DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ0741TVP03 Issue Date: Public Comment - January 11, 2017

Expiration Date: Five Years

The Alaska Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to **Cook Inlet Energy**, for the operation of the **Kustatan Production Facility**.

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 August 20, 2016, Register 219. All Federal regulation citations are from those sections adopted by reference in this version of regulation in 18 AAC 50.040 unless otherwise specified.

Upon effective date of this permit, Operating Permit No. AQ0741TVP02 and its revisions expire.

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

John F. Kuterbach, Manager
Air Permits Program

Table of Contents

Abbreviations and Acronyms

AAC.....Alaska Administrative Code
ADEC .....Alaska Department of Environmental Conservation
AS .....Alaska Statutes
ASTM .....American Society for Testing and Materials
BACT .....Best Available Control Technology
bbls .....U. S. Petroleum Barrels
CDX.....Central Data Exchange
CEDRI .....Compliance and Emissions Data Reporting Interface
C.F.R. .....Code of Federal Regulations
CAA.....Clean Air Act
The Act .....Clean Air Act
CI .....Compression Ignition
CIE.....Cook Inlet Energy, LLC
CO .....Carbon Monoxide
CO_2 .....Carbon Dioxide
CO_2e .....Carbon Dioxide Equivalent
Department .....Alaska Department of Environmental Conservation
dscf .....Dry Standard Cubic Foot
EPA .....US Environmental Protection Agency
EU ID .....Emissions Unit Identification Number
gr/dscf .....Grains per Dry Standard Cubic Foot
H_2S.....Hydrogen Sulfide
HAPs .....Hazardous Air Pollutants
hp .....Horsepower
ICE.....Internal Combustion Engine
kW .....Kilowatt
lb/hr Pounds per hour
LAER.....Lowest Achievable Emission Rate
MACT .....Maximum Achievable Control Technology
MMBtu .....Million British thermal units
MMBtu/hr.....Million British Thermal Units per hour
MMscf .....Million Standard Cubic Feet
MMscf/hr.....Million Standard Cubic Feet per hour
MR&R.....Monitoring, Recordkeeping, and Reporting
MW .....Megawatts
NAICS.....North American Industrial Classification System
NESHAPs.....National Emission Standards for Hazardous Air Pollutants
NOx.....Nitrogen Oxides
NSPS .....New Source Performance Standards
O_2 .....Oxygen
PM.....Pariculate Matter
$PM_{2.5}$.....Particulate Matter less than or equal to a nominal 2.5 microns in diameter
PM_{10} .....Particulate Matter less than or equal to a nominal 10 microns in diameter
ppm .....Parts per Million
ppmv .....Parts per Million by volume
ppmvd .....Parts per Million by volume on a dry basis
PS ..... Performance Specification
PSD .....prevention of significant deterioration
PTE .....potential to emit
RICE ..... Reciprocating Internal Combustion Engine
RM ..... Reference Method
SIC. .....Standard Industrial Classification
SIP.....State Implementation Plan
SPC .....Standard Permit Condition or Standard Operating Permit Condition
SO_2 .....sulfur dioxide
The Act.....Clean Air Act
TPY .....tons per year
VOC .....volatile organic compound
VOL .....volatile organic liquid
vol% .....volume percent
wt% .....weight percent
$wt\%S_{fuel}$ .....weight percent of sulfur in fuel

Section 1. Stationary Source Information

Identification

Permittee:		**Cook Inlet Energy**, LLC 601 West 5th Avenue, Suite 310 Anchorage, AK 99501
Stationary Source Name:		**Kustatan Production Facility**
Location:		60º 43´ 28" North; 151º 45´ 36" West
Physical Address:		West Forelands of Cook Inlet Alaska
Owner:		**Cook Inlet Energy, LLC** 601 West 5th Avenue, Suite 310 Anchorage, AK 99501
Operator:		Cook Inlet Energy, LLC 601 West 5th Avenue, Suite 310 Anchorage, AK 99501
Permittee's Responsible Official:		Leland Tate Senior Vice President/COO 601 West 5th Avenue, Suite 310 Anchorage, AK 99501
Designated Agent:		Leland Tate Senior Vice President/COO 601 West 5th Avenue, Suite 310 Anchorage, AK 99501
Stationary Source and Building Contact:		David Kumar/Jennifer Anderson 601 West 5th Avenue, Suite 310 Anchorage, AK 99501 (907) 433 3822; dkumar@glacieroil.com (907) 433 3822; jhenderson@glacieroil.com
Fee Contact:		David Kumar/Jennifer Anderson 601 West 5th Avenue, Suite 310 Anchorage, AK 99501 (907) 433 3822; dkumar@glacieroil.com (907) 433 3822; jhenderson@glacieroil.com
Permit Contact:		David Kumar/Jennifer Anderson 601 West 5th Avenue, Suite 310 Anchorage, AK 99501 (907) 433 3822; dkumar@glacieroil.com (907) 433 3822; jhenderson@glacieroil.com
Process Description:	SIC Code	1311: Crude Petroleum and Natural Gas Production
	NAICS Code:	211111: Crude Petroleum and Natural Gas Extraction

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

Section 2. Emissions Unit Inventory and Description

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

Table A - Emissions Unit Inventory

EU ID	Tag No.	Emission Unit Name	Emission Unit Description	Rating/Size	Fuel	Installation or Construction Date
Turbine Generators						
1	G-157A	Taurus 60-T7300S	Turbine Generator #1	5,652 kW	Lean fuel gas	2002
2	G-157B	Taurus 60-T7300S	Turbine Generator #2	5,652 kW	Lean fuel gas	2002
2a	G-157C	Taurus 60-T7300S	Turbine Generator #3	5,652 kW	Lean fuel gas	2003
Heaters						
3	V-115A	NATCO Natural Draft Burners	Heater Treater #1	6.2 MMBtu/hr	Raw fuel gas	2002
4	V-115B	NATCO Natural Draft Burners	Heater Treater #2	6.2 MMBtu/hr	Raw fuel gas	2002
5	V-115C	NATCO Natural Draft Burners	Heater Treater #3	6.2 MMBtu/hr	Raw fuel gas	2002
6	H-112A	NATCO Natural Draft Burners	Crude Heater #1	8.0 MMBtu/hr	Raw fuel gas	2002
7	H-112B	NATCO Natural Draft Burners	Crude Heater #2	8.0 MMBtu/hr	Raw fuel gas	2002
8	H-112C	NATCO Natural Draft Burners	Crude Heater #3	8.0 MMBtu/hr	Raw fuel gas	2002
Diesel Engines						
9	P-115	Cummins 6BTA	Fire Water Pump	160 hp	Diesel	2002
9a	B-2	Caterpillar 3406C	Backup Generator	530 hp	Diesel	2002
Miscellaneous Equipment						
10	H-150	Tornado TTI-SLT	Process Flare	0.8 MMBtu/hr	Raw fuel gas	2002
Storage Tanks						
12	T-133	Crude Tank No.1	Crude Storage Tank	10,000 bbls	N/A	2002
13	T-134	Crude Tank No.2	Crude Storage Tank	10,000 bbls	N/A	2002
14	T-135	Crude Tank No.3	Crude Storage Tank	10,000 bbls	N/A	2002
15	T140	Slop Oil Tank	Slop Oil Tank	10,000 bbls	N/A	2002
16	T-142	Produced Water Tank	Produced Water Tank	10,000 bbls	N/A	2002

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

Section 3. State Requirements

Visible Emissions Standard

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

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

1.1. For EU IDs 1 through 8, burn only gas as fuel. Monitoring for these emissions units shall consist of a statement in each operating report under Condition 70 indicating whether each of these emissions unit burned only gas during the period covered by the report. Report under Condition 69 if any fuel other than gas is burned.

1.2. For EU ID 9, as long as the emissions unit does not operate for more than 500 hours in a calendar year, monitoring shall consist of an annual compliance certification under Condition 71 with the visible emissions standard. Otherwise, monitor, record and report in accordance with Conditions 2 - 4 for the remainder of the permit term.

a. Monitor and record the monthly and calendar year-to-date operating hours.

b. Report the calendar year-to-date operating hours in the operating report under Condition 70 for the period covered by the report.

1.3. For EU ID 9a, as long as the emissions unit does not operate for more than 243 hours in a consecutive 12 months period, monitoring shall consist of an annual compliance certification under Condition 71 with the visible emissions standard. Otherwise, monitor, record and report in accordance with Conditions 2 - 4 for the remainder of the permit term.

a. Report the consecutive 12 months operating hours for each month, as described in Condition 17.3.b.

1.4. For EU ID 10, monitor, record and report in accordance with Condition 5.

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]
[40 C.F.R. 71.6(a)(3) & (c)(6)]

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

Liquid Fuel-burning Emissions Units (EU IDs 9 and 9a)

2. Visible Emissions Monitoring. When required by any of Conditions 1.2 or 1.3, or in the event of replacement of any of EU IDs 9 and 9a during the permit term, the Permittee shall observe the exhaust of the emissions unit for visible emissions using either the Method 9 Plan under Condition 2.3 or the Smoke/No-Smoke Plan under Condition 2.4.

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

2.2. The Permittee may for each unit elect to continue the visible emissions monitoring schedule in effect from the previous permit at the time a renewed 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)]

2.3. **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**. Except as provided in Condition 2.2 or Condition 2.5.c(ii), for EU IDs 9 and 9a, observe exhaust for 18 minutes within six months after the issue date of this permit. For any emissions unit, observe exhaust for 18 minutes within 14 calendar days after changing from the Smoke/No-Smoke Plan of Condition 2.4.

