protection Agency
EU.....Emission Unit
FGR .....flue gas recirculation
gr./dscf.....grain per dry standard cubic foot (1 pound = 7000 grains)
GPH.....gallons per hour
HAPs .....Hazardous Air Pollutants [HAPs as defined in AS 46.14.990]
hp.....Horsepower
ID.....Emission Unit Identification Number
LAER.....Lowest Achievable Emission Rate
LNB .....low NOx burner
lb/hr .....pounds per hour
MACT .....Maximum Achievable Control Technology [MACT as defined in 40 C.F.R. 63]
MMBtu/hr.....Million British thermal units per hour
MMscf .....Million standard cubic feet
MR&R .....Monitoring, Recordkeeping, and Reporting
NA .....Not applicable
ng/J .....nanograms per Joule
NESHAPs.....Federal National Emission Standards for Hazardous Air Pollutants [NESHAPs as contained in 40 C.F.R. 61 and 63]
NOx.....Nitrogen Oxides
NSPS .....Federal New Source Performance Standards [NSPS as contained in 40 C.F.R. 60]
O & M .....Operation and Maintenance
O_2 .....Oxygen
ORL.....owner requested limit
PM-10 .....Particulate matter less than or equal to a nominal 10 microns in diameter
PM-2.5.....Particulate matter less than or equal to a nominal 2.5 microns in diameter
ppm .....Parts per million
ppmv, ppmvd .....Parts per million, volumetric dry
ppmw .....Parts per million by weight
psia .....Pounds per Square Inch (absolute)
PSD .....Prevention of Significant Deterioration
PTE .....Potential to Emit
SCR .....selective catalytic reduction
SIC. .....Standard Industrial Classification
SO_2 .....Sulfur dioxide
tpy .....Tons per year
VOC .....volatile organic compound [VOC as defined in 40 C.F.R. 51.100(s)]
VOL .....volatile organic liquid [VOL as defined in 40 C.F.R. 60.111b, Subpart Kb]
vol% .....volume percent
WI .....water injection
wt% .....weight percent

Section 1. Stationary Source Information

Identification

Permittee:		**Chugach Electric Association, Inc.** PO Box 196300 Anchorage, AK 99519-6300
Stationary Source Name:		**International Station Power Plant**
Location:		61º 9.829´ North; 149º 54.403´ West
Physical Address:		5601 Electron Drive Anchorage, AK 99518
Owner/Operator		**Chugach Electric Association, Inc.** PO Box 196300 Anchorage, AK 99519-6300
Permittee's Responsible Official:		Michael B. Brodie P.E., Manager Environmental Engineering PO Box 196300 Anchorage, AK 99519-6300
Designated Agent:		Bradley W. Evans, CEO Chugach Electric Association, Inc. PO Box 196300 Anchorage, AK 99519-6300
Stationary Source and Building Contact:		Michael B. Brodie P.E., Manager Environmental Engineering PO Box 196300 Anchorage, AK 99519-6300 (907) 762-4835 mike_brodie@chugachelectric.com
Fee and Permit Contact:		Michael B. Brodie P.E., Manager Environmental Engineering PO Box 196300 Anchorage, AK 99519-6300 (907) 762-4835 mike_brodie@chugachelectric.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 C.F.R. 71.5(c)(1) & (2)]

Section 2. Emission Unit Inventory and Description

Emission units listed in Table A have specific monitoring, recordkeeping, or reporting conditions in this permit. Except as noted elsewhere in the permit, emission unit descriptions and ratings are given for identification purposes only. The specific unit descriptions do not restrict the Permittee from replacing an emission unit identified in Table A. The Permittee shall comply with all applicable provisions of AS46.14 and 18 AAC 50 when installing a replacement emission unit, including any applicable minor or construction permit requirements.

Table A - Emission Unit Inventory

EU ID	Emission Unit Name	Emission Unit Description	Fuel Type	Rating/Size	Installation or Construction Date
1	Power Unit No. 1	GE Frame 5J Turbine	Natural Gas	230 MMBtu/hr	1965
2	Power Unit No. 2	GE Frame 5J Turbine	Natural Gas	230 MMBtu/hr	1965
3	Power Unit No. 3	Westinghouse Turbine NT-310-GS	Natural Gas	276 MMBtu/hr	1969
5	Combustion Turbine 1	GE LM6000PF-25	Natural Gas	59,900 hp	2013
6	Combustion Turbine 2	GE LM6000PF-25	Natural Gas	59,900 hp	2013
7	Combustion Turbine 3	GE LM6000PF-25	Natural Gas	59,900 hp	2013
8	Combustion Turbine 4	GE LM6000PF-25	Natural Gas	59,900 hp	Not Installed
9	Duct Burner 1	Fossil Power Systems	Natural Gas	140 MMBtu/hr	2013
10	Duct Burner 2	Fossil Power Systems	Natural Gas	140 MMBtu/hr	2013
11	Duct Burner 3	Fossil Power Systems	Natural Gas	140 MMBtu/hr	2013
12	Duct Burner 4	Fossil Power Systems	Natural Gas	140 MMBtu/hr	Not Installed
13	Blackstart Generator Engine	Detroit Diesel 2000 G84	Diesel	1,495 hp	2013
15	Auxiliary Heater	Sigma Thermal	Natural Gas	16.7 MMBtu/hr	2013
16	Building A Standby Generator	Detroit Diesel 10637305	Diesel	175 kW	1984
17	Power Unit No. 1 Blackstart	Cummins V8-300-B1	Diesel	300 hp	1964
18	Power Unit No. 2 Blackstart	Cummins V8-300-B1	Diesel	300 hp	1965
19	Power Unit No. 3 Blackstart	Allis Chalmers 25000	Diesel	420 hp	1969
20	Emergency AC Generator	Cummins NT-310-GS	Diesel	310 hp	1969

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

Section 3. State Requirements

Visible Emissions Standards

1. Industrial Process and Fuel-Burning Equipment Visible Emissions. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EU IDs 1 through 3, 5 through 13, and 15 through 20, listed in Table A to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

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

1.1. For EU ID 13, monitor, record, and report in accordance with Conditions 2 through 4.

1.2. For EU IDs 1 through 3, 5 through 12, and 15, burn only gas as fuel. Monitoring for these emission units shall consist of a statement in each operating report under Condition 63 that each of these emission units fired only gas during the period covered by the report. Report under Condition 62 if any fuel other than gas is burned.

1.3. For each of EU IDs 16 through 20, as long as the unit does not exceed 400 hours of total operation (emergency and non-emergency hours combined) per consecutive 12-month period, monitoring shall consist of an annual compliance certification under Condition 64 with the visible emission standard.

a. For EU IDs 16 through 20, monitor and record the operating hours for each unit. Report the monthly and 12-month rolling total operating hours for each of EU IDs 16 through 20 in the operating report of Condition 63.

b. For any of EU IDs 16 through 20 that exceeds the threshold of Condition 1.3, notify the Department and begin monitoring for the unit(s) in accordance with Conditions 2 through 4 no later than 30 days after the calendar month in which the cumulative hours of operation for the calendar year exceeds the threshold.

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

Visible Emissions Monitoring, Recordkeeping and Reporting

Liquid Fuel-Fired Emission Units

2. Visible Emissions Monitoring. When required by any of Conditions 1.1 or 1.3, or in the event of replacement during the permit term, the Permittee shall observe the exhaust of EU ID 13 and any of EU IDs 16 through 20 that exceeds the threshold of Condition 1.3 for visible emissions using the Method 9 Plan under Condition 2.1 or the Smoke/No-Smoke Plan under Condition 2.2. The Permittee may change visible-emissions plans for an emission unit at any time unless prohibited from doing so by Condition 2.3. The Permittee may elect to continue the visible emissions monitoring schedule in effect from the previous permit at the time a renewal permit is issued, if applicable.

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

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

a. First Method 9 Observation. For any unit replaced during the term of this permit, observe exhaust for 18 minutes within 30 days of startup.

(i) For each existing emission unit that exceeds the operational threshold in Condition 1.3, observe the exhaust for 18 minutes of operations within 30 days after the calendar month during which that threshold has been exceeded, or within 30 days of the unit's next scheduled operations, whichever is later.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(i) take smoke/no smoke observations in accordance with Condition 2.2.

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

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

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

3. Visible Emissions Recordkeeping. When required by any of Conditions 1.1 or 1.3, or in the event of replacement of any of EU IDs 13 and 16 through 20 during the permit term, the Permittee shall keep records as follows:

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

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

a. the observer shall record

(i) the name of the stationary source, emission unit and location, emission unit type, observer's name and affiliation, and the date on the Visible Emissions Observation 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) on the sheet at the time opacity observations are initiated and completed;

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

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

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

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

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

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

a. the date and time of the observation;

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

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

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

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

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

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

4. Visible Emissions Reporting. When required by any of Conditions 1.1 or 1.3, or in the event of replacement of any of EU IDs 13 and 16 through 20 during the permit term, the Permittee shall report visible emissions as follows:

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

4.1. Include in each operating report under Condition 63 for the period covered by the report:

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

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

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

(ii) a summary to include:

(A) number of days observations were made;

(B) highest six-minute average observed; and

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

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

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

4.2. Report under Condition 62:

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

b. any monitoring under Condition 2 that was not performed when required.

