DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ0167TVP02 Issue Date: Public Comment -August 25, 2011
Expiration Date: Five Years

The Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the Permittee, **BP Exploration (Alaska), Inc.**, for the operation of the **Flow Station #1 (FS#1)**.

The Flow Station #1, defined by this permit as the surface structures and their associated permanent emission units located on the FS#1 production pad, and Prudhoe Bay Unit drill sites (DS) 1, 2, 5, 12, and 18, are considered one stationary source for purposes of determining classification under 18 AAC 50.326(a) and applicability with the modification requirements of 18 AAC 50.302. Temporary emission units and mobile equipment (e.g., drill rigs and associated activities and equipment) that periodically operate at the drill sites are not governed by this permit.

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

Upon effective date of this permit, Operating Permit No. AQ0167TVP01 expires.

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

John F. Kuterbach, Manager
Air Permits Program

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List of Abbreviations Used in this Permit

AAC.....Alaska Administrative Code
ADEC .....Alaska Department of Environmental Conservation
AS .....Alaska Statutes
ASTM.....American Society for Testing and Materials
BACT .....Best Available Control Technology
bbls .....U.S. Petroleum Barrels
BHp .....Boiler Horsepower
C.F.R. .....Code of Federal Regulations
The Act.....Clean Air Act
CO .....Carbon Monoxide
dscf .....Dry standard cubic foot
EPA .....US Environmental Protection Agency
EU.....Emission Unit
gr./dscf.....grain per dry standard cubic foot (1 pound = 7000 grains)
GPH.....gallons per hour
HAPs .....Hazardous Air Pollutants [HAPs as defined in AS 46.14.990]
H_2S.....Hydrogen Sulfide
Hp .....Horsepower
ID.....Emission Unit Identification Number
ISO.....Operating conditions corresponding to sea level and 59 deg. F
kPa.....kiloPascals
LAER.....Lowest Achievable Emission Rate
LHV.....Lower Heating Value
MACT .....Maximum Achievable Control Technology [MACT as defined in 40 C.F.R. 63]
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
NESHAPs.....Federal National Emission Standards for Hazardous Air Pollutants [NESHAPs as contained in 40 C.F.R. 61 and 63]
NO_X.....Nitrogen Oxides
NSPS .....Federal New Source Performance Standards [NSPS as contained in 40 C.F.R. 60]
O & M .....Operation and Maintenance
O_2 .....Oxygen
PAL .....Plantwide Applicability Limitation
PM-10 .....Particulate Matter less than or equal to a nominal ten microns in diameter
ppm .....Parts per million
ppmv, ppmvd .....Parts per million by volume on a dry basis
PSD .....Prevention of Significant Deterioration
PS .....Performance Specification
psia .....Pounds per Square Inch (absolute)
PSI.....Pounds per Square Inch (pressure)
PTE .....Potential to Emit
RM .....Reference Method
SIC. .....Standard Industrial Classification
SO_2 .....Sulfur dioxide
TPH.....Tons per hour
TPY .....Tons per year
VOC .....volatile organic compound [VOC as defined in 40 C.F.R. 51.100(s)]
VOL .....volatile organic liquid [VOL as defined in 40 C.F.R. 60.111b, Subpart Kb]
vol% .....volume percent
wt% .....weight percent

Section 1. Stationary Source Information

Identification

Permittee:	**BP Exploration (Alaska), Inc.** 900 East Benson Blvd. (Zip 99508) P.O. Box 196612 Anchorage, AK 99519-6612
Stationary Source Name:	**Flow Station #1**
Location:	Section 31, Township 11N, Range 15E, Umiat Meridian; UTM: Northing: 7795150 Easting: 445950 (Zone 6); or Latitude: 70° 15' 30"N Longitude: 148° 26' 02"W (NAD27)
Physical Address:	Prudhoe Bay, Alaska
Owners:	BP Exploration (Alaska) Inc. 900 East Benson Blvd. (Zip 99508) P.O. Box 196612 Anchorage, AK 99519-6612 ConocoPhillips Alaska, Inc. 700 G St. (Zip 99501) P.O. Box 100360 Anchorage, AK 99510-0360 Chevron USA, Inc. P.O. Box 36366 Houston, TX 77236 ExxonMobil Alaska Production, Inc. 3301 C St., Suite 400 (Zip 99503) P.O. Box 196601 Anchorage, AK 99519-6601
Operator:	BP Exploration (Alaska), Inc. 900 East Benson Blvd. (Zip 99508) P.O. Box 196612 Anchorage, AK 99519-6612
Permittee's Responsible Official:	Joe Perez, North Slope East Area Operations Manager
Designated Agent:	CT Corporation Systems 9360 Glacier Hwy, Suite 202 Juneau, AK 99801 (907) 586-3340
Stationary Source and Building Contact:	Mile Shelton and Jerome Hines (907) 659-5392 akopsfs1facilityotl@bp.com
Fee Contact:	Gregory Arthur, Air Compliance Authority (907) 564-4081 gregory.arthur@bp.com
Permit Contact:	Gregory Arthur, Air Compliance Authority (907) 564-4081 gregory.arthur@bp.com
Process Description SIC Code:	1311 – Crude Petroleum and Natural Gas Production