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

(ii) For each existing emissions unit that exceeds the applicable operational threshold in Conditions 1.2 or 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 emissions unit operates.

c. **Semiannual Method 9 Observations**. After observing emissions for three consecutive operating months under Condition 2.3.b, unless a six-minute average is greater than 15 percent and one or more observations are greater than 20 percent, perform 18-minute observations:

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

(ii) for an emissions unit with intermittent operations, within 30 days of startup following six months after the preceding observation.

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

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

(ii) for an emissions unit with intermittent operations, within 30 days of startup 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 emissions unit to at least monthly intervals as described in Condition 2.3.b, until the criteria in Condition 2.3.c for semiannual monitoring are met.

2.4. **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 emissions unit operates.

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

c. **Smoke Observed**. If smoke is observed, either begin the Method 9 Plan of Condition 2.3 or perform the corrective action required under Condition 2.5

2.5. **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 2.4, then the Permittee shall either follow the Method 9 Plan of Condition 2.3 or

a. initiate actions to eliminate smoke from the emissions 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 2.5.a,

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

(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 2.4.b; or

(ii) if the actions taken under Condition 2.5.a do not eliminate the smoke, or if subsequent smoke is observed under the schedule of Condition 2.5.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 2.4.a.

3. Visible Emissions Recordkeeping. When required by any of Conditions 1.2 or 1.3, or in the event of replacement of any of EU IDs 9 and 9a 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. If using the Method 9 Plan of Condition 2.3,

a. the observer shall record

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

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

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

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

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

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

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

3.2. If using the Smoke/No Smoke Plan of Condition 2.4, record the following information in a written log for each observation and submit copies of the recorded information upon request of the Department:

a. the date and time of the observation;

b. from Table A, the ID of the emissions 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 emissions unit starts operation on the day of the observation, the startup time of the emissions unit;

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

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

4. Visible Emissions Reporting. When required by any of Conditions 1.2 or 1.3, or in the event of replacement of any of EU IDs 9 or 9a 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 required under Condition 70:

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

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

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

(ii) a summary to include:

(A) number of days observations were made;

(B) highest six-minute and 18-consecutive-minute averages observed; and

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

c. for each emissions unit under the Smoke/No Smoke Plan, the number of days that smoke/no smoke observations were made and which days, if any, that 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 69:

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

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

Flares (EU ID 10)

5. Visible Emissions MR&R. The Permittee shall observe one daylight flare event[1] within 12 months of the preceding flare event observation. If no event exceeds 1 hour within that 12-month period, then the Permittee shall observe the next daylight flare event.

5.1. Monitor visible emissions during flare events using Method 9 for 18 minutes.

5.2. Record the following information for observed events:

a. the flare EU ID number;

b. results of the Method-9 observations;

c. reason(s) for flaring;

d. date, beginning and ending time of event; and

e. volume of gas flared.

5.3. Monitoring of a flare event may be postponed for safety or weather reasons, or because a qualified observer is not available. If monitoring of a flare event is postponed for any of the reasons described in this condition, the Permittee shall include in the next operating report required by Condition 70 an explanation of the reason the event was not monitored.

5.4. Attach copies of the records required by Condition 5.2 with the operating report required by Condition 70 for the period covered by that report.

5.5. Report under Condition 69 whenever the opacity standard in Condition 1 is exceeded.

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

Particulate Matter Emissions Standard

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

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

6.1. For EU IDs 1 through 8, burn only gas as fuel. Monitoring for these emissions units shall consist of a statement in each operating report under Condition 70 indicating whether each of these emissions units fired only gas during the period covered by the report. Report under Condition 69 if any fuel other than gas is burned.

[1] For purposes of this permit, a "*flare event*" is flaring of gas for greater than one hour as a result of scheduled release operations, i.e. maintenance or well testing activities. It does not include non-scheduled release operations, i.e. process upsets, emergency flaring, or de-minimis venting of gas incidental to normal operations.

6.2. For EU ID 9, as long as the emissions unit does not operate for more than 500 hours in a calendar year, monitoring shall consist of an annual compliance certification under Condition 71 with the particulate matter emissions standard. Otherwise, monitor, record and report in accordance with Conditions 7 - 9 for the remainder of the permit term for that emissions unit.

a. Comply with Conditions 1.2.a and 1.2.b

6.3. For EU 9a, as long as the emissions unit does not operate for more than 324 hours in a consecutive 12 months period, monitoring shall consist of an annual compliance certification under Condition 71 with the particulate matter emissions standard. Otherwise, monitor, record and report in accordance with Conditions 7 - 9 for the remainder of the permit term for that emissions unit.

a. Comply with Condition 1.3.a.

6.4. For EU ID 10, the Permittee must annually certify compliance under Condition 71 with the particulate matter standard.

[18 AAC 50.040(j), 50.326(j) & 50.346(c)]
[40 C.F.R. 71.6(a)(3) & (c)(6)]

Particulate Matter MR&R

Liquid Fuel-Burning Engines (EU IDs 9 and 9a)

7. Particulate Matter Monitoring. The Permittee shall conduct source tests on diesel engines, EU IDs 9 and 9a, to determine the concentration of particulate matter in the exhaust of each emissions unit as follows:

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

7.1. Except as exempted in Condition 7.4, within six months of exceeding the criteria of Conditions 7.2.a or 7.2.b, either

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

b. make repairs so that emissions no longer exceed the criteria of Condition 7.2; to show that emissions are below those criteria, observe visible emissions as described in Condition 2.3 under load conditions comparable to those when the criteria were exceeded.

7.2. Conduct the particulate matter source test or make repairs according to Condition 7.1 if

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

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

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

7.4. The automatic particulate matter source test requirements in Conditions 7.1 and 7.2 are waived for an emissions unit if a particulate matter source test on that unit has shown compliance with the particulate matter standard during this permit term.

8. Particulate Matter Recordkeeping. The Permittee shall keep records of the results of any particulate matter testing and visible emissions observations conducted under Condition 7.

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

9. Particulate Matter Reporting. The Permittee shall report as follows:

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

9.1. Report under Condition 69

a. within 30 days of the end of the month in which the source testing occur, if the results of any particulate matter source test conducted under Condition 7.1.a exceeds the particulate matter emissions limit; or

b. within the next 24 hours of the date compliance with Condition 7.1 was required, if the Permittee did not comply with either Condition 7.1.a or 7.1.b when required;

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

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

a. the dates, EU ID(s), and results when an observed 18-minute average was greater than an applicable threshold in Condition 7.2;

b. a summary of the results of any particulate matter testing under Condition 7; and

c. copies of any visible emissions observation results (opacity observations) greater than the thresholds of Condition 7.2, if they were not already submitted.

Sulfur Compound Emissions Standard

10. Sulfur Compound Emissions. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EU IDs 1 through 10 listed in Table A to exceed 500 parts per million (ppm) averaged over three hours.

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

Sulfur Compound MR&R

Fuel Oil[2] (EU IDs 9 and 9a)

11. Sulfur Content of Fuel Oil. The Permittee shall comply with Condition 16.

12. Fuel Oil Sulfur Compounds Monitoring and Recordkeeping. The Permitte shall monitor and record as follows:

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

12.2. 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

a. test the fuel for sulfur content of each shipment; or

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

12.3. Fuel testing under Condition 12.2.a must follow an appropriate method listed in 18 AAC 50.035 or another method approved in writing by the Department.

13. Fuel Oil Sulfur Compounds Reporting. The Permittee shall report as follows:

13.1. If sulfur content of the fuel burned in EU IDs 9 or 9a exceeds 0.5 percent by weight, the Permittee shall report under Condition 70.

13.2. The Permittee shall include in the operating report required by Condition 70

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

b. for any grade with a maximum fuel sulfur greater than 0.5 percent sulfur, the fuel sulfur of each shipment; and

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

Fuel Gas (EU IDs 1 through 8 and 10)

14. The Permittee will comply with the limit in Condition 10 as follows:

14.1. **Hydrogen sulfide (H_2S) Content of Gas Burned in EU IDs 1, 2, and 2a.** For EU IDs 1, 2, and 2a, the Permittee shall comply with Condition 30.

14.2. **H_2S Content of Gas Burned in EU IDs 3 – 8 and 10**. For EU IDs 3 through 8 and 10, the H_2S content of the gas burned in the emission units shall not exceed 700 parts per million by volume (ppmv)[3].

[2] *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.

[3] Permittee assumed 700 ppmv H_2S in estimating SO_2 emissions from EU IDs 3-8 and 10.

14.3. **Fuel Gas Sulfur Compounds Monitoring.** For EU IDs 1, 2, 2a, 3 through 8, and 10, the Permittee shall analyze a representative sample of each fuel (raw fuel gas and lean fuel gas) monthly to determine the H_2S content using either ASTM D4810-88 (Reapproved 1999), D4913-89 (Reapproved 1995), or a listed method approved in 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1).

a. If total H_2S content of the gas burned in the emission units exceeds 100 ppmv, then monitor weekly. If H_2S content of the gas burned in the emission units exceeds 700 ppmv, then monitor the H_2S content of the gas daily.

14.4. **Fuel Gas Sulfur Compound Recordkeeping.** The Permittee shall keep records of the H_2S content analysis required under Condition 14.3.

14.5. **Fuel Gas Sulfur Compound Reporting.** The Permittee shall report as follows:

a. Notify the Department at the end of the month for which the fuel gas H_2S content initially exceeds the Condition 14.3 monthly monitoring threshold of 100 ppmv.

b. Notify the Department at the end of the month for which the fuel gas H_2S content initially exceeds the Condition 14.3.a weekly monitoring threshold of 700 ppmv.

c. Report as excess emissions, in accordance with Condition 69, whenever the fuel combusted causes sulfur compound emissions to exceed the standard of Condition 10.

d. Include copies of the records required by Condition 14.4 with the operating report required by Condition 70 for the period covered by the report.