Particulate Matter (PM) Emissions Standards

5. Industrial Process and Fuel-Burning Equipment PM. The Permittee shall not cause or allow particulate matter emitted from EU IDs 1 through 3, 5 through 13, and 15 through 20, listed in Table A to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

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

5.1. For EU ID 13, monitor, record and report in accordance with Conditions 6 and 7.

5.2. For EU IDs 1 through 3, 5 through 12, and 15, burn only gas as fuel. Monitoring for these emission units shall consist of a statement in each operating report under Condition 63 that each of these emission units fired only gas during the period covered by the report. Report under Condition 62 if any fuel other than gas is burned.

5.3. For each of EU IDs 16 through 20, as long as the threshold in Condition 1.3 is not exceeded, monitoring shall consist of an annual compliance certification under Condition 64 with the particulate matter emission standard. For any unit(s) that exceed the threshold condition of Condition 1.3, monitor, record and report in accordance with Conditions 6 and 7 for the duration of the permit term.

a. For EU IDs 16 through 20, monitor and report the operating hours for each unit in accordance with Condition 1.3.a.

b. For any of EU IDs 16 through 20 that exceeds the threshold of Condition 1.3, notify the Department and begin monitoring for the unit(s) in accordance with Conditions 6 and 7 no later than 30 days after the calendar month in which the cumulative hours of operation for the calendar year exceeds the threshold.

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

PM Monitoring, Recordkeeping and Reporting

Liquid Fuel-Fired Engines (EU IDs 13 and 16-20)

6. PM Monitoring for Diesel Engines. The Permittee shall conduct source tests on EU ID 13, and on any of EU IDs 16 through 20 that exceeds the threshold of Condition 5.3, to determine the concentration of particulate matter in the exhaust of each emission unit as follows:

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

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

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

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

6.2. Conduct the PM source test or make repairs according to Condition 6.1.b if

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

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

6.3. During each one-hour PM source test run, observe the exhaust for 60 minutes in accordance with Method 9 and calculate the highest average 6-minute opacity that was measured during each one-hour test run. Submit a copy of these observations with the source test report.

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

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

7.1. Report under Condition 62

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

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

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

7.3. In each operating report under Condition 63, include for the period covered by the report:

a. the dates, EU ID(s), and results when an observed 18-minute average was greater than the threshold in Condition 6.2;

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

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

Sulfur Compound Emission Standards

8. Sulfur Compound Emissions. In accordance with 18 AAC 50.055(c), the Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EU IDs 1 through 3, 5 through 13, and 15 through 20 to exceed 500 ppm averaged over three hours.

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

For Fuel Oil[1](EU IDs 13 and 16-20)

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

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

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

(i) test the fuel for sulfur content; or

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

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

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

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

8.4. The Permittee shall report as follows:

a. If SO_2 emissions calculated under Condition 8.3 exceed 500 ppm, the Permittee shall report under Condition 62. When reporting under this condition, include the calculation under Condition 8.3.

b. The Permittee shall include in the report required by Condition 63

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

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

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

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

For Natural Gas[2] (EU IDs 1-3, 5-12, and 15)

8.5. **Monitoring and Recordkeeping**. When firing gaseous fuel, the Permittee shall burn only natural gas as fuel. In addition, the Permittee shall keep readily accessible records for the life of this permit showing that all supply contracts for natural gas used at the stationary source include a maximum specification of 20 grains of sulfur per 100 standard cubic feet of gas.

8.6. **Reporting.** Report as excess emissions, in accordance with Condition 62, if any fuel other than natural gas meeting the standard of Condition 8.5 is burned in any of EU IDs 1 through 3, 5 through 12, and 15.

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

[2] *Natural gas* is defined in 40 C.F.R. 60.41b, effective 7/1/07.

Pre-construction Permit[3] Requirements

Ambient Air Quality Protection Requirements

9. To protect the annual NO_2 and PM-2.5 ambient air quality standard and the NO_2 and PM-10 annual ambient air quality increment, the Permittee shall

9.1. operate EU ID 13 no more than 1,000 hours per rolling 12-month period.

a. Maintain on EU 13 a non-resettable hour meter.

b. Monitor and record the monthly hours of operation for EU ID 13.

c. Before the end of each calendar month calculate and record the total hours of operation for EU ID 13 for the previous month, then calculate the rolling 12-month total hours of operation by adding the previous 11 months.

d. Report in the operating report submitted under Condition 63 the monthly and rolling 12-month hours of operation.

e. Notify the Department under Condition 62 should the consecutive 12-month operating hours exceed the limit in this condition.

10. To protect the 24-hr PM-2.5 ambient air quality standard, the Permittee shall

10.1. For each common exhaust stack for each turbine/duct burner pair that are installed and operated (EU IDs 5 through 8, and EU IDs 9 through 12) construct the exhaust stack to have a release point that equals or exceeds an above grade height of 38.1 meters.

a. Provide as-built drawings of the exhaust stacks or measurements of the release point above grade of the exhaust stacks in the operating report required under Condition 63 submitted for the period in which the turbine/duct burner pair began initial operation.

11. To protect the annual NO_2 ambient air quality standard and increment, the Permittee shall

11.1. For each turbine/duct burner pair (EU IDs 5 through 8, and EU IDs 9 through 12) comply with the NOx Best Available Control Technology (BACT) limit shown in Table B of Condition 12 and comply with Conditions 12.1.

[Conditions 16-18, Construction Permit AQ0164CPT01, 12/20/2010]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

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

BACT Requirements

NOx, PM, PM-10 and PM-2.5 BACT

12. Turbine and Duct Burners BACT Limits. The Permittee shall limit the emissions from the natural gas-fired turbines and the natural gas-fired duct burners to not exceed the values shown in Table B. The Permittee shall implement the BACT controls on the natural gas-fired turbines (EU IDs 5 through 8) and the natural gas-fired duct burners (EU IDs 9 through 12) listed in Table B.

Table B – Natural Gas-Fired Turbine and Duct Burner BACT Requirements

Pollutant	EUs	BACT Control	BACT Emission Limit
NOx	5 – 8	SCR[4] and DLN[5]	5 ppmdv @ 15% O_2 (4-hr average, 70 min commencing after startup of turbine)
	9 – 12	SCR	
Total PM/PM-10/PM-2.5	5 – 8	Good Combustion Practices	0.0066 lb/MMBtu (3-hr average)
	9 – 12	Good Combustion Practices	7.6 lb/MMscf (3-hr average)

12.1. To show compliance with the NOx emission limit set out in Table B, the Permittee shall:

a. Install; certify, maintain, and operate a NOx continuous emissions monitoring system (CEMS) as provided in Condition 28.4. The CEMS must meet the performance specifications set forth in Condition 28.4, and it must meet the calibration and data recover requirements set forth in Condition 28.4.

b. Maintain the NOx and oxygen CEMS sampling probe in each common exhaust stack on each turbine/duct burner pair. Continuously monitor and record the rolling 4-hour average NOx concentration in parts per million, dry basis, by volume (ppmdv) and oxygen concentration measurements. Correct each rolling 4-hour average NOx concentration to 15 percent O_2.

c. Record the start and end times of each start-up period for each turbine. Maintain a log to document date, time and duration.

d. In each operating report under Condition 63, the Permittee shall attach:

(i) the maximum rolling 4-hour average NOx emission concentration corrected to 15 percent O_2 obtained from each CEMS required by Condition 12.1.a,

(ii) the date, time and duration of each start up period for each turbine,

[4] Selective catalytic reduction

[5] Dry low NOx burner

(iii) the date, time, duration, and rolling 4-hour average NOx emission concentrations corrected to 15 percent O_2 for any period exceeding the limit in Table B or a copy of the excess emission report filed under Condition 12.1.e,

e. If the rolling 4-hour average NOx emissions exceed the limit in Table B, the Permittee shall report as an excess emission under Condition 62.

12.2. To show ongoing compliance with the Total PM/PM-10/PM-2.5 limit set out in Table B, the Permittee shall keep records available for inspection, which demonstrate each turbine and duct burner is maintained in good operating condition and in accordance with Condition 41.

12.3. The Permittee shall submit a copy of the manufacturer's emission data with the first operating report submitted under Condition 63, that follows the installation of the first turbine and duct burner, or maintain and report the test results in accordance with Section 7.

[Condition 20, Construction Permit AQ0164CPT01, 12/20/2010]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

13. Black Start Generator BACT Limits. The Permittee shall limit the emissions from the diesel-fired black start generator (EU ID 13) to the values shown in Table C. The Permittee shall implement the BACT controls on EU ID 13 listed in Table C.