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

Section 2. Emission Unit Inventory and Description

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

Table A - Emission Unit Inventory

EU ID	Tag No.	Emission Unit Name	Emission Unit Description	Rating/Size	Commenced Construction, Startup, or Modification/ Reconstruction Date[1]
Group I - Gas Turbines at Production Pad					
1	NGT-15-1801	GE LM 1500	STV/IP Gas Compressor	14,200 Hp ISO	9/21/73
2	NGT-15-1802	GE LM 1500	STV/IP Gas Compressor	14,200 Hp ISO	9/21/73
3	NGT-15-1803	GE MS 5352B	LPS Gas Compressor	35,000 Hp ISO	1983
4	NGT-15-1804	GE MS 5352B	LPS Gas Compressor	35,000 Hp ISO	1983
5	NGT-15-15107	EGT (Ruston) TB 5000	Produced Water Injection Pump	4,900 Hp ISO	6/19/80
Group II – Gas-Fired Heaters at Production Pad					
6	NGH-15-1431	Broach Glycol Process Heater	Heater	38.0 MMBtu/hr[2]	5/2/74
7	NGH-15-1433	Broach Glycol Process Heater	Heater	38.0 MMBtu/hr[2]	5/2/74
8	NGH-15-1481	Broach Glycol Utility Heater	Heater	26.6 MMBtu/hr[2]	5/2/74
9	NGH-15-1491	Broach Glycol Utility Heater	Heater	26.6 MMBtu/hr[2]	5/2/74
10	NGH-15-1495	Econotherm Glycol Heater	Heater	79.9 MMBtu/hr[2]	1994
11	NGH-15-1496	Econotherm Glycol Heater	Heater	67.8 MMBtu/hr[2]	1994
12	NGH-15-14001	Smith Industries TEG Reboiler	Heater	16.185 MMBtu/hr[2]	1994
13	NGH-15-2801	BS&B TEG Reboiler	Heater	6.8 MMBtu/hr[2]	12/17/74
14	NGH-15-2811	BS&B TEG Reboiler	Heater	6.8 MMBtu/hr[2]	12/17/74
Group III – Liquid Fuel–Fired Equipment at Production Pad					
15	EDG-15-2882	White Superior Emergency Generator	Generator	2,180 Hp (1,626 kW)	8/21/75
16	EDG-15-1553C	Cummins Emergency Fire Water Pump	Fire Water Pump	255 Hp	unknown
Group IV – Flares at Production Pad					
17	HP/IP Flares, STV Flares	Emergency Flares	Flare	1.550 MMscf/day	After 1979

EU ID	Tag No.	Emission Unit Name	Emission Unit Description	Rating/Size	Commenced Construction, Startup, or Modification/ Reconstruction Date[1]
18	15-14000A	HP S-1 Emergency Flare	Flare	(pilot/sweep/purge/ assist) combined total for all flares	1994
19	15-14000B	HP S-2 Emergency Flare	Flare		1994
Group V – Fixed Roof Storage Tanks (> 10,000 gallon capacity) at Production Pad					
20	15-1951	Overflow/Dirty Water Tank	Tank	420,000 gallons	1981
26	15-1933	Slop Oil	Tank	428,300 gallons	1974
Group VI – Liquid Fuel-Fired Equipment at Drill Sites 1, 2, 5, 12, and 18					
21	80-857	DS1 – Emerson Emergency Generator	IC Engine (formerly covered by Preapproval Limit PAL000447)	885 Hp (660 kW)	<June 12, 2006
22	80-803	DS2 – Emerson Emergency Generator	IC Engine	335 Hp (250 kW)	<June 12, 2006
23	80-810	DS5 – Emerson GM Emergency Generator	IC Engine`	370 Hp (275 kW)	<June 12, 2006
24	80-874	DS12 – Caterpillar 3512 Emergency Generator	IC Engine (formerly covered by Preapproval Limit PAL000451)	1,300 Hp (965 kW)	<June 12, 2006
25	80-801	DS18 – Delco Emergency Generator	IC Engine	335 Hp (250 kW)	<June 12, 2006

Notes:

1. Date construction commenced (if known) or the startup date of the unit. If a unit has been modified or reconstructed as defined by AS 46.14.990, then the most recent modification or reconstruction date is provided.
2. Heat input, lower heating value (LHV)

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

Section 3. State Requirements

Visible Emissions Standards

1. Industrial Process and Fuel-Burning Equipment Visible Emissions. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EU IDs 1 through 19 and 21 through 25 listed in Table A to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

1.1. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EU IDs 3 through 5 listed in Table A to reduce visibility through the exhaust effluent by more than 10 percent averaged over any six consecutive minutes.

a. For EU IDs 3 – 5, monitor visible emissions as opacity as set forth in Condition 10.4.

1.2. For EU IDs 1 – 2, and 6 - 14, burn only gas as fuel. Monitoring for these emission units shall consist of a statement in each operating report under Condition 71 that each of these emission units fired only gas. Report under Condition 70 if any fuel is burned other than gas.

1.3. For each of EU ID 15 and 16, as long as the emission unit does not exceed the applicable rolling 12-month operating time limit in Condition 16 (emergency and non-emergency hours combined), monitoring shall consist of an annual compliance certification under Condition 72 with the visible emissions standard in accordance with Condition 17.4.a. Otherwise, monitor, record, and report visible emissions in accordance with Conditions 2 through 4.

1.4. For each of EU ID 21 through 25, as long as the individual emission unit does not exceed 400 hours of operation (emergency and non-emergency hours combined) per consecutive 12-month period, monitoring shall consist of an annual compliance certification under Condition 72 with the visible emissions standard in accordance with Condition 17.4.a. Otherwise, monitor, record, and report visible emissions in accordance with Conditions 2 through 4.

1.5. For EU IDs 17 through 19, monitor, record and report in accordance with Condition 5.

[18 AAC 50.040(j), 50.055(a)(1), & 50.326(j)]
[40 C.F.R. 71.6(a)(1) & (3)]
[Prudhoe Bay Unit PSD Permit No. PSD-X80-09, as amended 8/29/97]

Visible Emissions Monitoring, Recordkeeping and Reporting

Liquid Fuel-Fired Emission Units (EU IDs 15,16, and 21 through 25)

2. Visible Emissions Monitoring. The Permittee shall observe the exhaust of EU IDs 15 16, if required under Condition 1.3, and EU IDs 21 through 25, if required under Condition 1.4, or if replaced during the permit term, for visible emissions using the Method 9 Plan under Condition 2.1. 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)]

2.1. **Method 9 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.[1]

a. **First Method 9 Observation**.