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]
[40 C.F.R. 71.6(a)(3) & (c)(6)]

Preconstruction Permit [4] Requirements

Ambient Air Quality Standards

15. Ambient air quality standards compliance for the stationary source operation is demonstrated at the posted boundary specified in Cook Inlet Energy's Access Control Plan set out in Section 11. Establish and maintain ambient air boundaries as described in Section 11.

[Minor Permit No. AQ0741MSS02, Condition 4, 2/23/2015]
[18 AAC 50.326(a)]
[40 C.F.R. 71.2&71.6(a)(1) & (3)]

16. **SO_2 Requirements**. Limit the fuel sulfur content of the diesel fuel burned at the Kustatan Production Facility to no greater than 0.5 percent by weight.

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

16.1. Monitor and record as described in Condition 12.

16.2. Report as described in Condition 13.

[Minor Permit No. AQ0741MSS02, Condition 5, 2/23/2015]
[18 AAC 50.326(a)]
[40 C.F.R. 71.2&71.6(a)(1) & (3)]

Limits to Avoid Classification as PSD Major Source.

17. Nitrogen Oxides (NOx) Emission Limits.

17.1. Limit NOx emissions from EU IDs 1, 2, and 2a as follows:

a. Install "SoLoNOx" low NOx combustion technology on EU IDs 1, 2, and 2a;

b. Limit combined NOx emissions from EUs 1, 2 and 2a to no greater than 64.5 tons per 12-month rolling period, expressed as NO_2.

17.2. **Monitoring, Recording, and Reporting** NOx Emissions for EU IDs 1, 2, and 2a.

a. Calculate and record the NOx emissions, expressed as NO_2 for each monthly period and 12 month rolling period using hours of operation and the following emission factors[5]:

(i) 3.9 pounds per hour (lb/hr) for EU 1

(ii) 4.1 lb/hr for EU 2; and

(iii) 6.6 lb/hr for EU 2a; and

b. Verify NOx emission factors from the source testing required by Condition 29.1.a. Use exhaust properties determined by 40 CFR 60 Appendix A, Method 19, for each load tested. Use higher heating value throughout the analysis.

c. In the first operating report due after the Department approval of the source test results, calculate and report the NOx emissions using the worst case emission factor for each of the emission units based on the latest source test results for each these emission units. Alternatively, upon Department written approval, the Permittee may recalculate emissions using the new emission factors beginning effective with the month in which the source test was conducted.

d. Report the cumulative total monthly and 12-month rolling NOx emissions, expressed as NO_2, from EUs 1, 2 and 2a in the operating report required by Condition 70.

17.3. Limit operations of EU 9a to no more than 500 hours per 12-month rolling period.

[5] Emission factors are from most recent Department approved source test at the time of permit issuance plus 10% to adjust for load and temperature.

a. Monitor and record the hours of operation of EU 9a for each calendar month.

b. Report the cumulative total monthly and 12 month rolling hours of operation of EU 9a in the operating report required Condition 70.

[Minor Permit No. AQ0741MSS02, Condition 6, 2/23/2015]
[18 AAC 50.326(a)]
[40 C.F.R. 71.2&71.6(a)(1) & (3)]

18. Carbon Monoxide (CO) Emissions Limits for EU IDs 1, 2, 2a, and 10.

18.1. For EU ID 10, limit the fuel gas burned to no more than 70 million standard cubic feet (MMscf) in any 12-month rolling period.

a. Monitor the fuel gas burned in EU ID 10 for each calendar month. Use flow meters and totalizers accurate to ±10%. Calculate and record the 12-month rolling fuel gas burned for each month of the reporting period, by the end of the following month.

b. Report in the operating report required by Condition 70 the 12-month rolling fuel gas burned recorded in 18.1.a for each month of the reporting period.

18.2. For EUs 1, 2 and 2a, limit combined total CO emissions to less than 136 tons per 12-month rolling period.

18.3. Operate EUs 1, 2 and 2a at all times, except at startup, shutdown, and performance and emission tests at no less than the lower of either 50% load or the minimum load for which the most recent CO emission source tests were conducted.

18.4. **Monitoring, Recording and Reporting** for EU IDs 1, 2, and 2a:

a. Verify CO emission factors from applicable measurements from the source testing required by Condition 29.1.a. Use exhaust properties determined by 40 CFR 60 Appendix A, Method 19, for each load tested. Use higher heating value throughout the analysis.

b. If the combined emission factors for EUs 1, 2 and 2a for worst case operation exceed 31 lb/hr[6], calculate and record the CO emissions for each month and 12 month rolling period for the period preceding submission of the source test results. Use hours of operation and the worst case emission factor for each unit in the calculations.

c. For each of EUs 1, 2 and 2a, monitor the date, time, duration and reason for all operations less than the load listed in Condition 18.3.

d. Report in the operating report required by Condition 70 the cumulative 12-month rolling CO emission from EUs 1, 2, and 2a recorded in Condition

[6] Combined emission factor of 31 lb/hr for units 1, 2 and 2a is equivalent to 136 tpy of unlimited operations.

18.4.b for each month of the reporting period. The Permittee is exempt from reporting CO emissions prior to submission of source test results.

[Minor Permit No. AQ0741MSS02, Condition 7, 2/23/2015]
[18 AAC 50.326(a)]
[40 C.F.R. 71.2 & 71.6(a)(1) & (3)]

19. Volatile Organic Compounds (VOC) Emission Limits – Tank Closed Vent System. Equip the crude tanks, slop oil tank and produced water tank, EU IDs 12 through 16, with a closed vent system and control device meeting the following specifications:

19.1. The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions;

19.2. The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater

[Minor Permit No. AQ0741MSS02, Condition 7, 2/23/2015]
[18 AAC 50.326(a)]
[40 C.F.R. 71.2 & 71.6(a)(1) & (3)]

Insignificant Emissions Units

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

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

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

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

[18 AAC 50.055(b)(1)]

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

[18 AAC 50.055(c)]

20.4. General MR&R for Insignificant Emissions Units:

a. The Permittee shall submit the compliance certifications of Condition 71 based on reasonable inquiry;

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

c. The Permittee shall report in the operating report required by Condition 70 if an emissions unit has historically been classified as insignificant because of actual emissions less than the thresholds of 18 AAC 50.326(e) and current actual emissions 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

40 C.F.R. Part 60 New Source Performance Standards (NSPS)

Subpart A – General Provisions

21. 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 notification or, if acceptable to both the EPA and the Permittee, electronic notification, as follows:

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

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

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

21.2. A notification of 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]

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

a. information describing the precise nature of the change,

b. present and proposed emission control systems,

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

d. the expected completion date of the change.

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

21.4. 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]

a. the name and address of owner or operator,

[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.

[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.

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 .

22. 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 1, 2, and 2a, any malfunction of the associated air pollution control equipment, or any periods during which a continuous monitoring system (CMS) or monitoring device for EU IDs 1, 2, or 2a is inoperative.

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

23. NSPS Subpart A Excess Emissions and Monitoring Systems Performance (EEMSP) Report. The Permittee shall submit an EEMSP[9, 10] report and / or summary report form for EU IDs 1, 2, and 2a[11] to the Department and to EPA. Submit the report semiannually. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:

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

23.1. The magnitude of excess emissions computed in accordance with 40 C.F.R. 60.13(h)(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]

23.2. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of EU IDs 1, 2, and 2a 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 69.

[10] Periods of excess emissions and monitor downtime for units subject to the NSPS Subpart GG SO_2 limit (EU IDs 1 & 2) are defined in 40 C.F.R. 60.334(j)(2).

[11] Condition 24 describes the summary report form requirements. See Conditions 24.1 and 24.2 for information on when the EEMSP report of Condition 23 is required to be submitted along with the summary report form of Condition 24.

23.3. The date and time identifying each period during which a CMS 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]

23.4. When no excess emissions have occurred or the CMS have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

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

24. NSPS Subpart A EEMSP 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 (see Attachment A of the Statement of Basis) for each pollutant monitored for EU IDs 1, 2, and 2a.:

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

24.1. 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 CMS downtime for the reporting period is less than five percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in Condition 23 need not be submitted unless requested by the Administrator, or

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

24.2. 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 CMS downtime for the reporting period is five percent or greater of the total time for the reporting period, the summary report form and the excess emissions report described in Condition 23 shall both be submitted.

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

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

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

26. NSPS Subpart A Good Air Pollution Control Practice. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate EU IDs 1, 2, and 2a including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. The Administrator will determine whether acceptable operating and maintenance procedures are being used based on information available, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance records, and inspections of EU IDs 1, 2, and 2a.

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

27. **NSPS Subpart A Credible Evidence.** For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of the standards set forth in Conditions 29 or 30, 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 1, 2, and 2a 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]

28. **NSPS Subpart A Concealment of Emissions.** The Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of a standard set forth in Conditions 29 and 30. 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]

NSPS, Subpart GG Requirements

29. **NSPS Subpart GG NOx Standard.** The Permittee shall not allow the exhaust gas concentration of NOx from EU IDs 1, 2, and 2a, listed in Table A, to exceed 173.6 ppmvd at 15 percent O_2 dry exhaust basis, International Standards Organization corrected.

[18 AAC 50.040(a)(2)(V)]
[40 C.F.R. 60.332(a)(2) & (d), Subpart GG]

29.1. **Monitoring**. The Permittee shall comply with the following:

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

a. **Periodic Testing**. For each turbine subject to Condition 29 that operates for 400 hours or more in any consecutive 12-month period during the life of this permit, the Permittee shall satisfy either Condition 29.1.a(i) or 29.1.a(ii).