Table C – Diesel-Fired Black Start Generator BACT Requirements

Pollutant	EU ID	BACT Control	BACT Emission Limit
NO_X	13	Turbocharger/Aftercooler	6.4 g/kW-hr
Total PM/PM-10/PM-2.5	13	Good Combustion Practices	0.03 g/hp-hr

13.1. To show compliance with the NOx emission limit set out in Table C, the Permittee shall:

a. comply with the initial NOx compliance demonstration requirements in NSPS Subpart IIII, set forth in Condition 27.3.

13.2. To show ongoing compliance with the Total PM/PM-10/PM-2.5 emission limits set out in Table C, the Permittee shall comply with the maintenance and good combustion practices set forth in NSPS Subpart IIII as stated in Condition 27.1.

[Condition 21, Construction Permit AQ0164CPT01, 12/20/2010]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

14. Auxiliary Heater BACT Limits. The Permittee shall limit the emissions from the natural gas-fired auxiliary heater (EU ID 15) to the values shown in Table D. The Permittee shall implement the BACT controls on the natural gas-fired auxiliary heater (EU ID 15) as listed in Table D.

Table D – Natural Gas-Fired Auxiliary Heater BACT Requirements

Pollutant	EU ID	BACT Control	BACT Emission Limit
NOx	15	LNB/FGR[6]	32 lb/MMscf of fuel combusted (3-hr average)
Total PM/PM-10/PM-2.5	15	Good Combustion Practices	7.6 lb/MMscf (3-hr average)

14.1. To show ongoing compliance with the Total PM/PM-10/PM-2.5 limit set out in Table D, the Permittee shall keep records available for inspection, which demonstrate each heater is maintained in good operating condition and in accordance with Condition 41.

[Condition 22, Construction Permit AQ0164CPT01, 12/20/2010]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

Limits to Avoid PSD Modification Requirements

15. CO Limits for Turbine and Duct Burners. The Permittee shall limit the total emissions of CO from EU IDs 5 through 12 to no more than 93 tons per consecutive rolling 12-month period.

15.1. To show compliance with the CO limits in Condition 15, the Permittee shall:

a. Install and operate on each turbine/duct burner pair (EU IDs 5 through 8/EU IDs 9 through 12), a catalytic oxidation system with an efficiency of no less than 90%.

b. Install, certify, maintain, and operate a CO CEMS and conduct applicable CEMS performance tests listed in 40 CFR 60, Appendix B for each common exhaust stack for each turbine/duct burner pair (EU IDs 5 through 8/EU IDs 9 through 12). Certify test results; operate; and maintain air pollutant emissions controls and process monitoring equipment as described in this permit and in documents provided by the Permittee, listed in Section 6.

c. For each CO CEMS required by Condition 15.1, comply with each applicable monitoring system requirement as listed in 40 CFR 60.13, 60.19; 40 CFR 60, Appendix F, Quality Assurance Procedures; and the EPA Quality Assurance Handbook For Air Pollution Measurements, EPA/600 R-94/038b, effective July 1, 1997. The CEMS data assessment reports of 40 CFR 60, Appendix F, shall be prepared for each reporting period of the Operating Report required under Condition 63. Attach the assessment to the Operating Report required under Condition 63.

[6] Low NOx burner/flue gas recirculation

d. Maintain the CO CEMS sampling probe in each common exhaust stack on each turbine/duct burner pair. Continuously monitor and record 3-hour block average CO concentration in ppmdv and oxygen concentration. Calculate average CO concentration for each calendar day in ppmdv, and convert to emission rates as set out in Condition 15.1.g.

e. For each calendar day of operation, either:

(i) Continuously monitor the volume of gas fuel burned (scf_{fuel}/day) by each turbine/duct burner pair; or

(ii) Estimate fuel consumption in scf_{fuel}/day from each turbine/duct burner pair by operating time and design fuel consumption rate.

(iii) Record the volume of gas burned (scf_{fuel}/day) by each turbine/duct burner pair on a daily basis.

f. Determine or provide vendor data documenting the gross calorific value of each fuel burned by each turbine/duct burner pair (MMBtu/scf_{fuel}).

g. For each calendar day,

(i) Calculate the CO concentration in lb/$scf_{exhaust\ gas}$ for each turbine/duct burner pair as

$$C_d = (\text{CO concentration in ppmvd}) (7.27 \times 10^{-8})$$

Where:

C_d = Concentration of dry CO in lb/$scf_{exhaust\ gas}$.

(ii) Calculate the average CO emission rate (lb/MMBtu) for each calendar day, for each turbine/duct burner common exhaust stack using the methodology set out in 40 CFR 60, Appendix A, Method 20, Part 7.5.1 as follows:

$$E = C_d F_d [20.9/(20.9 - \%O_2 dry)]$$

Where:

E = CO Emission Rate in lb/MMBtu

F_d = Fuel Factor of applicable fuel based on a dry basis, $scf_{exhaust\ gas}$/MMBtu from Appendix A, Method 19. (Use fuel factors for the fuel as provided for in 40 CFR 60, Appendix A, Method 19, Table 19-2 or calculate the fuel F-factor using the procedures listed in 40 CFR 60 Appendix A, Method 19, Part 12.3.2.1, Eqn. 19-13.

O_2 = percent oxygen on a dry basis, %

h. For each calendar day, calculate the CO emissions (lb) for each turbine/duct burner pair by multiplying the volume of fuel burned for the day (scf_{fuel}/day) from Condition 15.1.e, times the heating value of the fuel (MMBtu/scf_{fuel}) from Condition 15.1.f, times the daily-average CO emission rate (lb/MMBtu) from Condition 15.1.g.

i. By the end of each calendar month, calculate and record the total CO emissions (tons) for the previous month by summing the daily CO emissions from Condition 15.1.h and dividing by 2000. Calculate the total CO emissions for the previous 12 months (tons).

j. In the Operating Report described in Condition 63, report the monthly emissions from the common exhaust stack of each turbine/duct burner pair. Report the rolling 12-month total CO emissions for each 12 months ending during the reporting period.

k. If the rolling 12-month total CO emissions exceeds the limit in Condition 15 the Permittee shall report as an excess emission under Condition 62.

[Condition 23, Construction Permit AQ0164CPT01, 12/20/2010]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

Insignificant Emission Units

16. For emission units at the stationary source that are insignificant as defined in 18 AAC 50.326(d)-(i) that are not listed in this permit, the following apply:

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

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

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

[18 AAC 50.055(b)(1)]

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

[18 AAC 50.055(c)]

16.4. General MR&R for Insignificant Emission Units

a. The Permittee shall submit the compliance certifications of Condition 64 based on reasonable inquiry;

b. The Permittee shall comply with the requirements of Condition 45;

c. The Permittee shall report in the operating report required by Condition 63 if an emission unit is insignificant because of actual emissions less than the thresholds of 18 AAC 50.326(e) and actual emissions become greater than any of those thresholds; and

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

[18 AAC 50.346(b)(4)]

Section 4. Federal Requirements

Emission Units Subject to Federal NSPS Subpart A

17. NSPS Subpart A Notification. For any affected facility[7] or existing facility[8] regulated under NSPS requirements in 40 C.F.R. 60, the Permittee shall furnish the Department and EPA written or electronic notification of:

[18 AAC 50.035 & 50.040(a)(1)]
[40 C.F.R. 60.7(a) & 60.15(d), Subpart A]

17.1. the date that construction or reconstruction of an affected facility commences postmarked no later than 30 days after such date.

[40 C.F.R. 60.7(a)(1), Subpart A]

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

[40 C.F.R. 60.7(a)(3), Subpart A]

17.3. 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 C.F.R. 60.14(e), 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 C.F.R. 60.7(a)(4), Subpart A]

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

[40 C.F.R. 60.7(a)(5), Subpart A]

17.5. any proposed replacement of an existing facility, for which the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, postmarked as soon as practicable, but no less than 60 days before commencement of replacement, and including the following information:

[40 C.F.R. 60.15(d), Subpart A]

[7] *Affected facility* means, with reference to a stationary source, any apparatus to which a standard applies, as defined in 40 C.F.R. 60.2, effective 7/1/07

[8] *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 C.F.R. 60.2, effective 7/1/07.

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.

18. NSPS Subpart A Startup, Shutdown, & Malfunction Requirements. The Permittee shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of EU IDs 5 through 12 and 15, any malfunction of associated air-pollution control equipment, or any periods during which a continuous monitoring system or monitoring device is inoperative.