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

(ii) For each existing emission unit that exceeds the operational threshold in Condition 1.3, observe the exhaust for 18 minutes of operations within 45 days after the calendar month during which that threshold has been exceeded, or when the unit is next operated, whichever is later.

b. **Monthly Method 9 Observations**. After the first Method 9 observation required by Condition 2.1.a(i), perform 18-minute observations at least once in each calendar month that an emission unit operates.

c. **Semiannual Method 9 Observations**. After observing emissions for three consecutive operating months under Condition 2.1.b, unless a six-minute average is greater than 15 percent and one or more observations are greater than 20 percent, perform 18-minute observations between four and seven months after the previous set of observations. If an emission unit does not operate during this period, then complete the observations the next time the unit operates.

d. **Annual Method 9 Observations**. After at least two observations under Condition 2.1.c, 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 between 10 and 13 months after the previous observations. If an emission unit does not operate during this period, then complete the observations the next time the unit operates.

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

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

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

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

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

a. the observer shall record

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

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

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

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

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

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

4. Visible Emissions Reporting. 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. In each operating report under Condition 71, include for the period covered by the report:

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

b. a summary to include:

(i) number of days observations were made;

(ii) highest six-minute average observed; and

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

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

4.2. Report under Condition 70:

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 IDs 17 through 19)

5. Visible Emissions Monitoring, Recordkeeping, and Reporting. The Permittee shall observe six flare events[2] occurring during the life of this permit including at least one event per calendar year.

5.1. Monitor flare events using Method-9.

5.2. Record the following information for observed events:

a. the flare(s) EU ID number; and

b. results of the Method-9 observations; and

c. reason(s) for flaring; and

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

e. volume of gas flared.

5.3. Attach copies of the records required by Condition 5.2 with the operating report required by Condition 71 for the period covered by the report.

5.4. Report under Condition 70 whenever the opacity standard in Condition 1 is exceeded or the monitoring required under Condition 5 is not completed.

[2] For purposes of this permit, a "flare event" is flaring of gas at a rate that exceeds the source's de minimis pilot, purge, and assist gas rates for a minimum of 18 consecutive minutes. Flare events monitored within 12 months prior to the permit effective date may be used to count toward the six-event total.

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

Particulate Matter Emissions Standards

6. Industrial Process and Fuel-Burning Equipment Particulate Matter. The Permittee shall not cause or allow particulate matter emitted from EU IDs 1 through 19 and 21 through 25 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 14, burn only gas as fuel. Monitoring for these emission units shall consist of a statement in each operating report under Condition 71 that each of these emission units fired only gas. Report under Condition 70 if any fuel other than gas is burned.

6.2. For each of EU IDs 15 and 16, as long as the emission unit does not exceed the applicable rolling 12-month operating time limit in Condition 16 (emergency and non-emergency hours combined), monitoring shall consist of an annual compliance certification under Condition 72 with the particulate matter standard in accordance with Condition 17.4.a. Otherwise, monitor, record, and report in accordance with Conditions 7 and 8.

6.3. For each of EU IDs 21 through 25, as long as the individual emission unit does not exceed 400 hours of total operation (emergency and non-emergency hours combined) per consecutive 12-month period, monitoring shall consist of an annual compliance certification under Condition 72 with the particulate matter standard in accordance with Condition 17.4.a. Otherwise, monitor, record, and report in accordance with Conditions 7 and 8.

6.4. For EU IDs 17 through 19, the Permittee must annually certify compliance under Condition 72 with the particulate matter standard.

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

PM Monitoring, Recordkeeping and Reporting

Liquid Fuel-Fired Engines (EU IDs 15, 16, and 21 through 25)

7. Particulate Matter Monitoring for Diesel Engines. The Permittee shall conduct source tests on diesel engines EU IDs 15 and 16, if required by Condition 6.2, and EU IDs 21 through 25, if required by Condition 6.3, to determine the concentration of particulate matter (PM) in the exhaust 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 provided in Condition 7.4, within six months of exceeding the criteria of Conditions 7.2.a or 7.2.b, either

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

b. make repairs so that emissions no longer exceed the criteria of Condition 7.2; to show that emissions are below those criteria, observe emissions as described in Condition 2.1 under load conditions comparable to those when the criteria were exceeded.

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

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

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

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

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

8.1. Report under Condition 70:

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

b. if one of the criteria of Condition 7.2 was exceeded and the Permittee did not comply with either Condition 7.1.a or 7.1.b, this must be reported by the day following the day compliance with Condition 7.1 was required;

8.2. 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;

8.3. In each operating report under Condition 71, include for the period covered by the report:

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

b. a summary of the results of any PM 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.

[40 C.F.R. 71.6(a)(3) & (c)(6)]

Sulfur Compound Emission Standards Requirements

9. Sulfur Compound Emissions. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EU IDs 1 through 19 and 21 through 25 to exceed 500 ppm averaged over three hours.

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

Monitoring and Reporting for Other Fuel Oil[3](EU IDs 15, 16, and 21 through 25)

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

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

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

(i) test the fuel for sulfur content using an appropriate method listed in 18AAC 50.035(b)-(c) or 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1); or

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

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

9.3. The Permittee shall report as follows:

a. If SO_2 emissions calculated under Condition 9.2 exceed 500 ppm, the Permittee shall report under Condition 70. When reporting under this condition, include the calculation under Section 12.

b. The Permittee shall include in the operating report required by Condition 71:

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

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

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

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

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

Monitoring and Reporting for Fuel Gas[4](EU IDs 1 through 14 and 17 through 19)

9.4. For EU IDs 3 through 5, the Permittee shall comply with this limit according to Condition 29.

9.5. **Monitoring.** For EU IDs 1, 2, 6 through 14, and 17 through 19, the Permittee shall either

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

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

c. make a demonstration that the fuel gas burned at the stationary source meets the definition of natural gas as allowed under Condition 29.1.b. If such a demonstration is made, then the frequency of monitoring may be reduced to no less than semi-annually. Use the results of this monitoring as a basis for estimating actual SO_2 emissions from gas-fired emission units at the source.