(i) For existing turbines whose latest emissions source testing was certified as operating at less than or equal to 90 percent of the limit shown in Condition 29, the Permittee shall conduct a NOx and O_2 source test under 40 C.F.R. 60, Appendix A, Method 20, or Method 7E and either Method 3 or 3A, within the first applicable criteria below in the noted timeframe no later than Five Years from permit issue date, except as set out in Conditions 29.1.a(i)(C) and 29.1.a(ii):

(A) Within 5 years of the latest performance test, or

(B) Within 1 year of the the effective date of this permit if the last source test occurred greater than five years prior to the effective date of this permit and the 400-hour threshold was triggered within 6 months of the permit's effective date, or

(C) Within 1 year after exceeding 400 hours of operation in a 12-month period if the last source test occurred greater than 4 years prior to the exceedance.

(ii) For existing turbines whose latest emissions source testing was certified as operating at greater than 90 percent of the limit shown in Condition 29, the Permittee shall conduct a NOx and O_2 source test under 40 C.F.R. 60, Appendix A, Method 20, or Method 7E and either Method 3 or 3A, annually until two consecutive tests show performance results certified at less than or equal to 90 percent of the limit of Condition 29.

b. **Substituting Test Data**. The Permittee may use a Method 20, or Method 7E and either Method 3 or 3A, , test under Condition 29.1.a performed on only one of a group of turbines to satisfy the requirements of those conditions for the other turbines in the group if

(i) the Permittee demonstrates that test results are less than or equal to 90 percent of the emission limit of Condition 29, and are projected under Condition 29.1.c to be less than or equal to 90 percent of the limit at maximum load;

(ii) for any source test conducted after the effective date of this permit, the Permittee identifies in a source test plan under Condition 61

(A) the turbine to be tested;

(B) the other turbines in the group that are to be represented by the test; and

(C) why the turbine to be tested is representative, including that each turbine in the group

(1) is located at a stationary source operated and maintained by the Permittee;

(2) is tested under close to identical ambient conditions;

(3) is the same make and model and has identical injectors and combustor;

(4) uses the same fuel type from the same supply origin.

(iii) The Permittee may not use substitute test results to represent emissions from a turbine or group of turbines if that turbine or group of turbines is operating at greater than 90 percent of the emission limit of Condition 29.

c. **Load**. The Permittee shall comply with the following:

(i) Conduct all tests under Condition 29.1 in accordance with 40 C.F.R. 60.335(b)(2), except as otherwise approved in writing by the Department, or by EPA if the circumstances at the time of the EPA approval are still valid. For the highest load condition, if it is not possible to operate the turbine during the test at maximum load, the Permittee will test the turbine when operating at the highest load achievable by the turbine under the ambient and stationary source operating conditions in effect at the time of the test.

(ii) Demonstrate in the source test plan for any test performed after the effective date of this permit whether the test is scheduled when maximum NOx emissions are expected.

(iii) If the highest operating rate tested is less than the maximum load of the tested turbine or another turbine represented by the test data,

(A) for each such turbine the Permittee shall provide to the Department as an attachment to the source test report

(1) additional test information from the manufacturer or from previous testing of units in the group of turbines; if using previous testing of the group of turbines, the information must include all available test data for the turbines in the group, and

(2) a demonstration based on the additional test information that projects the test results from Condition 29.1 to predict the highest load at which emissions will comply with the limit in Condition 29;

(B) the Permittee shall not operate any turbine represented by the test data at loads for which the Permittee's demonstration predicts that emissions will exceed the limit of Condition 29;

(C) the Permittee shall comply with a written finding prepared by the Department that

(1) the information is inadequate for the Department to reasonably conclude that compliance is assured at any load greater than the test load, and that the Permittee must not exceed the test load,

(2) the highest load at which the information is adequate for the Department to reasonably conclude that compliance assured is less than maximum load, and the Permittee must not exceed the highest load at which compliance is predicted, or

(3) the Permittee must retest during a period of greater expected demand on the turbine, and

(D) the Permittee may revise a load limit by submitting results of a more recent approved source test done at a higher load, and, if necessary, the accompanying information and demonstration described in Condition 29.1.c(iii)(A); the new limit is subject to any new Department finding under Condition 29.1.c(iii)(C) and

(iv) In order to perform an emission test required by Conditions 29.1.a and 29.1.b, the Permittee may operate a turbine at a higher load than that prescribed by Condition 29.1.c(iii).

(v) For the purposes of Conditions 29.1 through 29.3, maximum load means the hourly average load that is the smallest of

(A) 100 percent of manufacturer's design capacity of the gas turbine at ISO standard day conditions;

(B) the highest load allowed by an enforceable condition that applies to the turbine; or

(C) the highest load possible considering permanent physical restraints on the turbine or the equipment which it powers.

29.2. **Recordkeeping**. The Permittee shall keep records as follows:

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

a. The Permittee shall comply with the following for each turbine for which a demonstration under Condition 29.1.c(iii) does not show compliance with the limit of Condition 29 at maximum load.

(i) The Permittee shall keep records of

(A) load; or

(B) as approved by the Department, surrogate measurements for load and the method for calculating load from those measurements.

(ii) Records in Condition 29.2.a shall be hourly or otherwise as approved by the Department.

(iii) Within one month after submitting a demonstration under Condition 29.1.c(iii)(A)(2) that predicts that the highest load at which emissions will comply is less than maximum load, or within one month of a Department finding under Condition 29.1.c(iii)(C), whichever is earlier, the Permittee shall propose to the Department how they will measure load or load surrogates, and shall propose and comply with a schedule for installing any necessary equipment and beginning monitoring. The Permittee shall comply with any subsequent Department direction on the load monitoring methods, equipment, or schedule.

b. For any turbine subject to Condition 29, that will operate less than 400 hours in any 12 consecutive months, the Permittee shall keep monthly records of the hours of operation.

29.3. **Reporting**. The Permittee shall keep report as follows

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

a. In each operating report under Condition 70 the Permittee shall list for each turbine tested or represented by testing at less than maximum load and for which the Permittee must limit load under Condition 29.1.c(iii)

(i) the load limit;

(ii) the turbine identification; and

(iii) the highest load recorded under Condition 29.2.a during the period covered by the operating report.

b. In each operating report under Condition 70 for each turbine for which Condition 29.1 has not been satisfied because the turbine normally operates less than 400 hours in any 12 consecutive months, the Permittee shall identify

(i) the turbine;

(ii) the highest number of operating hours for any 12 consecutive months ending during the period covered by the report; and

(iii) any turbine that operated for 400 or more hours.

c. The Permittee shall report under Condition 69 if

(i) a test result exceeds the emission standard;

(ii) Method 20, or Method 7E and either Method 3 or 3A, testing is required under Condition 29.1.a(i) or 29.1.a(ii) but not performed, or

(iii) the turbine was operated at a load exceeding that allowed by Conditions 29.1.c(iii)(B) and 29.1.c(iii)(C); exceeding a load limit is deemed a single violation rather than a multiple violation of both monitoring and the underlying emission limit.

[18 AAC 50.220(a) - (c) & 50.040(a)(1)]
[40 C.F.R. 60.8(b), Subpart A]

30. NSPS Subpart GG Sulfur Standard. The Permittee shall comply with either the SO_2 standard in Condition 30.1, or the fuel sulfur content standard in Condition 30.2 below:

[18 AAC 50.040(a)(2)(V)]
[40 C.F.R. 60.333, Subpart GG]

30.1. Do not allow the exhaust gas concentration of SO_2 from EU IDs 1, 2, and 2a, listed in Table A, to exceed 150 ppmvd corrected to 15 percent O_2, or

[40 C.F.R. 60.333(a), Subpart GG]

30.2. Do not allow the sulfur content for the fuel burned in EU ID(s) to exceed 0.8 percent by weight.

[40 C.F.R. 60.333(b), Subpart GG]

30.3. **Monitoring**. The Permittee shall monitor compliance with the standards listed in this condition, as follows:

[18 AAC 50.040(a)(2)(V)]
[40 C.F.R. 60.334 & 60.335, Subpart GG]

a. Monitor the total sulfur content of the fuel being fired in the turbine, except as provided in Condition 30.3.b. The sulfur content of the fuel must be determined using total sulfur methods described in 40 C.F.R. 60.335(b)(10) and Condition 30.4. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4,000 ppmw), ASTM D4084–82, 94, D5504–01, D6228–98, or Gas Processors Association Standard 2377–86, which measure the major sulfur compounds may be used.

[40 C.F.R. 60.334(h)(1), Subpart GG]

b. The owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 C.F.R. 60.331(u), regardless of whether an existing custom schedule approved by the Administrator requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration[12]:

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

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

[40 C.F.R. 60.334(h)(3), Subpart GG]

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

[12] The Permittee submitted a certified statement to the Department dated <insert date > indicating that the fuel gas combusted at the stationary source meets the definition of natural gas in 40 C.F.R. 60.331(u), pursuant to 40 C.F.R. 60.334(h)(3). Periodic fuel sulfur monitoring under Condition 30.3.a and reporting under Conditions 23, 24, and 30.6 do not apply to Subpart GG turbines that have demonstrated that natural gas fuel meets the definition of 40 C.F.R. 60.331(u) as set out by Condition 30.3.b. Per 40 C.F.R. 60.334(i)(3)(i), a custom sulfur monitoring schedule under 60.334(i)(3)(ii)(A) is acceptable without prior Administrative approval.