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

19. NSPS Subpart A Excess Emissions and Monitoring Systems Performance Report. Except as provided in Condition 20, the Permittee shall submit to the Department and to EPA "excess emissions and monitoring systems performance report" (EEMSP)[9] any time a limit in Condition 28 has been exceeded as described in this condition. Submit the EEMSP reports with the summary reports to EPA semi-annually postmarked by the 30th day following the end of each six month period ending June 30th and December 31st. Written reports of excess emissions shall include the following information:

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

19.1. The magnitude of excess emissions computed in accordance with Condition 25.3, 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 C.F.R. 60.7(c)(1), Subpart A]

19.2. Identification of each period of excess emissions that occurred during startup, shutdown, and malfunctions of EU IDs 5 through 12; the nature and cause of any malfunction (if known), and the corrective action taken or preventative measures adopted.

[40 C.F.R. 60.7(c)(2), Subpart A]

[9] The federal EEMSP report is not the same as the state excess emission report required by Condition 62.

19.3. The date and time identifying each period during which a continuous monitoring system was inoperative except for zero and span checks and the nature of any repairs or adjustments.

[40 C.F.R. 60.7(c)(3), Subpart A]

19.4. A statement indicating whether or not any excess emissions occurred or the continuous monitoring system(s) was inoperative, repaired, or adjusted, at any time during the reporting period.

[40 C.F.R. 60.7(c)(4), Subpart A]

20. NSPS Subpart A Summary Report Form. The Permittee shall submit to the Department and to EPA one "summary report form" in the format shown in Figure 1 of 40 C.F.R. 60.7 (Section 15) for each pollutant monitored for EU IDs 5 through 12. The report shall be submitted semiannually, postmarked by the 30th day following the end of each 6-month period, except when more frequent reporting is specifically required by an applicable subpart, case-by-case basis, or the EPA as follows:

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

20.1. If the total duration of excess emissions for the reporting period is less than one percent of the total operating time for the reporting period and continuous monitoring system downtime for the reporting period is less than five percent of the total operating time for the reporting period, submit a summary report form **unless** the EEMSP report described in Condition 19 is requested, or

[40 C.F.R. 60.7(d)(1), Subpart A]

20.2. If the total duration of excess emissions for the reporting period is one percent or greater of the total operating time for the reporting period or the total continuous monitoring system downtime for the reporting period is five percent or greater of the total time for the reporting period, then submit a summary report form **and the EEMSP** described in Condition 19.

[40 C.F.R. 60.7(d)(2), Subpart A]

21. NSPS Subpart A Performance (Source) Tests. The Permittee shall conduct initial source tests according to Section 6 and as indicated in this condition on any affected facility within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after initial startup, and at such times as may be required by EPA, and shall provide the Department and EPA with a written report of the results of the source test. The Permittee shall:

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

21.1. Conduct source tests and reduce data as set out in 40 C.F.R. 60.8(b), and provide the Department copies of any EPA waivers or approvals of alternative methods.

[40 C.F.R. 60.8(b), Subpart A]

21.2. Conduct source tests under conditions specified by EPA to be based on representative performance of EU IDs 5 through 12.

[40 C.F.R. 60.8(c), Subpart A]

21.3. Notify the Department and EPA at least 30 days in advance of the source test.

[40 C.F.R. 60.8(d), Subpart A]

21.4. Provide adequate sampling ports, safe sampling platform(s), safe access to sampling platform(s), and utilities for sampling and testing equipment.

[40 C.F.R. 60.8(e), Subpart A]

22. NSPS Subpart A Good Air Pollution Control Practice. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate EU IDs 5 through 12 and 15 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 5 through 12 and 15.

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

23. NSPS Subpart A Credible Evidence. For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of the standards set forth in Condition 28, nothing in 40 C.F.R. Part 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether EU IDs 5 through 12 and 15 would have been in compliance with applicable requirements of 40 C.F.R. Part 60 if the appropriate performance or compliance test or procedure had been performed.

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

24. NSPS Subpart A Concealment of Emissions. The Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of a standard set forth in Condition 28. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard that is based on the concentration of a pollutant in the gases discharged to the atmosphere.

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

25. NSPS Subpart A, Monitoring. For the continuous monitoring system required under Condition 28.4, the Permittee shall:

[18 AAC 50.040(a)(1)]
[40 C.F.R. 60.13(a) Subpart A]

25.1. Install and operate the continuous monitoring system prior to a performance test conducted under Condition 21, including completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.

[40 C.F.R. 60.13(b), Subpart A]

25.2. Check the zero (or low level value between zero and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with 40 C.F.R. 60.13(d). The zero and span must, at a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in Appendix B of 40 C.F.R. 60

[40 C.F.R. 60.13(d)(1), Subpart A]

25.3. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under Condition 25.2, keep all continuous monitoring systems in operation continuously and as follows:

[40 C.F.R. 60.13(e) Subpart A]

a. Complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

[40 C.F.R. 60.13(e)(2) Subpart A]

25.4. 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 C.F.R. 60.13(f), Subpart A]

25.5. Reduce data in accordance with:

[40 C.F.R. 60.13(h), Subpart A]

a. Owners or operators of all continuous monitoring systems other than opacity shall reduce all data to 1-hour averages for time periods as defined in 40 C.F.R. 60.2.

[40 C.F.R. 60.13(h)(1), Subpart A]

b. For continuous monitoring systems other than opacity, 1-hour averages shall be computed as required in 40 C.F.R. 60.13(h)(2)(i) through (ix), 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 C.F.R. 60.13(h)(2), Subpart A]

c. All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in the applicable subpart. After conversion into units of the standard, the data may be rounded to the same number of significant digits used in the applicable subpart to specify the emission limit.

[40 C.F.R. 60.13(h)(3), Subpart A]

Subpart Dc - Steam Generating Units

NSPS Subpart Dc Fuel Consumption

26. For EU ID 15 the Permittee shall record the amount of each fuel combusted during each day and maintain the records for a period of two years following the date of such record.

26.1. As an alternative to meeting the requirements of Condition 26, the owner or operator of an affected facility that combusts only natural gas to demonstrate compliance with the SO_2 standard may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

[18 AAC 50.040(a)(2)(D)]
[40 C.F.R. 60.48c(g) & (i), Subpart Dc]

Subpart IIII - Compression Ignition Internal Combustion Engines

27. For EU ID 13, the Permittee shall comply with any applicable requirement in 40 C.F.R. 60 Subpart IIII for stationary compression ignition (CI) internal combustion engine (ICE) whose construction[10], modification[11], or reconstruction[12] commences after July 11, 2005.

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

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

[18 AAC 50.040(a)(2)(OO), (j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.4206, & 60.4211(a), Subpart IIII]

27.2. The Permittee shall comply with the applicable provisions of NSPS Subpart A as specified in Table 8 to Subpart IIII.

[18 AAC 50.040(a)(2)(OO), (j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.4218 & Table 8, Subpart IIII]

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

NSPS Subpart IIII Emission Standards

27.3. The Permittee shall comply with the applicable emission standards for stationary CI engines in 40 C.F.R. 60.4204(b) by purchasing an engine certified to the standards in 40 C.F.R. 60.4201(a) for the same model year and engine power, and installing and configuring it according to the manufacturer's specifications.

[18 AAC 50.040(a)(2)(OO), (j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.4211(c), & 60.4204(b), Subpart IIII]

NSPS Subpart IIII Fuel Requirements

27.4. For EU ID 13, the Permittee shall comply with the following:

[18 AAC 50.040(a)(2)(OO), (j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

a. Beginning October 1, 2010, owners and operators of stationary CI ICE subject to NSPS Subpart IIII with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of Condition 27.4.a(i).

[40 C.F.R. 60.4207(b), Subpart IIII]

(i) All diesel fuel is subject to the following per-gallon standards:

[40 C.F.R. 80.510(b), Subpart I]

(A) A maximum sulfur content of 15 ppm.

[40 C.F.R. 80.510(b)(1)(i), Subpart I]

(B) A minimum cetane index of 40, or

(C) A maximum aromatic content of 35 volume percent.

[40 C.F.R. 80.510(b)(2)(i) & (ii), Subpart I]

Subpart KKKK - Turbines

28. For EU IDs 5 through 12, the Permittee shall comply with all applicable requirements of NSPS Subpart KKKK for stationary combustion turbines that commenced construction, modification, or reconstruction after February 18, 2005.

[18 AAC 50.040(a)(2)(QQ), (j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.4300 & 60.4305, Subpart KKKK]

NSPS Subpart KKKK Emission Standards

28.1. For EU IDs 5 through 12, the Permittee must meet the following NOx emission limits:

[18 AAC 50.040(a)(2)(QQ), (j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.4320(a), Subpart KKKK]

a. 25 ppm at 15 percent O_2 or 150 nanograms per Joule (ng/J) of useful output (1.2 pounds per megawatt-hour (lb/MWh)), or

b. 96 ppm at 15 percent O_2 or 590 ng/J of useful output (4.7 lb/MWh) when operating at less than 75 percent of peak load, or operating at ambient temperatures less than 0 °F.