9.6. **Recordkeeping.** Keep records of the monthly statement from the fuel supplier or the sulfur content analysis required under Conditions 9.5.a or 9.5.b or according to Condition 9.5.c.

9.7. **Reporting.** The Permittee shall:

a. Report as excess emissions, in accordance with Condition 70, whenever the fuel combusted causes sulfur compound emissions to exceed the standard of Condition 9.

b. Include copies of the records required by Condition 9.6 with the operating report required by Condition 71 for the period covered by the report.

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

Monitoring and Reporting for North Slope Liquid Fuel (EU IDs 15, 16, and 21 through 25)

9.8. For liquid fuel from a North Slope topping plant, the Permittee shall obtain from the topping plant the results of a monthly fuel sulfur analysis.

a. The Permittee shall include in the operating report required by Condition 71 a list of the sulfur content(s) measured for each month covered by the report.

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

[4] *Fuel gas* has the meaning taken as natural gas as defined in 40 C.F.R. 60.41b, effective 7/1/07.

c. If SO_2 emissions are calculated under Condition 9.8.b to exceed 500 ppm, the Permittee shall report under Condition 70. The report shall document the calculation under Condition 9.8.b.

d. For fuel with a sulfur content greater than 0.75 percent by weight, the Permittee shall include in the operating report required by Condition 71 the calculated SO_2 emissions in PPM.

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

Legacy[5] Permit Requirements

BACT Emission Limits - NO_X, CO, PM, and Opacity Emission Limits, EU IDs 3 through 5

10. The Permittee shall limit actual emissions from the turbines, EU IDs 3 through 5, as indicated in Table B below. Limits in Table B are not to be exceeded.

10.1. The Permittee shall calculate the monthly and the 12-month consecutive summation of emissions for NO_X, CO, and PM for EU IDs 3 through 5. Use the emission factors found in Table E, Section 12 of this permit, or the latest emission factor obtained from the most recent performance test in Condition 10.6, along with the hours of operation and/or amount of fuel used, to calculate the monthly emissions for each unit.

10.2. Report the monthly and the consecutive 12-month period summation of emissions from Condition 10.1, for each month of the reporting period, with each operating report required by Condition 71.

10.3. Notify the Department per Condition 70 should the 12-month consecutive summation of emissions of any air pollutant exceed the limit for that pollutant in Condition 10.

10.4. **Opacity Monitoring**. If any of EU IDs 3 - 5 exceeds 200 hours operating time during either 6- month period defined as March through August or September through February, conduct Method 9 observations to demonstrate compliance with the short term turbine BACT opacity emission limit in Table B. The observations shall be conducted as specified by 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. Complete the observations within 30-days after the end of each semi-annual period defined above or when the unit is next operated, whichever is later.

a. Record and report as required under Conditions 3 and 4.

b. Report under Condition 70 the results of Method 9 observations that exceed the BACT opacity emission limit in Table B.

10.5. **NO_X Monitoring**. For EU IDs 3 through 5, monitor, record, and report in accordance with Conditions 28.2 through 28.4 to demonstrate compliance with the short-term BACT NO_X emission limit in Table B.

[5] *Legacy* refers to permits issued before the split Construction and Operating Permits Program, and includes Federal PSD Permits, or State-issued Permits-to-Operate.

10.6. **NO_X, CO and PM BACT Recurring Testing**. The Permittee shall monitor compliance with the short-term NO_X, CO, and PM BACT limit in Table B for EU IDs 3 through 5 by conducting a source test to demonstrate compliance with each limit on EU IDs 3 or 4 and 5 within 12 months of the effective date of this permit. Record and report results of the source test in accordance with Section 6.

[Federal Prudhoe Bay Unit PSD Permit No. PSD-X80-09, as amended 8/29/97]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a), 7/2/07]

Table B - BACT Emissions Limits (GE/MS5352B Turbines NGT-15-1803 and NGT-15-1804, and Ruston/TB5000 Turbine NGT-15-15107)

Pollutant	EU ID No.	Turbine Make/Model	Equipment Tag Number	Emission Limit (short-term) per Individual Turbine	Annual Emission Limit per Individual Turbine (TPY)
NO_X	3	GE/MS5352B	15-1803	173 ppmvd @15%O_2	1,115
	4	GE/MS5352B	15-1804	173 ppmvd @15%O_2	1,115
	5	Ruston/TB5000	15-15107	154 ppmvd @15%O_2	141
CO	3	GE/MS5352B	15-1803		269
	4	GE/MS5352B	15-1804	0.17 lb/MMBtu for each unit	269
	5	Ruston/TB5000	15-15107		38
PM	3	GE/MS5352B	15-1803		22
	4	GE/MS5352B	15-1804	0.014 lb/MMBtu for each unit	22
	5	Ruston/TB5000	15-15107		3.2
Opacity	3	GE/MS5352B	15-1803		
	4	GE/MS5352B	15-1804	10%, consecutive 6-minute average per unit	No limit
	5	Ruston/TB5000	15-15107		

Notes: 1) All turbine group emission limits for NO_X refer to full load, ISO conditions.

2) All other emission limits refer to full load, standard conditions.

3) All short-term and long-term limits are from Permit No. PSD-X80-09.

BACT Emission Limits - NO_X Emission Limits for EU IDs 10 through 12, 18, and 19

11. The Permittee shall limit the oxides of nitrogen emissions from EU IDs 10 through 12 and EU IDs 18 and 19 as shown in Table C below. Limits in Table C are not to be exceeded.

11.1. The Permittee shall maintain records that are available for inspection, which demonstrate that EU IDs 10 through 12 and EU IDs 18 and 19 are maintained in good operating condition and in accordance with current BPXA established guidelines and operating procedures.

11.2. The Permittee shall monitor compliance with the short-term NO_X BACT limit in Table C for EU IDs 10 through 12 by conducting a source test on EU IDs 10 through 12 no later than 12 months after the effective date of this permit. Record and report results of the source test in accordance with Section 6.