[40 C.F.R. 60.334(h)(4), Subpart GG]

d. The frequency of determining the sulfur content of the fuel shall be as follows:

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 60.334(i), Subpart GG]

(i) **Gaseous fuel.** For owners and operators that elect not to demonstrate sulfur content using options in Condition 30.3.b, and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined and recorded once per unit operating day.

[40 C.F.R. 60.334(i)(2), Subpart GG]

(ii) **Custom schedules**. Notwithstanding the requirements of Condition 30.3.d(i), operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in 40 C.F.R. 60.334(i)(3)(i) and (i)(3)(ii), custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in Condition 30. The two custom sulfur monitoring schedules set forth in 40 C.F.R. 60.334(i)(3)(i)(A) through (D) and 60.334(i)(3)(ii) are acceptable without prior Administrative approval.

[40 C.F.R. 60.334(i)(3), Subpart GG]

30.4. **Test Methods and Procedures**. If the owner or operator is required under Conditions 30.3.a or 30.3.d(ii) to periodically determine the sulfur content of the fuel combusted in the turbine, a minimum of three fuel samples shall be collected during the performance test. Analyze the samples for the total sulfur content of the fuel using Conditions 30.4.a and/or 30.4.b:

[18 AAC 50.040(a)(2)(V)]
[40 C.F.R. 60.335(b), Subpart GG]

a. For liquid fuels, ASTM D129–00, D2622–98, D4294–02, D1266–98, D5453–00 or D1552–01; or

[40 C.F.R. 60.335(b)(10)(1), Subpart GG]

b. For gaseous fuels, ASTM D1072-80, 90; D3246-81, 92, 96; D4468-85; or D6667-01. The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the prior approval of the Administrator.

[40 C.F.R. 60.335(b)(10)(2), Subpart GG]

c. The fuel analyses required under Condition 30.4 may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

[40 C.F.R. 60.335(b)(11), Subpart GG]

30.5. **Recordkeeping**. Keep records as required by Condition 30.3 and 30.4, and in accordance with Condition 65.

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

30.6. **Reporting**. For each affected unit that periodically determines the fuel sulfur content under Condition 30.3.a, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with 40 C.F.R. 60.7(c) as summarized in Condition 23 except where otherwise approved by a custom fuel monitoring schedule. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction as described by 40 C.F.R. 60.334(j)(2).

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 60.334(j), Subpart GG]

40 C.F.R. 63 NESHAP

Subpart A – General Provisions

31. National Emissions Standards for Hazardous Air Pollutants (NESHAP) Subpart A. For stationary compression ignition internal combustion engines (CI ICE) EU IDs 9 and 9a, you must comply with the applicable requirements of 40 C.F.R. 63 Subpart A in accordance with the provisions for applicability of Subpart A in NESHAP Subpart ZZZZ, Table 8.

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

RICE Subject to NESHAP Subpart ZZZZ

32. Management Practices for RICEs at an Area Source of HAPs. For EU IDs 9 and 9a, you must comply with the applicable requirements in Table 2d to 40 C.F.R. 63, Subpart ZZZZ.

32.1. **Management Practices for Stationary Emergency[13] CI RICE**: For EU ID 9, you must comply with the following management practices:

a. Change oil and filter every 500 hours of operation or annually, whichever comes first;

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

[13] If EU ID 9 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 under Condition 32.1, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the Permittee may delay the management practice 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.

[40 C.F. R. 63, Footnote 2 to Table 2d, Subpart ZZZZ]

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

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

32.2. **Management Practices for Non-Emergency Stationary CI RICEs > 500 hp at Area Sources not Accessible by the Federal Aid Highway System**: For EU ID 9a, you must comply with te following management practices:

a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;

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

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

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

33. General Requirements: For EU IDs 9 and 9a, you must 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)]

33.1. **Good Air Pollution Control Practices.** 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)]

33.2. **Operation and Maintenance Requirements**.

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)]

b. You must minimize the engine’s time spent at idle and minimize the engine’s startup time at startup to a period need for appropriate and safe loading of the engine, not to exceed 30 minutes

[40 C.F.R. 63.6625(h) & Table 2d, Column 3]

33.3. **Hour Meter**. For emergency engine EU ID 9, you must install a non-resettable hour meter if one is not already installed.

[40 C.F.R. 63.6625(f)]

33.4. **Oil Analysis Program for CI Engines**. You have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Condition 32. The oil analysis must be performed at the same frequency specified for changing the oil in Condition 32. 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. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator 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 engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator 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.

[40 C.F.R. 63.6625(i)]

34. Operating Hour Limits for Emergency Engine, EU ID 9.

34.1. **Operating Hour Limits for Emergency Engine.** You must operate the emergency stationary RICE according to the requirements in Conditions 34.1.a - 34.1.c. In order for the engine to be considered an emergency stationary RICE, 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 34.1.a - 34.1.c, is prohibited. If you do not operate the engine according to the requirements in Conditions 34.1.a - 34.1.c, the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines.

[18 AAC 50.040(c)(23)]
[40 C.F.R. 63.6640(f)]

a. There is no time limit on the use of emergency stationary RICE in emergency situations.

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

b. You may operate the emission units for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of these units is limited to 100 hours per calendar year. The Permittee 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 Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

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

c. You may operate the emission units up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing under Condition 34.1.b. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 C.F.R. 63.6640(f)(3) & (4)]

NESHAP Subpart ZZZZ Monitoring

35. Continuous Compliance: For EU IDs 9 and 9a, you must 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)]

35.1. You must demonstrate continuous compliance with requirements in Condition 32 according to methods specified in Conditions 35.1.a and 35.1.b.

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

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

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

c. 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)]

36. Recordkeeping. For EU IDs 9 and 9a, you must comply with the following:

36.1. Keep record 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)]

36.2. For EU ID 9, keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. 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.

[40 C.F.R. 63.6655(f)]

36.3. Keep records 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)]

a. 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)]

b. Keep records readily accessible in hard copy or electronic form for at least five years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 C.F.R. 63.6660(c)]

c. All the records may be maintained offsite.

[40 C.F.R. 63.10(b)(1)]
[Table 8 to NESHAP, Subpart ZZZZ]

37. Reporting. For EU IDs 9 and 9a, you must include in the operating report required by Condition 70, a report of deviations as defined in 40 C.F.R. 63.6675 for each instance in which an applicable requirement in 40 C.F.R. 63, Subpart A as specified in Table 8 to Subpart ZZZZ was not met.

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

40 C.F.R. Part 61 NESHAP

Subpart A – General Provisions & Subpart M – Asbestos

38. 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]

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

39. 40 C.F.R. Part 82 Protection of Stratospheric Ozone

39.1. **Subpart F – Recycling and Emissions Reduction**. The Permittee shall comply with the standards for recycling and emissions reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F.

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

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

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

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

[18 AAC 50.040(d) & 50.326(j)]
[40 C.F.R. 82.270(b) through (f), Subpart H]

General NSPS and NESHAP Requirements

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

40.1. After the effective date of any relevant standard promulgated by the Administrator under this part, an owner or operator who constructs a new affected source that is not major-emitting or reconstructs an affected source that is not major-emitting that is subject to such standard, or reconstructs a source such that the source becomes an affected source subject to the standard, must notify the Administrator and the Department of the intended construction or reconstruction. The notification must be submitted in accordance with the procedures in 40 C.F.R. 63.9(b).

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

41. NSPS and NESHAP Reports. The Permittee shall:

41.1. **Reports:** Except for federal reports and notices submitted through EPA's CDX/CEDRI online reporting system, attach to the operating report required by Condition 70 for the period covered by the report, a copy of any NSPS and NESHAPs reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10. For reports submitted through CDX/CEDRI, state in the operating report the date and a brief description of each of the online reports submitted during the reporting period; and

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

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

Section 5. General Conditions

Standard Terms and Conditions

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

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

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

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

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

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

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

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

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

46.1. the stationary source's assessable potential to emit of 309 TPY; or

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

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

b. material balance calculations;

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

d. other methods and calculations approved by the Department, including appropriate vendor-provided emissions factors when sufficient documentation is provided.

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

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

47.1. no later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions to ADEC, Air Permits Program, ATTN: Assessable Emissions Estimate, 410 Willoughby Ave., Ste 303, PO Box 111800, Juneau, AK 99811-1800; the submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates; or

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

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

48. Good Air Pollution Control Practice. The Permittee shall do the following for EU IDs 3 through 8, 10 and 12 through 16.

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

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

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

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

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

[18 AAC 50.045(a)]

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

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

50.1. The Permittee shall keep records of:

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

b. any additional precautions that are taken

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

(ii) to prevent future dust problems.

50.2. The Permittee shall report according to Condition 52.

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

[18 AAC 50.055(g)]

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

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

52.1. **Monitoring, Recordkeeping, and Reporting** for Condition 52:

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

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

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

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

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

d. The Permittee shall keep records of

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

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

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

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

e. With each stationary source operating report under Condition 70, the Permittee shall include a brief summary report which must include

(i) the number of complaints received;

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

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

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

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

53. Technology-Based Emission Standard. If an unavoidable emergency, malfunction (as defined in 18 AAC 50.235(d)), or non-routine repair (as defined in 18 AAC 50.990(64), causes emissions in excess of a technology-based emission standard[14] listed in Conditions 29, 30 and 39 (refrigerants), the Permittee shall

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

53.2. report in accordance with Condition 69; the report must include information on the steps taken to mitigate emissions and corrective measures taken or to be taken.