[Table 1, Subpart KKKK]

28.2. For EU IDs 5 through 12, the Permittee must comply with either Condition 28.2.aor 28.2.b

[18 AAC 50.040(a)(2)(QQ), (j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.4330(a), Subpart KKKK]

a. You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO_2 in excess of 110 nanograms per Joule (ng/J) (0.90 pounds per megawatt (lb/MWh)) gross output, or

b. You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO_2 /J (0.060 lb SO_2 /MMBtu) heat input.

[40 C.F.R. 60.4330(a)(1) & (2), Subpart KKKK]

NSPS Subpart KKKK General Compliance Requirements

28.3. For EU IDs 5 through 12, the Permittee shall comply with the following:

[18 AAC 50.040(a)(2)(QQ), (j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1) & (a)(3)(i) & (ii)]

a. You must operate and maintain your stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.

[40 C.F.R. 60.4333(a), Subpart KKKK]

NSPS Subpart KKKK Monitoring Requirements for NO_X Emissions

28.4. For EU IDs 5 through 12, the Permittee shall comply with the following:

[18 AAC 50.040(a)(2)(QQ), (j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(i)]
[40 C.F.R. 60.4340(b), Subpart KKKK]

a. Install, certify, maintain, and operate a continuous emissions monitoring system (CEMS) consisting of a NOx monitor and a diluent gas (oxygen (O_2) or carbon dioxide (CO_2)) monitor, to determine the hourly NOx emission rate in parts per million (ppm) or pounds per million British thermal units (lb/MMBtu).

b. For units complying with the output-based standard, install, calibrate, maintain, and operate a fuel flow meter (or flow meters) to continuously measure the heat input to the affected unit; and

c. For units complying with the output-based standard, install, calibrate, maintain, and operate a watt meter (or meters) to continuously measure the gross electrical output of the unit in megawatt-hours; and

[40 C.F.R. 60.4335(b)(1) through (3), Subpart KKKK]

d. Each NOx diluent CEMS must be installed and certified according to Performance Specification 2 (PS 2) in appendix B of 40 C.F.R. 60, except the 7-day calibration drift is based on unit operating days, not calendar days. With state approval, Procedure 1 in Appendix F of 40 C.F.R. 60 is not required. Alternatively, a NOx diluent CEMS that is installed and certified according to Appendix A of Part 75 of 40 C.F.R. 60 Subpart KKKK is acceptable for use. The relative accuracy test audit (RATA) of the CEMS shall be performed on a lb/MMBtu basis.

e. As specified in 40 C.F.R. 60.13(e)(2), during each full unit operating hour, both the NOx monitor and the diluent monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained with each monitor for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required for each monitor to validate the NOx emission rate for the hour.

f. Each fuel flow meter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, with state approval, fuel flowmeters that meet the installation, certification, and quality assurance requirements of appendix D to 40 C.F.R. part 75 are acceptable for use under NSPS Subpart KKKK.

g. Each watt meter, steam flow meter, and each pressure or temperature measurement device shall be installed, calibrated, maintained, and operated according to manufacturer's instructions.

h. The owner or operator shall develop and keep on-site a quality assurance plan for all of the continuous monitoring equipment described in Conditions 28.4.d, 28.4.f and 28.4.g. For the CEMS and fuel flow meters, the owner or operator may, with state approval, satisfy the requirements of this paragraph by implementing the quality assurance program and plan described in section 1 of appendix B to 40 C.F.R. Part 75.

[40 C.F.R. 60.4345 (a) through (e), Subpart KKKK]

i. For purposes of identifying excess emissions:

[40 C.F.R. 60.4350, Subpart KKKK]

(i) All CEMS data shall be reduced to hourly averages as specified in 40 C.F.R. 60.13(h).

(ii) For each unit operating hour in which a valid hourly average, as described in Condition 28.4.e, is obtained for both NOx and diluent monitors, the data acquisition and handling system must calculate and record the hourly NOx emission rate in units of ppm or lb/MMBtu, using the appropriate equation from method 19 in Appendix A of Part 60. For any hour in which the hourly average O_2 concentration exceeds 19.0 percent O_2 (or the hourly average CO_2 concentration is less than 1.0 percent CO_2), a diluent cap value of 19.0 percent O_2 or 1.0 percent CO_2(as applicable) may be used in the emission calculations.

(iii) Correction of measured NOx concentrations to 15 percent O_2 is not allowed.

[40 C.F.R. 60.4350(a) through (c), Subpart KKKK]

(iv) All required fuel flow rate, steam flow rate, temperature, pressure, and megawatt data must be reduced to hourly averages.

[40 C.F.R. 60.4350(e), Subpart KKKK]

(v) Calculate the hourly average NOx emission rates, in units of the emission limits under Condition 28.1, using ppm for units complying with the concentration limit or equations 1 through 3 under 40 C.F.R. 60.4350(f) for units complying with the output based standard.

[40 C.F.R. 60.4350(f) & (f)(2), Subpart KKKK]

(vi) For combined cycle and combined heat and power units with heat recovery, use the calculated hourly average emission rates from Condition 28.4.i(v) to assess excess emissions on a 30 unit operating day rolling average basis, as described in Condition 28.6.b(i).

[40 C.F.R. 60.4350(h), Subpart KKKK]

NSPS Subpart KKKK Monitoring Requirements for SO_2 Emissions

28.5. For EU IDs 6 and 7, the Permittee shall comply with the following:

[18 AAC 50.040(a)(2)(QQ), (j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(i)]

a. You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO2/J (0.060 lb SO2/MMBtu) heat input for units located in continental areas. You must use one of the following sources of information to make the required demonstration:

[40 C.F.R. 60.4365, Subpart KKKK]

(i) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet, has potential sulfur emissions of less than less than 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input for continental areas; or

(ii) Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input for continental areas. 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 C.F.R. part 75 is required.

[40 C.F.R. 60.4365(a) & (b), Subpart KKKK]

NSPS Subpart KKKK Reporting Requirements

28.6. For EU IDs 5 through 12, the Permittee shall comply with the following:

[18 AAC 50.040(a)(2)(QQ), (j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii)]

a. For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur all reports required under 40 C.F.R. 60.7(c), report in accordance with Conditions 19 and 20. Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.

[40 C.F.R. 60.4375(a) and 60.4395, Subpart KKKK]

b. For the purpose of reports required under Condition 19, periods of excess emissions and monitor downtime that must be reported are defined as follows:

[40 C.F.R. 60.4380, Subpart KKKK]

(i) An excess emission for any unit is when the 4-hour or 30-day rolling average NOx emission rate exceeds the applicable emission limit in Condition 28.1. For the purposes of this sub-condition, a "4-hour rolling average NOx emission rate" is the arithmetic average of the average NOx emission rate in ppm or ng/J (lb/MWh) measured by the continuous emission monitoring equipment for a given hour and the three operating hour average NOx emission rates immediately preceding that operating hour. Calculate the rolling average if a valid NOx emission rate is obtained for at least 3 of the 4 hours. For the purposes of this condition, a "30-day rolling average NOx emission rate" is the arithmetic average of all hourly NOx emission data in ppm or ng/J (lb/MWh) measured by the continuous emission monitoring equipment for a given day and the twenty-nine unit operating days immediately preceding that unit operating day. A new 30-day average is calculated for each operating day as the average of all hourly NOx emissions rates for the preceding 30 unit operating days if a valid NOx emission rate is obtained for at least 75 percent of all operating hours.

(ii) A period of monitor downtime is any unit operating hour in which the data for any of the following parameters are either missing or invalid: NOx concentration, CO_2 or O_2 concentration, fuel flow rate, steam flow rate, steam temperature, steam pressure, or megawatts. The steam flow rate, steam temperature, and steam pressure are only required if you will use this information for compliance purposes.

(iii) For operating periods during which multiple emissions standards apply, the applicable standard is the average of the applicable standards during each hour. For hours with multiple emissions standards, the applicable limit for that hour is determined based on the condition that corresponded to the highest emissions standard.

Emission Units Subject to Federal NESHAP Subpart A

29. NESHAP Subpart A Requirements. The Permittee shall comply with the applicable requirements of 40 C.F.R. 63 Subpart A in accordance with the provisions for applicability of Subpart A in Table 8 to NESHAP Subpart ZZZZ.

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

Subpart ZZZZ – Reciprocating Internal Combustion Engines

30. For EU IDs 13 and 16 through 20, the Permittee shall comply with all applicable requirements of NESHAP Subpart ZZZZ for stationary reciprocating internal combustion engines (RICE) located at an area source of hazardous air pollutant (HAP) emissions.

[18 AAC 50.040(c)(23), (j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.6585, 63.6590, & 63.6595(a), Subpart ZZZZ]

30.1. For EU ID 13, the Permittee must meet the requirements of 40 C.F.R. Part 63 by meeting the requirements of 40 C.F.R. Part 60 Subpart IIII for compression ignition engines. No further requirements apply for EU ID 13 under 40 C.F.R. Part 63.