[Operating Permit No. 9273-AA017, as amended through 12/20/96]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

Table C - BACT Emissions Limits for EU IDs 10 through 12, 18, and 19 (Econotherm Heaters NGH-15-1495 and NGH-15-1496; Smith TEG Reboiler NGH-15-14001; and HP Flares 15-14000A and 15-14000B)

Pollutant	EU ID No.	Make/Model	Equipment Tag Number	Emission Limit (short-term) per Individual Unit	Annual Emission Limit per Individual Unit (TPY)
NO_X	10 11	Econotherm Glycol Heaters	NGH-15-1495 NGH-15-1496	0.08 lb/MMBtu	No Limit
	12	Smith TEG Reboiler	NGH-15-14001		
	18 19	HP S-1 and S-2 Emergency Flares	15-14000A 15-14000B	0.068 lb/MMBtu	No Limit

Notes: 1) All short term limits are from Permit No. 9273-AA017.

Fuel Consumption Monitoring for EU IDs 1 through 19 and 21 through 25

12. The Permittee shall maintain and operate monitoring devices (e.g., fuel gas meters) or provide other means of estimating fuel consumption to determine the total volume of fuel gas consumed by the Group I emission units (EU IDs 1 through 5) and the Group II emission units (EU IDs 6 through 14). For other fuel-burning equipment (Group III: EU IDs 15 and 16, Group IV: EU IDs 17 through 19, and Group VI: EU IDs 21 through 25) the fuel consumption may be estimated.

12.1. Monitor and record each type of fuel and the total quantity burned in each emission unit group (Groups I, II, III, IV, and VI) and the stationary source-wide totals for each fuel type on a monthly basis.

12.2. Report using the operating report under Condition 71, the monthly total fuel consumption (MMscf/month for gas-fired emission units and gallons/month for liquid fuel-fired emission units) for each emission unit group (Groups I, II, III, IV, and VI) and the stationary source total fuel consumption, for each month of the reporting period.

[Operating Permit No. 9273-AA017, as amended through 12/20/96]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

Hours of Operation Monitoring for EU IDs 1 through 16 and 21 through 25

13. The Permittee shall monitor, record, and report the hours of operation as follows:

13.1. Monitor and record the monthly operating time for each of EU IDs 1 through 16, and 21 through 25.

13.2. Report using the operating report required under Condition 71, the data recorded under Condition 13.1, for each month of the reporting period.

[Operating Permit No. 9273-AA017, as amended through 12/20/96]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

Operating Hours Limit for EU IDs 1 and 2

14. The Permittee shall operate the turbines, EU IDs 1 and 2, no more than a combined total of 12,000 hours per consecutive 12-month period.

14.1. Monitor and record the monthly combined hours of operation and the consecutive 12-month period summation of the combined hours of operation for EU IDs 1 and 2.

14.2. For each month of the reporting period, report the data recorded under Condition 14.1 with the operating report required by Condition 71.

14.3. Report under Condition 70 if the combined consecutive 12-month total hours of operation for any given month exceed the limit for EU IDs 1 and 2 in Condition 14.

[Operating Permit No. 9273-AA017, as amended through 12/20/96]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

Flue Gas Monitoring for EU IDs 10 and 11

15. The Permittee shall conduct monitoring of EU IDs 10 and 11 monthly for flue gas content of O_2 in accordance with the approved alternate monitoring plan dated January 10, 1995.

15.1. For EU ID(s) 10 and 11, the Permittee shall install, maintain, and operate in good working order a continuous emissions monitoring system (CEMS) for recording and monitoring flue gas content of CO or O_2 which shall be installed and calibrated according to 40 C.F.R. 60, Appendix B.

15.2. Include copies of the records required by Condition 15 with the operating report required by Condition 71 for each month of the reporting period.

[Operating Permit No. 9273-AA017 Exhibit C, as amended through 12/20/96]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

Operating Hours Limit for EU IDs 15 and 16

16. The Permittee shall operate, EU IDs 15 and 16, no more than 200 hours each per consecutive 12-month period.

16.1. Monitor and record the monthly hours of operation and the consecutive 12-month period summation of operational hours for each of EU IDs 15 and 16.

16.2. For each month of the reporting period, report the data recorded under Condition 16.1 with the operating report required by Condition 71.

16.3. Report under Condition 70 if the consecutive 12-month period total hours of operation for any given month exceed the limit in Condition 16.

[Operating Permit No. 9273-AA017, as amended through 12/10/96]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

Stationary Source-Wide Specific Requirements

Insignificant Emission Units

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

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

[18 AAC 50.055(a)(1)]

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

[18 AAC 50.055(b)(1)]

17.3. **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)]

17.4. General MR&R for Insignificant Emission Units

a. The Permittee shall submit the certification of compliance of Condition 72 based on reasonable inquiry;

b. The Permittee shall comply with the requirements of Condition 48;

c. The Permittee shall report in the operating report required by Condition 71 if an emission unit is insignificant because of historical 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

Emission Units Subject to Federal NSPS, Subpart A

18. NSPS Subpart A Notification. For any affected facility[6] or existing facility[7] regulated under NSPS requirements in 40 C.F.R. 60, the Permittee shall furnish the Department and EPA written or electronic notification of:

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

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

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

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

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

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

a. information describing the precise nature of the change,

b. present and proposed emission control systems,

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

d. the expected completion date of the change.

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

18.4. 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 60 days (or soon as practicable) before construction of the replacements is commenced, and must include the following information:

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

a. the name and address of owner or operator,

b. the location of the existing facility,

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

7 *Existing facility* means, with reference to a stationary source, any apparatus of the type for which a New Source Performance Standard is promulgated, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type, as defined in 40 C.F.R. 60.2, effective 7/1/07.

c. a brief description of the existing facility and the components which 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 New Source Performance Standards after the proposed replacements.