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

Open Burning Requirements

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

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

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

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

[14] As defined in 18 AAC 50.990(106), the term "*technology-based emission standard*" means a best available control technology (BACT) standard; a lowest achievable emission rate (LAER) standard; a maximum achievable control technology (MACT) standard established under 40 C.F.R. 63, Subpart B, adopted by reference in 18 AAC 50.040(c); a standard adopted by reference in 18 AAC 50.040(a) or (c); and any other similar standard for which the stringency of the standard is based on determinations of what is technologically feasible, considering relevant factors.

Section 6. General Source Testing and Monitoring Requirements

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

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

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

[18 AAC 50.220(b)]

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

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

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

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

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

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

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

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

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

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

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

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

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

57.6. Source testing for emissions of $PM_{2.5}$ and PM_{10} must be conducted in accordance with the procedures specified in 40 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]

57.7. 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)(32) & 50.220(c)(2)]
[40 C.F.R. 63, Appendix A, Method 301]

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

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

59. Test Exemption. The Permittee is not required to comply with Conditions 61, 62 and 63 when the exhaust is observed for visible emissions by Method 9 Plan (Condition 2.3) or Smoke/No Smoke Plan (Condition 2.4).

[18 AAC 50.345(a)]

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

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

61. Test Plans. Except as provided in Condition 59, before conducting any source tests, the Permittee shall submit a plan to the Department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance and must specify how the emissions unit will operate during the test and how the Permittee will document that operation. The Permittee shall submit a complete plan within 60 days after receiving a request under Condition 55 and at least 30 days before the scheduled date of any test unless the Department agrees in writing to some other time period. Retesting may be done without resubmitting the plan.

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

62. Test Notification. Except as provided in Condition 59, at least 10 days before conducting a source test, the Permittee shall give the Department written notice of the date and the time the source test will begin.

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

63. **Test Reports.** Except as provided in Condition 59, within 60 days after completing a source test, the Permittee shall submit one certified copy of the results in the format set out in the *Source Test Report Outline*, adopted by reference in 18 AAC 50.030. The Permittee shall certify the results in the manner set out in Condition 66. If requested in writing by the Department, the Permittee must provide preliminary results in a shorter period of time specified by the Department.

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

64. **Particulate Matter Calculations.** In source testing for compliance with the particulate matter standards in Conditions 6 and 20.2, the three-hour average is determined using the average of three one-hour test runs. The source test must account for those emissions caused by routine maintenance activities by ensuring that at least one test run includes the emissions caused by the routine maintenance activity and is conducted under conditions that lead to representative emissions from that activity. The emissions must be quantified using the following equation:

$$E = E_M\left[(A+B)\times\frac{S}{R\times A}\right]+E_{NM}\left[\frac{(R-S)}{R}-\frac{BS}{R\times A}\right]$$

Where:

E = the total particulate matter emissions of the emissions unit in grains per dry standard cubic foot (gr/dscf)

E_M = the particulate matter emissions in gr/dscf measured during the test that included the routine maintenance activity

E_{NM} = the arithmetic average of particulate matter emissions in gr/dscf measured by the test runs that did not include the routine maintenance activity

A = the period of routine maintenance activity occurring during the test run that included routine maintenance activity, expressed to the nearest hundredth of an hour

B = the total period of the test run, less A

R = the maximum period of emissions unit operation per 24 hours, expressed to the nearest hundredth of an hour

S = the maximum period of routine maintenance activity per 24 hours, expressed to the nearest hundredth of an hour

[18 AAC 50.220(f)]

Section 7. General Recordkeeping and Reporting Requirements

Recordkeeping Requirements

65. 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)]

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

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

a. 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

66. Certification. The Permittee shall certify any permit application, report, affirmation, or compliance certification submitted to the Department and required under the permit by including the signature of a responsible official for the permitted stationary source following the statement: *"Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete."* Excess 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.

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

a. a certifying authority registered under AS 09.80.020 verifies that the electronic signature is authentic; and

b. the person providing the electronic signature has made an agreement, with the certifying authority described in Condition 66.1.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)]

67. Submittals. Unless otherwise directed by the Department or this permit, the Permittee shall submit reports, compliance certifications, and/or other submittals required by this permit, certified in accordance with Condition 66, to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician. The Permittee shall submit the documents either by hard copy or electronically.

67.1. Provide electronic submittals, either by:

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

b. using the Department's Air Online Services at http://dec.alaska.gov/applications/air/airtoolsweb/.

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

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

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

69. Excess Emissions and Permit Deviation Reports.

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

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

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

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

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

c. report all other excess emissions and permit deviations

(i) within 30 days after the end of the month during which the excess emissions or deviation occurred, except as provided in Condition 69.1.c(iii); or

(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 69.1.c(i); and

(iii) for failure to monitor, as required in Conditions 4.2.b and 9.1.b and other applicable conditions of this permit.

69.2. When reporting either excess emissions or permit deviations, the Permittee shall report using either the Department's online form, which can be found at http://dec.alaska.gov/applications/air/airtoolsweb, http://dec.alaska.gov/air/ap/docs/eeform.pdf, or if the Permittee prefers, the form contained in Section 14 of this permit. The Permittee must provide all information called for by the form that is used.

69.3. If requested by the Department, the Permittee shall provide a more detailed written report 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)]

70. Operating Reports. During the life of this permit[15], the Permittee shall submit to the Department an operating report by August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year.

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

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

a. the date of the deviation;

b. the equipment involved;

c. the permit condition affected;

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

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

70.3. when excess emissions or permit deviations have already been reported under Condition 69 the Permittee shall cite the date or dates of those reports.

70.4. The operating report must include, for the period covered by the report, a listing of emissions monitored under Conditions 2.3.e, 2.4.c, and 29.1.a which trigger additional testing or monitoring, whether or not the emissions monitored exceed an emission standard. The Permittee shall include in the report.

a. the date of the emissions;

b. the equipment involved;

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

c. the permit condition affected; and

d. the monitoring result which triggered the additional monitoring.

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

[18 AAC 50.346(b)(6) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii)(A)]

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

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

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

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

c. state whether compliance is intermittent or continuous; and

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

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

71.3. In addition, submit a copy of the report directly to the Clean Air Act Compliance Manager, US EPA Region 10, Mail Stop: OCE-101, 1200 Sixth Avenue, Suite 900, Seattle, WA 98101.

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

72. Emission Inventory Reporting. The Permittee shall submit to the Department reports of actual emissions, by emissions unit, of CO, Ammonia (NH_3), NOx, PM_{10}, $PM_{2.5}$, SO_2, VOCs and Lead (and lead compounds) using the form in Section 15 of this permit, as follows:

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

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

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

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

a. 5 tons per year of lead (and lead compounds), or

b. 1,000 TPY of CO; or

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

72.3. For reporting under Condition 72.2, the Permittee shall report in 2018 for calendar year 2017, 2021 for calendar year 2020, 2024 for calendar year 2023, etc., in accordance with the Environmental Protection Agency set schedule.

72.4. Include in the report required by this condition, the required data elements contained within the form in Section 15 or those contained in Table 2A of Appendix A to Subpart A of 40 C.F.R. 51 for each stack associated with an emissions unit.

[18 AAC 50.346(b)(8) & 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

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

73.1. 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;

73.2. The information shall be submitted to the Part 70 Operating Permit Program, US EPA Region 10, AWT-150, 1200 Sixth Avenue, Suite 900, Seattle, WA 98101.

73.3. 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

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

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

74. 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)]

75. 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:

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

75.2. 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;

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

75.4. 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)]

76. Operational Flexibility. The Permittee may make CAA Section 502(b)(10)[16] 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):

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

76.2. For each such change, the notification required by Condition 76.1 shall include a brief description of the change within the permitted stationary source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

76.3. The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made pursuant to Condition 76.

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

77. Permit Renewal. To renew this permit, the Permittee shall submit to the Department[17] 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) & (j)(2)]
[40 C.F.R. 71.5(a)(1)(iii) & 71.7(b) & (c)(1)(ii)]

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

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

Section 9. Compliance Requirements

General Compliance Requirements

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

78.1. included and specifically identified in the permit; or

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

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

79. The Permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 18 AAC 50, and, except for those terms or conditions designated in the permit as not federally enforceable, the Clean Air Act, and is grounds for

79.1. an enforcement action;

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

79.3. denial of an operating permit renewal application.

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

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

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

81. 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)]

82. 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

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

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

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

82.4. 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)]

Compliance Schedule

83. 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.