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

30.2. For EU IDs 16 through 20, the Permittee must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013.

[18 AAC 50.040(c)(23), (j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.6595(a) & (a)(1), Subpart ZZZZ]

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

30.3. For EU ID 16, the Permittee shall comply with the following:

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

a. You must meet the following requirements, except during periods of startup:

(i) Change oil and filter every 1,000 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;

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

[40 C.F.R. 63.6603(a) & (b)(2), & Table 2d, Item 1, Subpart ZZZZ]

30.4. For EU IDs 17 through 20, the Permittee shall comply with the following:

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

a. You must meet the following requirements, except during periods of startup:

(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;

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

[40 C.F.R. 63.6603(a), & Table 2d, Item 4, Subpart ZZZZ]

30.5. For EU IDs 16 through 20, 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.

[18 AAC 50.040(c)(23)), (j)(4) & 50.326(j)]
[40 C.F.R. 63.6625(h) and Table 2d, Subpart ZZZZ]

30.6. Sources have the option to utilize an oil analysis program as described in Condition 30.10.b in order to extend the specified oil change requirement in Conditions 30.3.a(i) and 30.4.a(i).

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

30.7. For EU IDs 17 through 20, the Permittee shall comply with the following:

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

a. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Conditions 30.3.a and 30.4.a, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[Table 2d, Item 4, Subpart ZZZZ]

NESHAP Subpart ZZZZ Fuel Requirements

30.8. For EU IDs 17 through 20, the Permittee shall comply with the following:

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

a. Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in Conditions 30.13.a(ii)(B) and 30.13.a(ii)(C) or that operates for the purpose specified in Condition 30.13.a(iii)(B), you must use diesel fuel that meets the requirements in 40 C.F.R. 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

[40 C.F.R. 63.6604(b), Subpart ZZZZ]

NESHAP Subpart ZZZZ General Requirements

30.9. For EU IDs 16 through 20, the Permittee shall comply with the following:

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

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

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

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

NESHAP Subpart ZZZZ Monitoring, Installation, Collection, Operation, and Maintenance Requirements

30.10. For EU IDs 16 through 20, the Permittee shall comply with the following:

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

a. You must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop 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 C.F.R. 63.6625(e) & (e)(3), Subpart ZZZZ]

b. You have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Conditions 30.3.a(i)30.4.a and 30.4.a(i). The oil analysis must be performed at the same frequency specified for changing the oil in Conditions 30.3.a(i)30.4.a and 30.4.a(i). The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the Permittee is not required to change the oil. If any of the limits are exceeded, the Permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the Permittee must change the oil within 2 business days or before commencing operation, whichever is later. The Permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[18 AAC 50.040(c)(23), (j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.6625(i), Subpart ZZZZ]

30.11. For EU IDs 17 through 20, the Permittee shall comply with the following:

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

a. If you own or operate an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

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

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

30.12. For EU IDs 16 through 20, the Permittee shall comply with the following:

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

a. You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Conditions30.3 and 30.4 according to methods specified in Condition 30.12.a(i) or 30.12.a(ii).

[40 C.F.R. 63.6640(a), Subpart ZZZZ]

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

(ii) 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.

[Table 6, Item 9, Subpart ZZZZ]

b. You must also report each instance in which you did not meet the requirements in Table 8 to NESHAP Subpart ZZZZ that apply to you.

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

30.13. For EU IDs 17 through 20, the Permittee shall comply with the following:

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

a. If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in Conditions 30.13.a(i) through 30.13.a(iii). In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in Conditions 30.13.a(i) through 30.13.a(iii), is prohibited. If you do not operate the engine according to the requirements in Conditions 30.13.a(i) through 30.13.a(iii), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

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

(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

[40 C.F.R. 63.6640(f)(1), Subpart ZZZZ]

(ii) You may operate your emergency stationary RICE for any combination of the purposes specified in Conditions 30.13.a(ii)(A) through 30.13.a(ii)(C) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition 30.13.a(iii) counts as part of the 100 hours per calendar year allowed by this condition.

[40 C.F.R. 63.6640(f)(2), Subpart ZZZZ]

(A) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(B) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 C.F.R. 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(C) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

[40 C.F.R. 63.6640(f)(2)(i) through (iii), Subpart ZZZZ]

(iii) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in Condition 30.13.a(ii). Except as provided in Conditions 30.13.a(iii)(A) and 30.13.a(iii)(B), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 C.F.R. 63.6640(f)(4), Subpart ZZZZ]

(A) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

[40 C.F.R. 63.6640(f)(4)(i), Subpart ZZZZ]

(B) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

[40 C.F.R. 63.6640(f)(4)(ii), Subpart ZZZZ]

(1) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(2) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(3) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(4) The power is provided only to the facility itself or to support the local transmission and distribution system.

(5) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[40 C.F.R. 63.6640(f)(4)(ii)(A) through (E), Subpart ZZZZ]

NESHAP Subpart ZZZZ Reporting Requirements

30.14. For EU IDs 16 through 20, the Permittee must report all deviations as defined in NESHAP Subpart ZZZZ in the semiannual monitoring report required by Condition 63.

[18 AAC 50.040(c)(23), (j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.6650(f), Subpart ZZZZ]

NESHAP Subpart ZZZZ Recordkeeping Requirements

30.15. For EU IDs 16 through 20, the Permittee shall comply with the following:

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

a. You must 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 C.F.R. 63.6655(e) & (e)(3), Subpart ZZZZ]

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

[40 C.F.R. 63.6660(a), Subpart ZZZZ]

c. As specified in 40 C.F.R. 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 C.F.R. 63.6660(b), Subpart ZZZZ]

d. You must 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 C.F.R. 63.10(b)(1).

[40 C.F.R. 63.6660(c), Subpart ZZZZ]

30.16. For EU IDs 17 through 20, the Permittee shall comply with the following:

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

a. You must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in Condition 30.13.a(ii)(B) or 30.13.a(ii)(C) or 30.13.a(iii)(B), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

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

General Federal Requirements

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

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

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

Subpart G – Significant New Alternatives Policy

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

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

Subpart H – Halon Emissions Reduction

32.2. The Permittee shall comply with the applicable prohibitions set out in 40 C.F.R. 82.270 (Protection of Stratospheric Ozone Subpart H – Halon Emission Reduction).

[18 AAC 50.040(d)]
[40 C.F.R. 82.270(b) through (f), Subpart H]

NESHAPs Applicability Determinations

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

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

34. NSPS and NESHAP Reports. The Permittee shall:

34.1. **Reports:** Attach to the operating report required by Condition 63 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, unless previously submitted to the Department; and

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

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

Section 5. General Conditions

Standard Terms and Conditions

35. 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)]

36. 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)]

37. 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)]

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

[18 AAC 50.326(j)(1), 50.400, 50.403, & 50.405]
[AS 37.10.052(b) & AS 46.14.240]

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

39.1. the stationary source's assessable potential to emit of 1,668 tpy; or

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

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

b. material balance calculations;

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

d. other methods and calculations approved by the Department.

[18 AAC 50.040(j)(3), 50.035, 50.326(j)(1), 50.346(b)(1), 50.410, & 50.420]
[40 C.F.R. 71.5(c)(3)(ii)]

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

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

40.2. if no estimate is submitted on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit set forth in Condition 39.1.

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

41. Good Air Pollution Control Practice. The Permittee shall do the following for EU IDs 1 through 3:

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

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

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

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

42. 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)]

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

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

43.1. 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 43.1 or to address the results of Department inspections that found potential problems; and

(ii) to prevent future dust problems.

43.2. The Permittee shall report according to Condition 45.

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

[18 AAC 50.055(g)]

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

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

45.1. Monitoring, Recordkeeping, and Reporting for Condition 45:

a. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 62.

b. As soon as practicable after becoming aware of a complaint that is attributable to emissions from the stationary source, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of Condition 45.

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

a. after an investigation because of a complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of Condition 45; or

b. the Department notifies the Permittee that it has found a violation of Condition 45.

45.3. The Permittee shall keep records of

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

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

c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 45; and

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

45.4. With each operating report under Condition 63, the Permittee shall include a brief summary report which must include

a. the number of complaints received;

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

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

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

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

46. Technology-Based Emission Standard. If an unavoidable emergency, malfunction, or non-routine repair, as defined in 18 AAC 50.235(d), causes emissions in excess of a technology-based emission standard[13] listed in Conditions 12, 13, 14, and 28, the Permittee shall take all reasonable steps to minimize levels of emissions that exceed the standard. Excess emissions reporting under Condition 62 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 62.

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

Open Burning Requirements

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

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

47.2. Compliance with this condition shall be an annual certification conducted under Condition 64.

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

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

Section 6. General Source Testing and Monitoring Requirements

48. 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)]

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

[18 AAC 50.220(b)]

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

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

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

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

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

50.2. 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 C.F.R. 61.

[18 AAC 50.040(b) & 50.220(c)(1)(B)]
[40 C.F.R. 61]

50.3. 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 C.F.R. 63.