19. 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 3 through 5, 10 through 12, and 20, any malfunctions of associated air-pollution control equipment, or any periods during which a continuous monitoring system or monitoring device for EU IDs 3 through 5, 10 through 12, and 20 is inoperative.

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

20. NSPS Subpart A Excess Emissions and Monitoring Systems Performance Report. The Permittee shall submit excess emissions and monitoring systems performance reports (excess emissions are defined in applicable subparts) and-or summary report forms to the Department and the Administrator **annually** by the 30th day following the end of each calendar year[8,9]. Submit the EEMSP reports with the summary report form as required in Condition 21. 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 & 60.334(j), Subpart GG]
[EPA letter, Re: Custom Fuel Monitoring Schedule, 10/18/93]

20.1. Specific identification of each period of excess emissions that occurred during startups, shutdowns, and malfunctions of EU IDs 3 through 5; 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]

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

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

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

[8] Periods of excess emissions and monitor downtime are defined in 40 C.F.R. 60.334(j)(2) for Subpart GG-affected units.
[9] The Permittee obtained EPA approval for annual instead of semi-annual fuel sulfur reporting in a letter from Jim McCormick (EPA Region 10) to Arco Alaska, Inc. dated Oct. 18, 1993.

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

21. NSPS Subpart A Summary Report Form. The Permittee shall submit to the Department and to EPA one "summary report form" containing the information and in the format shown in Figure 1 of 40 C.F.R. 60.7[10] unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored for EU IDs 3 through 5. The report shall be submitted as required by Condition 20 as follows:

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

21.1. 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, submit only the summary report form **unless** the EEMSP report described in Condition 20 is requested by the Administrator or

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

21.2. 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, then submit a summary report form **and the EEMSP** described in Condition 20.

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

22. NSPS Subpart A Performance (Source) Tests. The Permittee shall conduct source tests according to 40 C.F.R. 60.8 and Section 6 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]

23. 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 3 through 5, 10 through 12, and 20, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating 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, opacity observations, review of operating and maintenance procedures, and inspections of EU IDs 3 through 5, 10 through 12, and 20.

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

[10] See Summary Report Form in Attachment A of the Statement of Basis.

24. 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 27, 28, or 29 nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether EU IDs 3 through 5, 10 through 12, and 20, would have been in compliance with applicable requirements 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]

25. 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 28 or 29. 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]

Steam Generating Units Subject to NSPS Subpart Dc

26. NSPS Subpart Dc Fuel Consumption. For each EU IDs 10 through 12, the Permittee shall record and maintain records of the amount of fuel combusted during each operating day; or monitor according to an EPA approved custom fuel-monitoring schedule.

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

Petroleum Liquid Storage Vessels (Tanks) Subject to NSPS Subpart Ka

27. NSPS Subpart Ka Requirements. The Permittee shall comply with 40 C.F.R. 60 Subpart Ka, as follows:

[18 AAC 50.040(a)(2)(L)]
[40 C.F.R. 60.112a, Subpart Ka]

27.1. The Permittee shall maintain and operate EU ID 20 with a vapor recovery system meeting the specifications of 40 C.F.R. 60.112a(a)(3) and in accordance with the Operations and Maintenance Plan developed in compliance with 40 C.F.R. 60.113a(a)(2)(iii).

[18 AAC 50.040(a)(2)(L)]
[40 C.F.R. 60.112a(a)(3), Subpart Ka]

Turbines Subject to NSPS Subpart GG (*EU IDs 3 through 5*)[11]

28. NSPS Subpart GG NO_X Standard. The Permittee shall not allow the exhaust gas concentration of NO_X from EU IDs 3 and 4 to exceed 174 ppmvd at 15 percent O_2, ISO corrected.

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

28.1. **Emergency Fuel.** Stationary gas turbines with a heat input greater than or equal to 10.7 gigajoules per hour (10 million Btu/hour) when fired with natural gas are exempt from the standard in Condition 28 when being fired with an emergency fuel. Each period during which an exemption is in effect shall be included in the report required in Condition 20. For each period, the type, reasons, and duration of the firing of the emergency fuel shall be reported.

[40 C.F.R. 60.332(k) and 60.334(j)(4), Subpart GG]

28.2. **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 Conditions 10 and 28 that operates for 400 hours or more in any 12-month period during the life of this permit, the Permittee shall satisfy either Condition 28.2.a(i) or 28.2.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 most stringent applicable limit shown in Conditions 10 and 28, the Permittee shall conduct a NO_X 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 the listed expiration date of the permit, except as set out in Conditions 28.2.a(i)(C) and 28.2.a(ii):

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

(B) Within 1 year of 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 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 operation over the 400 hour threshold.

[11] EU ID 5 is exempt from Subpart GG NO_X requirements because it satisfies the exemptions listed in 40 C.F.R. 60.332(e).

(ii) For existing turbines whose latest emissions source testing was certified as operating at greater than 90 percent of any of the applicable limits shown in Conditions 10 and/or 28, the Permittee shall conduct a NOX and O2 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 applicable limits of Conditions 10 and/or 28.

b. **Substituting Test Data**. The Permittee may use a Method 20, or Method 7E and either Method 3 or 3A, test under Condition 28.2.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 applicable emission limits of Conditions 10 and/or 28, and are projected under Condition 28.2.c to be less than or equal to 90 percent of the applicable limit at maximum load;

(ii) for any source test done after the effective date of this permit, the Permittee identifies in a source test plan under Condition 62

(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) operates under close to identical ambient conditions as the untested turbines;

(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 any of the emission limits of Conditions 10 and/or 28.

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

(i) Conduct all tests under Condition 28.2 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 NO_X 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 28.2 to predict the highest load at which emissions will comply with the applicable limits in Conditions 10 and/or 28;

(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 any of the applicable limits of Conditions 10 and/or 28.