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

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

84.2. 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)]

85. Table B identifies the emissions units that are not subject to the specified requirements at the time of permit issuance. If any of the requirements listed in Table B becomes applicable during the permit term, 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 B - Permit Shields Granted

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
1, 2, 2a	40 C.F.R. 60.332(a)(1)	Standard applies to Electric Utility Stationary Gas Turbines. The turbines are not Electric Utility Stationary Gas Turbines, as defined in subpart
	40 C.F.R. 60.334(a), (b) & (d) – Monitoring of Operations	Applies only to turbines equipped with water injection to control NOx emissions. Turbines not equipped with water injection to control NOx.
	40 C.F.R. 60.334(h)(1) & (2), (i), & (j) – Monitoring of Operations	Applies to turbines monitoring for fuel sulfur, fuel nitrogen, or for turbines using CEMs or parametric monitoring for NOx. The turbines burn natural gas. For nitrogen monitoring, the Permittee does not claim an allowance for fuel bound nitrogen.
	40 C.F.R. 60.335(a) & (b) – Test Methods and Procedures	Obsolete requirements –initial source tests completed.
	40 C.F.R. 60, Subpart KKKK	This requirement only applies to units that commenced construction, modification, or reconstruction after February 18, 2005. The permit shield applies to currently installed units until modified, reconstructed or replaced.
	40 C.F.R. 63, Subpart YYYY	Stationary source is not a major source of HAPs.
3 - 8	40 C.F.R. 63 Subpart DDDDD	Stationary source is not a major source of HAPs.
	40 C.F.R. 63 Subpart JJJJJJ	Units are process heaters, not boilers and burn gas

9	40 C.F.R. 63.6603(b), 63.6604, 63.6625(c), (d), 63.6625 (g), 63.6645(a), (b), (c), (d), (e), (f), 63.6655(c)	EU ID 9 is an existing emergency stationary CI RICE at an area source of HAP emissions in Alaska not accessible by the Federal Aid Highway System.
9a	40 C.F.R. 63.6603(a), 63.6604, 63.6625(c), (d), (f), (g), 63.6645(a), (b), (c), (d), (e), (f), 63.6655(c), (f)	EU ID 9a is an existing non-emergency stationary CI RICE greater than 300 HP located at an area source of HAP emissions in Alaska not accessible by the Federal Aid Highway System.
9 and 9a	40 C.F.R. 60, Subpart IIII	Only applies to emission units that commenced construction, modification or reconstruction after July 11, 2005. The permit shield only applies to currently installed units until modified, reconstructed or replaced.
	40 C.F.R. 63.6600, 63.6601, 63.6602, 63.6610, 63.6611	Stationary source is not a major source of HAPs.
	40 C.F.R. 63.6605(a), 63.6630, 63.6635, 63.6640, 63.6650, 63.6655(a), (d)	The emission units are not subject to emission limitations or operating limitations.
	40 C.F.R. 63, Subpart ZZZZ §§63.6612, 63.6615, 63.6620, 63.6645 (g) & (h)	The emission units are not subject to performance tests or other compliance demonstrations.
	40 C.F.R. 63.6625(a), (b), 63.6655(b)	Not required to use a CEMS, CPMS, or a CMS.
12 - 16	40 C.F.R. 60, Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels	The storage vessels are exempt from Subpart Kb under 40 C.F.R. 60.110b(d)(4). The tanks have capacity ≤1,589.874 m^3 used for petroleum or condensate stored, processed, or treated before custody transfer.
Nonroad Engines	18 AAC 50.055, Industrial processes and fuel-burning equipment	Nonroad (mobile) internal combustion engines are not included in the definition of fuel-burning equipment under 18 AAC 50.990.
Stationary Source Wide	40 C.F.R. 60, Subparts B, C, Cc, F, G, H, I, J, M, N, Na, O, S, T, U, V, WW, X, Y, Z, AA, AAa, Bb CC, EE, HH, KK, LL, MM, NN, PP, QQ, RR, SS, TT, UU, VV, WW, XX, BBB, DDD, FFF, GGG, HHH, III, JJJ, NNN, OOO, PPP, QQQ, RRR, SSS, TTT, UUU, VVV, and WWW.	Not an affected stationary source, operation, or industry.
	40 C.F.R. Cb, Cd, Ce, D, Da, Db, Dc, E, Ea, Eb, Ec, K, Ka, L, P, Q, R, DD, AAA, KKK, AAAA, BBBB, CCCC, DDDD, EEEE, and JJJJ.	No affected facility within stationary source.
	40 C.F.R. 60, Subpart LLL – SO_2 Emissions from Onshore Natural Gas Plants	No affected source within the stationary source, the natural gas processing skid at Kustatan does not contain a sweetening unit.
	40 C.F.R. 61, Subpart J – Equipment Leaks of Benzene	Stationary source does not contain any equipment in benzene service (>10% by weight).
	40 C.F.R. 61, Subpart V	Per 40 C.F.R. 61.240(b), a stationary source must be subject to a specific subpart of 40 C.F.R. 61 to be subject to Subpart V.
	40 C.F.R. 61 Subpart B, C, D, E, F, H, I, K, L, N, O, P, Q, R, T, W, Y, BB, and FF	No affected facility within stationary source.

	40 C.F.R. 63, NESHAPs – Subparts F, G, J, L, M, N, L, O, Q, R, S, T, U, W, X, Y, AA, BB, CC, DD, EE, GG, II, JJ, KK, LL, MM, OO, SS, VV, XX, YY, CCC, DDD, EEE, GGG, III, JJJ, LLL, MMM, NNN, OOO, PPP, QQQ, RRR, TTT, UUU, VVV, XXX, AAAA, CCCC, DDDD, EEEE, FFFF, GGGG, HHHH, IIII, JJJJ, KKKK, MMMM, NNNN, OOOO, PPPP, QQQQ, RRRR, SSSS, TTTT, UUUU, VVVV, WWWW, XXXX, AAAAA, BBBBB, CCCCC, EEEEE, FFFFF, GGGGG, HHHHH, IIIII, JJJJJ, KKKKK, LLLLL, MMMMM, NNNNN, PPPPP, QQQQQ, RRRRR, SSSSS, TTTTT, DDDDDD, EEEEEE, FFFFFF, and GGGGGG	Not an affected stationary source, operation or industry, or no affected emission units within the stationary source.
	40 C.F.R. 63, NESHAPs – Subpart H	Stationary source does not contain any equipment intended to operate in organic hazardous air pollutant service (equipment contain fluids that is at least 5% by weight of total organic HAPs).
	40 C.F.R. 63, NESHAPs – Subparts HH and HHH	Stationary source is not a major source of HAPs as defined in 40 C.F.R. 63.760(s). Area sources are exempt from the subpart if an affected source (i.e., triethylene glycol dehydration unit) does not exist at the stationary source.
	40 C.F.R. 82, Subpart A	Stationary source does not produce, transform, destroy, import or export Class I or Group I or II substances or products.
	40 C.F.R. 82.30, Subpart B	Stationary source does not service motor vehicle air conditioners.
	40 C.F.R. 82.60, Subpart C	Stationary source does not manufacture or distribute Class I and II products or substances.
	40 C.F.R. 82.80, Subpart D	Subpart applies only to Federal departments, agencies, and instrumentalities.
	40 C.F.R. 82.100, Subpart E	Stationary source does not manufacture or distribute Class I and II products or substances
	40 C.F.R. 82.158, Subpart F	Stationary source does not manufacture or import recovery and recycling equipment.
	40 C.F.R. 82.174(a), Subpart G	Stationary source does not manufacture substitute chemicals or products for ozone depleting compounds.
	40 C.F.R. 82.270(a), Subpart H	Stationary source does not manufacture halon.

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

Section 11. Kustatan Production Facility Public Access Control Plan

Purpose

The purpose of this Public Access Control Plan for the Kustatan Production Site is to protect the general public from public health and safety hazards incident to the heavy industrial activity planned at the Cook Inlet Energy, LLC, Kustatan Production Site property on the West Foreland, Cook Inlet, Alaska. The planned activity involves exploratory drilling for potential petroleum production. Cook Inlet Energy, LLC has established these reasonable restrictions on general public access to attain adequate protection of public health and welfare.

Cook Inlet Energy, LLC is committed to fully and adequately protecting the health and safety of its work force by meeting or exceeding the standards for air exposure of the Occupational Safety and Health Administration (OSHA) and, where the general public has access, the National and Alaska Ambient Air Quality Standards (AAQS). A primary purpose of this plan is to delineate the area to be protected and controlled for occupational health and safety from the area that is subject to unrestricted, general public access where AAQS are applicable. A secondary purpose is to ensure that reasonable measures are in place to accomplish reasonable restrictions on public access. The boundary is reflected in Figure 1 of the reference document, the Ambient Air Boundary Map.

General Information

The Kustatan Production site is located on the West Foreland, Cook Inlet, Alaska. The site is on property owned by Cook Inlet Energy, LLC. The nearest community to the site is Nikiski, approximately 9 kilometers to the east. Cook Inlet lies between the site and Nikiski. Cook Inlet Energy, LLC's West McArthur River Unit Production Facilities are located approximately 8 kilometers north of the site.

Currently, the site is accessible only by helicopter and boat. Because the area is roadless, Cook Inlet is effective as a physical barrier to prevent public access. A second effective physical barrier is the steep, 150- to 200-foot high bluff that must be climbed to access the West Foreland.

Cook Inlet Energy, LLC has constructed a private road from the company's West McArthur River Unit Production Facilities to the site. The public will not be allowed to use this road. As a practical matter, few people are traversing the area that will be impacted by the Kustatan Production Site. The few people that may be in the area would be primarily at the Kustatan Fish Camp. This camp is on property owned by Cook Inlet Energy, LLC. This fish camp has a small boat dock but is officially off-limits to the general public. To be conservative, the fish camp is treated as accessible to the public for the purposes of this plan.

In addition to the physical barrier cited above, public access to the site will be restricted using strategically located signs. These signs will be posted at the fish camp boat dock, the trail leading from the fish camp to the top of the bluff, and at the point the Cook Inlet Energy, LLC road enter the site.

Public Access Control Measures

The area surrounding the Kustatan Production site is remote, isolated, and physically prohibitive to travel. Cook Inlet Energy, LLC owns the area within the ambient air quality boundary and has the legal right to restrict public access. No established trails or cabin sites

exist within the restricted area. In addition, no public need or use exists for the land within the restricted area.

Cook Inlet and high angle bluffs prohibit snowmobile and all-terrain vehicle travel. Walking is difficult, and in places, impossible.

Signs will be posted along the two theoretically potential access routes. These two routes are Cook Inlet Energy, LLC's private access road from the West McArthur River Unit Production Facilities and the walking trail from the Kustatan fish camp to the top of the bluff. Three signs will be posted, one each at the:

- Fish camp boat dock;
- Point the foot trail to the top of the bluff exists the fish camp; and
- Point of entry to the site of the Cook Inlet Energy, LLC road from the West McArthur River Unit Production Facilities.