[18 AAC 50.040(c) & 50.220(c)(1)(C)]
[40 C.F.R. 63]

50.4. 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 and may use the form in Section 11 to record data.

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

50.5. 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 C.F.R. 60, Appendix A.

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

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

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

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

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

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

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

52. Test Exemption. The Permittee is not required to comply with Conditions 54, 55 and 56 when the exhaust is observed for visible emissions by Method 9 or smoke/no smoke observations.

[18 AAC 50.345(a)]

53. 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)]

54. Test Plans. Except as provided in Condition 52, before conducting any source tests, the Permittee shall submit a plan to the Department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance and must specify how the emission unit will operate during the test and how the Permittee will document that operation. The Permittee shall submit a complete plan within 60 days after receiving a request under Condition 48 and at least 30 days before the scheduled date of any test unless the Department agrees in writing to some other time period. Retesting may be performed without resubmitting the plan.

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

55. Test Notification. Except as provided in Condition 52, 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)]

56. Test Reports. Except as provided in Condition 52, within 60 days after completing a source test, the Permittee shall submit 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 59. 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)]

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

[18 AAC 50.220(f)]

Section 7. General Recordkeeping and Reporting Requirements

Recordkeeping Requirements

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

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

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

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

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

b. the date(s) analyses were performed;

c. the company or entity that performed the analyses;

d. the analytical techniques or methods used;

e. the results of such analyses; and,

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

Reporting Requirements

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

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

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

b. the person providing the electronic signature has made an agreement, with the certifying authority described in Condition 59.1.a, that the person accepts or agrees to be bound by an electronic record executed or adopted with that signature.

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

60. Submittals. Unless otherwise directed by the Department or this permit, the Permittee shall send reports, compliance certifications, and other submittals required by this permit to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician. The Permittee may, upon consultation with the Compliance Technician regarding software compatibility, provide electronic copies of data reports, emission source test reports, or other records under a cover letter certified in accordance with Condition 59.

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

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

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

62. Excess Emissions and Permit Deviation Reports.

62.1. Except as provided in Condition 45, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

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

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

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

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

c. report all other excess emissions and permit deviations

(i) within 30 days of the end of the month in which the excess emissions or deviation occurred, except as provided in Conditions 62.1.c(ii) and 62.1.c(iii);

(ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the Department provides written permission to report under Condition 62.1.c(i); and

(iii) for failure to monitor, as required in other applicable conditions of this permit.

62.2. When reporting excess emissions or permit deviations, the Permittee shall report using either the Department's on-line form, which can be found at http://www.dec.state.ak.us/air/ap/site.htm, or if the Permittee prefers, the form contained in Section 12 of this permit. The Permittee must provide all information called for by the form that is used.

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

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

63. Operating Reports. During the life of this permit[14], the Permittee shall submit to the Department an original and one copy of an operating report by August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year.

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

63.2. If excess emissions or permit deviations that occurred during the reporting period are not reported under Condition 63.1,

a. The Permittee shall identify

(i) the date of the deviation;

(ii) the equipment involved;

(iii) the permit condition affected;

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

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

b. When excess emissions or permit deviations have already been reported under Condition 62 the Permittee shall cite the date or dates of those reports.

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

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

64. Annual Compliance Certification. Each year by March 31, the Permittee shall compile and submit to the Department an annual compliance certification report[15].

[14] *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.
[15] See Condition 64.2 for clarification on the number of reports required.

64.1. 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;

64.2. **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.

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

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

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

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

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

b. equal or exceed 2500 tpy of CO, NOx or SO_2.

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

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

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

65.3. The Permittee shall commence reporting in 2012 for the calendar year of 2011, 2015 for calendar year 2014, etc.

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

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

Section 8. Permit Changes and Renewal

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

66.1. 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[16];

66.2. The information shall be submitted to the same address as in Condition 64.3.

66.3. 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

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

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

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

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

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

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

68.2. 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;

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

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

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

[16] The documents required in Condition 66.1 are submitted to the Department's Anchorage office. The current address for the Anchorage office is: ADEC, 619 East Ship Creek, Suite 249, Anchorage, AK 99501.

69. Operational Flexibility. The Permittee may make Section 502(b)(10)[17] changes within the permitted stationary source without requiring a permit revision if the changes are not modifications under any provision of Title I of the Act and the changes do not exceed the emissions allowable under this permit (whether expressed therein as a rate of emissions or in terms of total emissions):

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

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

69.3. The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made pursuant to Condition 69.

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

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

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

[17] As defined in 40 C.F.R. 71.2, 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.

Section 9. Compliance Requirements

General Compliance Requirements

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

71.1. included and specifically identified in the permit; or

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

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

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

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

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

a. an enforcement action;

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

c. denial of an operating permit renewal application.

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

73. 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)]

74. 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

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

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

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

74.4. 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)]

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

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

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.

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

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

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

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

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

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

Table E - Permit Shields Granted

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
1-3	40 C.F.R. 60 Subpart GG	EU IDs 1, 2, and 3 were constructed before the October 3, 1977 applicability date under 40 C.F.R. 60.330(b), and have not been modified or reconstructed after this date. The applicability of this shield ends if and when any of EU IDs 1, 2, or 3 are modified or reconstructed.
1-3	40 C.F.R. 60 Subpart KKKK	EU IDs 1, 2, and 3 were constructed before the February 18, 2005 applicability date under 40 C.F.R. 60.4305(a), and have not been modified or reconstructed after this date. The applicability of this shield ends if and when any of EU IDs 1, 2, or 3 are modified or reconstructed.
1-3 and 5-8	40 C.F.R. 63 Subpart YYYY	The stationary source is not a HAP major source.
5-8	40 C.F.R. 60 Subpart GG	Per 40 C.F.R. 60.4305(b), turbines regulated under 40 C.F.R. 60 Subpart KKKK are exempt from the requirements of Subpart GG.
5-8	40 C.F.R. 60.4335(a)	No steam or water injection is used for NOx control.
5-8	40 C.F.R. 60.4355	Parameter monitoring is not required.
5-8	40 C.F.R. 60.4370 and 60.4385	Sulfur content monitoring is exempted by maintaining a valid document specifying that the maximum total sulfur content is 20 grains of sulfur or less per 100 standard cubic feet.
9-12	40 C.F.R. 60 Subpart Da	Each of EU IDs 9-12 has a heat input ≤ 250 MMBtu per hour and is therefore exempt from this subpart per 40 C.F.R. 60.40Da(e)(1)