(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

(4) the Permittee may revise a load limit by submitting results of a more recent Method 20, or Method 7E and either Method 3 or 3A, test done at a higher load, and, if necessary, the accompanying information and demonstration described in Condition 28.2.c(iii)(A); the new limit is subject to any new Department finding under Condition 28.2.c(iii)(C) and

(iv) In order to perform a Method 20, or Method 7E and either Method 3 or 3A, emission test, the Permittee may operate a turbine at a higher load than that prescribed by Condition 28.2.c(iii).

(v) For the purposes of Conditions 28.2 through 28.4, 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.

28.3. **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 28.2.c(iii) does not show compliance with the applicable limits of Conditions 10 and/or 28 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 28.3.a shall be hourly or otherwise as approved by the Department.

(iii) Within one month after submitting a demonstration under Condition 28.2.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 28.2.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 Conditions 10 and/or 28, that will operate less than 400 hours in any 12 consecutive months, the Permittee shall keep monthly records of the hours of operation.

28.4. **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 71 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 28.2.c(iii):

(i) the load limit;

(ii) the turbine identification; and

(iii) the highest load recorded under Condition 28.3.a during the period covered by the operating report.

b. In each operating report under Condition 71 for each turbine for which Condition 28.2 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 70 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 28.2.a(i) or 28.2.a(ii) but not performed, or

(iii) the turbine was operated at a load exceeding that allowed by Conditions 28.2.c(iii)(B) and 28.2.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]

29. NSPS Subpart GG Sulfur Standard. The Permittee shall not allow the sulfur content for the fuel burned in EU IDs 3 through 5 to exceed 0.8 percent by weight.

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

29.1. **Monitoring**. The Permittee shall monitor compliance with the fuel sulfur content standard 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 29.1.b. The sulfur content of the fuel must be determined using total sulfur methods described in Condition 29.2. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 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. Notwithstanding the provisions of Conditions 29.1a and 29.1c, and upon submittal of a certified statement to the Department that, pursuant to 40 C.F.R. 60.334(h)(3), the gaseous fuel is demonstrated to meet the definition of natural gas in 40 C.F.R. 60.331(u)[12] the Permittee may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, regardless of whether an existing custom schedule approved by the Administrator requires such monitoring. The Permittee shall use one of the following sources of information to make the required demonstration:

(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 Permittee may, without submitting a special petition to the Administrator, continue monitoring on this schedule. The EPA-approved Custom Fuel Monitoring Schedule and Alternate H_2S Sampling Method allow the Permittee to determine the sulfur content of the fuel gas at least monthly using ASTM D 4810-88, ASTM D 4913-89, or Gas Producer's Association (GPA) Method 2377-86.

[40 C.F.R. 60.334(h)(4), Subpart GG]
[Custom Fuel Monitoring Schedule, 7/13/93 (with additional correspondence dated 8/20/93, 10/18/93, and 8/19/96)]
[Alternative Monitoring Plan, 10/2/97]

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

[12] From 40 C.F.R. 60.331(u), *natural gas* contains 20.0 grains or less of total sulfur per 100 standard cubic feet. Equivalents of this in other units are as follows: 0.068 weight percent total sulfur, 680 ppmw total sulfur, and 338 ppmv at 20 degrees Celsius total sulfur. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 960 and 1100 Btu/scf.]

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

(i) **Fuel oil.** For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in Sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of Appendix D of 40 C.F.R Part 75 (i.e., flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank).

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

(ii) **Gaseous fuel.** If the Permittee elects not to demonstrate sulfur content using options in Condition 29.1.b or Condition 29.1c, and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined and recorded under Condition 29.1a once per unit operating day.

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

(iii) **Custom schedules.** Notwithstanding the requirements of Condition 29.1.d(ii), the Permittee may develop a custom schedule 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, according to the provisions and as allowed under 40 C.F.R. 60.334(i)(3). 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]

29.2. **Test Methods and Procedures.** If the Permittee periodically determines the sulfur content of the fuel combusted in the turbine under Condition 29.1.a and Condition 29.1.d, 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 29.2.a and/or 29.2.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)(i), 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)(ii), Subpart GG]

c. The fuel analyses required under Condition 29.1 and 29.2 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.

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 60.335(b)(11), Subpart GG]

29.3. **Recordkeeping.** Keep records of analyses conducted under Condition 29.1.

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

29.4. **Reporting.** The Permittee shall:

a. for each affected unit for which the Permittee elects to periodically determine the fuel sulfur content under Condition 29.1.a, 29.1.c, or 29.1.d,

(i) annually report the results of all sulfur monitoring to EPA and send a copy to the Department by the 30th day following the end of each calendar year;

[EPA Letter: Custom Fuel Monitoring Schedule, 10/18/93]

(ii) include with the report submitted under Condition 29.4.a(i) a report of excess emissions and monitoring system downtime in accordance with 40 C.F.R. 60.7(c) as summarized in Condition 20 and as defined under 40 C.F.R. 60.334(j)(2). Excess emissions shall be reported for all periods of unit operation, including startups, shutdowns, and malfunctions.

(iii) If periodic gaseous fuel sulfur monitoring is not required to be conducted because the demonstration under Condition 29.1.b has been made, reporting under Conditions 20, 21, and this condition is not required.

b. include a copy of the records required by Condition 29.3 with the operating report required by Condition 71 for the period covered by the report; and

c. report under Condition 70 if

(i) a test result exceeds the limit in Condition 29;

(ii) monitoring is required under Condition 29.1 but not performed; or

(iii) any reporting required under Condition 29.4 is not completed.

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 60.334(j)(2) & (5), Subpart GG]

Emission Units Subject to Federal NESHAPS, Subpart A

30. NESHAP Subpart A. The Permittee shall comply with the applicable requirements of 40 C.F.R. 63 Subpart A in accordance with the provisions for applicability of Subpart A in Table 2 of Subpart HH, and of Table 8 of Subpart ZZZZ.

Black Oil Facility Subject to NESHAP Subpart HH

31. Recordkeeping. Records for the stationary source shall be maintained as required in 40 C.F.R. 63.10(b)(3) in order to maintain the exemption of 40 C.F.R. 63.760(e)(1).