The sign specifications are:

- Each sign will be 4 feet by 6 feet and will be mounted on posts
- Each sign will be inspected semi-annually and will be repaired or replaced, as necessary.
- Each sign will be free of visible obstructions.
- Each sign will read:

COOK INLET ENERGY, LLC, PETROLEUM EXPLORATION AND PRODUCTION OPERATIONS

INDUSTRIAL AREA
DANGER
OIL PRODUCTION AND FLARING IN PROGRESS

NO UNAUTHORIZED VISITORS BEYOND THIS POINT

[Minor Permit No. AQ0741MSS02, Section 8, 2/23/2015]
[18 AAC 50.326(a)]

Section 12. Visible Emissions Forms

VISIBLE EMISSIONS OBSERVATION FORM

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

- Source Name: full company name, parent company or division or subsidiary information, if necessary.
- Address: street (not mailing or home office) address of facility where visible emissions observation is being made.
- Phone (Key Contact): number for appropriate contact.
- Stationary Source ID Number: number from NEDS, agency file, etc.
- Process Equipment, Operating Mode: brief description of process equipment (include type of facility) and operating rate, % capacity, and/or mode (e.g. charging, tapping, shutdown).
- Control Equipment, Operating Mode: specify type of control device(s) and % utilization, control efficiency.
- Describe Emission Point: for identification purposes, stack or emission point appearance, location, and geometry; and whether emissions are confined (have a specifically designed outlet) or unconfined (fugitive).
- Height Above Ground Level: stack or emission point height relative to ground level; can use engineering drawings, Abney level, or clinometer.
- Height Relative to Observer: indicate height of emission point relative to the observation point.
- Distance from Observer: distance to emission point; can use rangefinder or map.
- Direction from Observer: direction plume is traveling from observer.
- Describe Emissions and Color: include physical characteristics, plume behavior (e.g., looping, lacy, condensing, fumigating, secondary particle formation, distance plume visible, etc.), and color of emissions (gray, brown, white, red, black, etc.). Note color changes in comments section.
- Visible Water Vapor Present?: check "yes" if visible water vapor is present.
- If Present, 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	
Emission Unit Location		
City	State	Zip
Phone # (Key Contact)	Stationary Source ID Number	
Process Equipment	Operating Mode	
Control Equipment	Operating Mode	
Describe Emission Point/Location		
Height above ground level	Height relative to observer	Clinometer Reading
Distance From Observer Start End	Direction From Observer Start End	
Describe Emissions & Color Start	End	
Visible Water Vapor Present? If yes, determine approximate distance from the stack exit to where the plume was read No Yes		
Point in Plume at Which Opacity Was Determined		
Describe Plume Background Start End	Background Color Start End	
Sky Conditions: Start	End	
Wind Speed Start End	Wind Direction From Start End	
Ambient Temperature	Wet Bulb Temp	RH percent

SOURCE LAYOUT SKETCH: 1 Stack or Point Being Read 2 Wind Direction From 3 Observer Location 4 Sun Location 5 North Arrow 6 Other Stacks

Observation Date	Start Time		End Time		
Min \ Sec	0	15	30	45	Comments
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Range of Opacity
Minimum Maximum

I have received a copy of these opacity observations Print Name: Signature:		Print Observer's Name	
		Observer's Signature	Date Observer's Affiliation:
Title	Date	Certifying Organization Certified By:	Date

Data Reduction:

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

Average Opacity Summary:

Set Number	Time			Opacity		Comments
	Start	End		Sum	Average	

Section 13. SO_2 Material Balance Calculation

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

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

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

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

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

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

F. = 20.9 – [**vol%$_{dry}O_{2,\ exhaust}$**] = 20.9 – _____ = _____

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

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

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

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

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

The fuel weight percent of sulfur (wt%S_{fuel}) is obtained pursuant to Condition 11. The fuel weight percents of carbon and hydrogen are obtained from the fuel refiner.

The volume percent of oxygen in the exhaust (**vol%$_{dry}O_{2,\ exhaust}$**) is obtained from oxygen meters, manufacturer's data, or from the most recent analysis under 40 C.F.R. 60, Appendix A-2, Method 3, adopted by reference in 18 AAC 50.040(a), at the same engine load used in the calculation.

Enter all of the data in percentages without dividing the percentages by 100. For example, if **wt%S_{fuel}** = 1.0%, then enter 1.0 into the equations not 0.01 and if **vol%$_{dry}O_{2,\ exhaust}$** = 3.00%, then enter 3.00, not 0.03.

[18 AAC 50.346(c)]

Section 14. Notification Form[18]

Kustatan Production **Facility** AQ0741TVP03

Stationary Source Name **Air Quality Permit Number.**

Cook **Inlet Energy**

Company Name

When did you discover the Excess Emissions/Permit Deviation?

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

When did the event/deviation occur?

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

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

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

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

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

☐ Excess Emissions – Complete Section 1 and Certify

☐ Deviation from Permit Condition – Complete Section 2 and Certify

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

Section 1. Excess Emissions

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

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

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

☐ Control Equipment Failure ☐ Schedule Maintenance/Equipment Adjustment

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

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

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

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

[18] Revised as of September 27, 2010.

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

☐ Opacity _____ % ☐ Venting _____ gas/scf ☐ Control Equipment Down
☐ Fugitive Emissions ☐ Emission Limit Exceeded ☐ Recordkeeping Failure
☐ Marine Vessel Opacity ☐ Flaring ☐ Other

(f) **Unavoidable Emissions:**

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

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

Certify Report (go to end of form)

Section 2. Permit Deviations

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

☐ Emissions Unit-Specific
☐ Failure to Monitor/Report
☐ General Source Test/Monitoring Requirements
☐ Recordkeeping/Reporting/Compliance Certification
☐ Standard Conditions Not Included in the Permit
☐ Generally Applicable Requirements
☐ Reporting/Monitoring for Diesel Engines
☐ Insignificant Emissions Unit
☐ Stationary Source Wide
☐ Other Section: _____ (Title of section and section number of your permit).

(b) **Emissions Unit Involved:**

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

EU ID	EU Name	Permit Condition/ Potential Deviation

(c) **Description of Potential Deviation:**

Describe briefly what happened and the cause. Include the parameters/operating conditions and the potential deviation.

(d) **Corrective Actions:**

Describe actions taken to correct the deviation or potential deviation and to prevent future recurrence.

Certification:

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

Printed Name: _____ Title: _____ Date: _____

Signature: _____ Phone Number: _____

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

To Submit this Report:

1. Fax to: 907-451-2187
   Or
2. Email to: DEC.AQ.Airreports@alaska.gov
   Or
3. Mail to: ADEC
   Air Permits Program
   610 University Avenue
   Fairbanks, AK 99709-3643
   Or
4. Phone Notifications: 907-451-5173
   Phone notifications require a written follow-up report.
   Or
5. Submission of information contained in this report can be made electronically at the following website: *http://dec.alaska.gov/applications/air/airtoolsweb/* or *http://dec.alaska.gov/air/ap/docs/eeform.pdf*

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

[18 AAC 50.346(b)(3)]

Section 15. 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 in bright yellow. Make additional copies as needed.	

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

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

Processes	
Process	**Primary Process**
SCC Code	(ex. 20100201)
	>
	>
Material Processed	
Period Start	
Period End	
Throughput (units)	
Summer %	
Fall %	
Winter %	
Spring %	

Operational Schedule	
Days/Week	
Hours/Day	
Weeks/Year	
Hours/Year	

Fuel Characteristics			
Heat Content	**Elem. Sulfur Content (%)**	**H_2S Sulfur Content**	**Ash Content (if applicable)**

Heating		
Heat Input	**Heat Output**	**Heat Values Convention**

Emissions Operating Type:					
Pollutant	**Emission Factor (EF)**	**EF Numerator**	**EF Denominator**	**EF Source**	**Tons**
Carbon Monoxide (CO)					
Nitrogen Oxides (NOx)					
PM_{10} Primary (PM_{10}-PRI)					
$PM_{2.5}$ Primary (PM_{25}-PRI)					
Sulfur Dioxide (SO_2)					
Ammonia (NH_3)					
Lead and lead compounds					
Volatile Organic Compounds (VOC)					
Emissions' Release Point					
Release Point ID					
Apportion%					

Process	**Secondary Process**
SCC Code	(ex. 20100201)
	>
	>
	>
	>

Material Processed	
Period Start	
Period End	
Throughput (units)	
Summer %	
Fall %	
Winter %	
Spring %	

Operational Schedule

Days/Week	
Hours/Day	
Weeks/Year	
Hours/Year	

Fuel Characteristics

Heat Content	Elem. Sulfur Content (%)	H_2S Sulfur Content	Ash Content (if applicable)

Heat Input	Heat Output	Heat Values Convention

Emissions Operating Type:

Pollutant	Emission Factor (EF)	EF Numerator	EF Denominator	EF Source	Tons
Carbon Monoxide (CO)					
Nitrogen Oxides NOx					
PM_{10} Primary (PM_{10}-PRI)					
$PM_{2.5}$ Primary (PM_{25}-PRI)					
Sulfur Dioxide (SO_2)					
Ammonia (NH_3)					
Lead and lead compounds					
Volatile Organic Compounds (VOC)					

Emissions' Release Point

Release Point ID					
Apportion%					

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

Certification:

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

Printed Name:_____Title_____Date _____

Signature:_____ Phone number_____

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

To submit this report:

1. 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 99811-1800

Or

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

[18 AAC 50.346(b)(9)]