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
13	40 C.F.R. 60.4208(e) and (h)	EU ID 13 is a 2010 model year CI ICE that was installed in May 2012.
13	40 C.F.R. 60.4209(b)	EU ID 13 is not equipped with a diesel particulate filter.
13	40 C.F.R. 60.4214(a)(1) and (2)	EU ID 13 is a 2010 model year CI ICE, is less than 2,237 kW, and has a displacement < 10 liters per cylinder. Reporting is required for EU ID 13 per Condition 37 of AQ0164CPT01.
13	40 C.F.R. 60.4216	The source is accessible by the FAHS.
13	40 C.F.R. 60.4217	EU ID 13 uses diesel fuel.
15	40 C.F.R. 60.42c, 60.44c, and 60.46c	No NSPS Subpart Dc SO_2 standard is applicable to natural gas-fired heaters. EU ID 15 is subject to the state SO_2 emission standard under 18 AAC 50.055(c).
15	40 C.F.R. 60.43c, 60.45c, and 60.47c	No NSPS Subpart Dc particulate matter (PM) standard is applicable to natural gas-fired heaters. EU ID 15 is subject to the BACT PM limit and state PM emission standard under 18 AAC 50.055(b)(1).
16-20	40 C.F.R. 60 Subpart IIII	EU IDs 16-20 were constructed before the July 11, 2005 applicability date under 40 C.F.R. 60.4200, and have not been modified or reconstructed after this date. The applicability of this shield ends if and when any of EU IDs 16-20 are modified or reconstructed.
16-20	40 C.F.R. 63.6600, 63.6601, 63.6602, 63.6610, and 63.6611	The stationary source is not a HAP major source.
16-20	40 C.F.R. 63.6612, 63.6615, 63.6620, 63.6630, 63.6635, and 63.6645	EU IDs 17-19 are black start engines and EU IDs 16 and 20 are less than 300 hp.
Stationary source-wide	40 CFR 60 Subparts D, Db, E, Ea, Eb, Ec, F, G, Ga, H, I, J, Ja, K, Ka, Kb, L, M, N, Na, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AAa, BB, CC, DD, EE, HH, KK, LL, MM, NN, PP, QQ, RR, SS, TT, UU, VV, VVa, WW, XX, AAA, BBB, DDD, FFF, GGG, GGGa, HHH, III, JJJ, KKK, LLL, NNN, OOO, PPP, QQQ, RRR, SSS, TTT, UUU, VVV, WWW, AAAA, CCCC, EEEE, JJJJ, LLLL, MMMM, OOOO	Not an affected stationary source, operation, or industry.
Stationary source-wide	40 CFR 61 Subpart B, C, D, E, F, H, I, J, K, L, N, O, P, Q, R, T, V, W, Y, BB, and FF	No affected facilities within the stationary source.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
Stationary source-wide	40 C.F.R. 63 Subpart B, F, G, H, I, J, L, M, N, O, Q, R, S, T, U, W, X, Y, AA, BB, CC, DD, EE, GG, HH, II, JJ, KK, LL, MM, OO, PP, QQ, RR, SS, TT, UU, VV, WW, XX, YY, CCC, DDD, EEE, GGG, HHH, III, JJJ, LLL, MMM, NNN, OOO, PPP, QQQ, RRR, TTT, UUU, VVV, XXX, AAAA, CCCC, DDDD, EEEE, FFFF, GGGG, HHHH, IIII, JJJJ, KKKK, MMMM, NNNN, OOOO, PPPP, QQQQ, RRRR, SSSS, TTTT, UUUU, VVVV, WWWW, XXXX, AAAAA, BBBBB, CCCCC, DDDDD, EEEEE, FFFFF, GGGGG, HHHHH, IIIII, JJJJJ, KKKKK, LLLLL, MMMMM, NNNNN, PPPPP, QQQQQ, RRRRR, SSSSS, TTTTT, UUUUU, WWWWW, YYYYY, ZZZZZ, BBBBBB, CCCCCC, DDDDDD, EEEEEE, FFFFFF, GGGGGG, HHHHHH, JJJJJJ, LLLLLL, MMMMMM, NNNNNN, OOOOOO, PPPPPP, QQQQQQ, RRRRRR, SSSSSS, TTTTTT, VVVVVV, WWWWWW, XXXXXX, YYYYYY, ZZZZZZ, AAAAAAA, BBBBBBB, CCCCCCC, DDDDDDD, EEEEEEE, HHHHHHH	Not an affected stationary source, operation, or industry.
Stationary source-wide	40 C.F.R. 98, Subparts D, E, F, G, H, I, K, L, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, BB, CC, DD, EE, FF, GG, HH, II, JJ, LL, MM, NN, OO, PP, QQ, RR, SS, TT, and UU	No affected facilities within the stationary source.
Stationary source-wide	40 C.F.R. 51.308(e) and 40 C.F.R. 51 Appendix Y Guidelines for BART Determinations under the Regional Haze Rule	The International Station Power Plant is not an “existing stationary facility” as defined in 40 C.F.R. 51.301.
Stationary source-wide	40 C.F.R. 82 Subpart B	The stationary source and its employees do not perform service on motor vehicle air conditioners, for consideration or otherwise.
Stationary source-wide	40 C.F.R. 82 Subpart F	The stationary source does not contain commercial, industrial, or comfort air conditioning appliances containing ozone-depleting substances used as refrigerants.
Stationary source-wide	18 AAC 50.055(a)(2)-(a)(9)	The stationary source does not contain any EUs subject to these opacity standards.
Stationary source-wide	18 AAC 50.055(b)(2)-(b)(6)	The stationary source does not contain any EUs subject to these particulate standards.
Stationary source-wide	18 AAC 50.055(d)-(f)	The stationary source does not contain any EUs subject to these sulfur standards.
Stationary source-wide	18 AAC 50.060, 50.070, 50.075, 50.085, 50.090	The stationary source is not an affected source regulated by these standards.

Section 11. Visible Emissions Forms

VISIBLE EMISSION OBSERVATION FORM

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

- Source Name: full company name, parent company or division or subsidiary information, if necessary.
- Address: street (not mailing or home office) address of facility where VE observation is being made.
- Phone (Key Contact): number for appropriate contact.
- 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, is Plume…: check "attached" if water droplet plume forms prior to exiting stack, and "detached" if water droplet plume forms after exiting stack.
- Point in Plume at Which Opacity was Determined: describe physical location in plume where readings were made (e.g., 1 ft above stack exit or 10 ft. after dissipation of water plume).
- Describe Plume Background: object plume is read against, include texture and atmospheric conditions (e.g., hazy).
- Background Color: sky blue, gray-white, new leaf green, etc.
- Sky Conditions: indicate cloud cover by percentage or by description (clear, scattered, broken, overcast).
- Wind Speed: record wind speed; can use Beaufort wind scale or hand-held anemometer to estimate.
- Wind Direction From: direction from which wind is blowing; can use compass to estimate to eight points.
- Ambient Temperature: in degrees Fahrenheit or Celsius.

  Wet Bulb Temperature: can be measured using a sling psychrometer

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

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

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

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

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

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

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

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

Page No._____

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

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

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

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

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

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

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

F. = 21 – [**vol%$_{dry}$O2, $_{exhaust}$**] = 21 - _____ = _____

G. = [**vol%$_{dry}$O2, $_{exhaust}$**] ÷ F = _____ ÷ _____ = _____

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

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

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

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

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

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

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

[18 AAC 50.346(c)]

Section 13. ADEC Notification Form

International Station Power Plant	AQ0164TVP03
Stationary Source Name	**Air Quality Permit No.**
Chugach Electric Association, Inc.	
Company Name	**Date**

When did you discover the Excess Emissions/Permit Deviation?

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

When did the event/deviation occur?

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

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

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

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

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

☐ Excess Emissions – Complete Section 1 and Certify

☐ Deviation from Permit Condition – Complete Section 2 and Certify

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

Section 1. Excess Emissions

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

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

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

☐ Control Equipment Failure ☐ Schedule Maintenance/Equipment Adjustment

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

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

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

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

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

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

☐ Fugitive Emissions ☐ Emission Limit Exceeded ☐ Other _____

☐ Marine Vessel Opacity ☐ Flaring _____

(f) Unavoidable Emissions:

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

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

Certify Report (Go to end of form.)

Section 2. Permit Deviations

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

☐ Emission Unit-Specific

☐ Failure to Monitor/Report

☐ General Source Test/Monitoring Requirements

☐ Recording/Reporting/Compliance Certification

☐ Standard Conditions Not Included in the Permit

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

☐ Generally Applicable Requirements

☐ Reporting/Monitoring for Diesel Engines

☐ Recordkeeping Failure

☐ Insignificant Emission Unit

☐ Stationary Source Wide

(b) Emission Unit Involved:

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

EU ID	EU Name	Permit Condition/ Potential Deviation

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

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

Certification:

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

Printed Name: _____ Title: _____ Date: _____

Signature: _____ Phone Number: _____

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

To Submit this Report:

Fax to: 907-451-2187

Or

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

If faxed or emailed, the report must be certified within the Operating Report required for the same reporting period per Condition 63.

Or

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

Or

Phone Notification: 907-451-5173

Phone notifications require a written follow-up report.

Or

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

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

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

[18 AAC 50.346(b)(3)]

Section 14. Emission Inventory Form

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

Mandatory information is highlighted. Make additional copies as needed.

Inventory start date:	
Inventory end date:	
Inventory Type:	

Facility Information:

ADEC Stationary Source ID:	
(Stationary Source) Facility Name:	
AFS ID:	
Census Area/ Community:	
Line of Business (NAICS):	
Contact/Owner Name:	
Contact Owner Address:	
Contact/Owner Phone Number:	
Facility Physical Address:	
	Lat: Long:
Mailing Address :	

Emission Unit:

ID:	
Description:	
Manufacturer:	
Model Number:	
Serial Number:	
Year of Manufacture:	

Maximum Nameplate Capacity:	
Design Capacity (BTU/hr):	
Control Equipment (List All):	
	Control Equipment Type(Primary or Secondary):
	ID:
	Type:
	Manufacturer:
	Model:
	Control Efficiency (%):
	Capture Efficiency (%):
	Total Capture Efficiency (%):
	Pollutants Controlled
	-

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

	Spring %:
	Days/Week of Operation:
	Weeks/Year of Operation:
	Hours/Day of Operation:
	Hours/Year of Operation:

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

Stack Description:	
	Stack Detail:
	ID:
	Type:
	Measurement Units:
	Base Elevation:
	Stack Height:
	Stack Diameter:
	Exit Gas Temp:
	Exit Gas Velocity:
	Actual Exit Gas Flow Rate:
	Data Source:
	Description:

	Latitude:
	Longitude:
	Location Description:
	Accuracy (m):
	Datum:

Certification:

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

Printed Name:_____Title_____Date _____

Signature:_____ Phone number_____

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

To Submit this report:

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

Or

4. Submission of information can be made via a full electronic batch submittal (XML files). This will require each data element to be tagged with XML (Extensible Markup Language) code before it can be uploaded to ADEC database.
   https://myalaska.state.ak.us/dec/air/airtoolsweb/EiXmlValidator.aspx

[18 AAC 50.346(b)(9)]

Section 15. EEMSP Summary Report

FIGURE 1--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: _____