[18 AAC 50.040(c)(13) & (j) and 50.326(j)]
[40 C.F.R. 63.760(e)(1)]

Stationary Reciprocating Internal Combustion Engines (RICE) Subject to NESHAP Subpart ZZZZ (*EU IDs 15, 16, and 21 through 25*)

32. NESHAP Subpart ZZZZ Applicability and General Requirements. For EU IDs 15, 16, and 21 through 25 listed in Table A, the Permittee shall comply with the applicable requirements for existing stationary reciprocating internal combustion engines (RICE) located at an area source of HAP emissions that commenced construction before June 12, 2006.

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

32.1. **Notification.** The Permittee is not required to submit an initial notification for an existing stationary emergency RICE or an existing stationary RICE that is not subject to any numerical emission standards.

[40 C.F.R. 63.6645(a)(5), Subpart ZZZZ]

32.2. The Permittee shall be in compliance with the applicable management practices and operating limitations, as set out in Condition 33, at all times.

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

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

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

32.4. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times.

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

32.5. The Permittee has the option to utilize an oil analysis program as described in 40 C.F.R. 63.6625(i) in order to extend the specified oil change requirement in Condition 33.1.a.

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

32.6. Continuously comply with the emissions and operating limitations at all times as required by the following:

a. Operating and maintaining the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related operation and maintenance instructions; or

b. Developing and following the stationary source‘s 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)(3), 63.6640(a) & Table 6 item 9, Subpart ZZZZ]

33. NESHAP Subpart ZZZZ Management Practices and Operating Limitations. For EU IDs 15, 16, and 21 through 25, existing emergency stationary CI RICE located at an area source of HAP emissions, the Permittee shall comply with the following management practices and operating limitations no later than May 3, 2013.

[40 C.F.R. 63.6595(a)(1), Subpart ZZZZ]

33.1. Except during periods of startup and as allowed by Condition 33.2,

a. Change oil and filter every 500 hours of operation or annually, whichever comes first[13].

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

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

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

33.2. If any of EU IDs 15, 16, and/or 21 through 25 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 33.1, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated.

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

34. Monitoring. For existing emergency stationary CI RICE, EU IDs 15, 16, and 21 through 25, the Permittee shall:

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

34.1. Install a non-resettable hour meter if one is not already installed.

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

[13] See Condition 32.5 [ref. Table 2d, Footnote 1 and 40 C.F.R. 63.6625(i)].

34.2. Operate the emergency stationary RICE unit according to the conditions described below:

a. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in Conditions 34.2b through 34.2d, is prohibited. If the engine is not operated according to the requirements in Conditions 34.2b through 34.2d, the engine will not be considered an emergency engine under 40 C.F.R. 63, Subpart ZZZZ and will need to meet all applicable requirements for non-emergency engines. (See Condition 37)

b. There is no time limit on the use of emergency stationary RICE in emergency situations. The total operating hour time for EU IDs 15 and 16 is further limited by Condition 16.

c. The Permittee 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 such units is limited to 100 hours per 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 year.

d. The Permittee may operate the emission units up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing under Condition 34.2c. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a stationary source to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the stationary source is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this condition, as long as the power provided by the financial arrangement is limited to emergency power.

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

35. Recordkeeping. For existing emergency stationary CI RICE, EU IDs 15, 16, and 21 through 25, the Permittee shall keep the following records:

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

35.1. a copy of each report submitted as required under Condition 36;

35.2. all required maintenance performed on the air pollution control (if any) and monitoring equipment;

35.3. actions taken during periods of malfunction to minimize emissions in accordance with Condition 32.3, including corrective actions to restore malfunctioning process and air pollution control (if any) and monitoring equipment to its normal or usual manner of operation;

35.4. records required in Condition 32.6, as applicable, to show continuous compliance with the applicable management practices and operating limitations in Condition 33.1.

35.5. the maintenance conducted in order to demonstrate that the units and after-treatment control device (if any) are operated and maintained the stationary RICE according to the maintenance plan required in Condition 32.6. These records must include at a minimum: oil and filter change dates and corresponding hour on the hour meter; inspection and replacement dates for air cleaners, hoses, and belts; and records of other emission-related repairs and maintenance performed; and

35.6. the hours of operation of each of EU IDs 15, 16, and 21 through 25 that is recorded through the non-resettable hour meter. The Permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the Permittee shall keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

35.7. keep records in accordance with 40 C.F.R. 63.10(b)(1), in a form suitable and readily available for expeditious review, readily accessible in hard copy or electronic form, and for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 C.F.R. 63.6655(a)(1, 2, 4, & 5), (d), (e)(2) & (f)(2) & 63.6660 Subpart ZZZZ]

36. Reporting. For existing emergency stationary CI RICE, EU IDs 15, 16, and 21 through 25, the Permittee shall:

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

36.1. report deviations as defined in 40 C.F.R. 63.6675 in the operating report required by Condition 71;

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

36.2. report under Condition 70 any failure to perform the management practice on the schedule required in Condition 33.1 and the Federal, State or local law under which the risk was deemed unacceptable (See Condition 33.2); and

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

36.3. notify the Department in accordance with Condition 70 if any of the requirements in Conditions 32 through 35 were not met.

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

37. Operational Flexibility under NESHAP Subpart ZZZZ for Emergency RICE > 300 Hp. In accordance with Condition 34.2.a, if any of EU IDs 21 through 25 fails to meet the requirements for emergency RICE under Condition 34, the Permittee shall:

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(3 & 13) & 71.6(c)(6)]

37.1. Operate the engine(s) as non-emergency engines for the rest of the life of the permit and comply with the following:

a. Comply with the requirements of Condition 78.

b. Include the following information in addition to that required by Condition 78.2 in the written notification required by Condition 78.1:

(i) A comprehensive list of the requirements of 40 C.F.R. 63 Subparts A and ZZZZ that will apply as a result of the change in operational status;

(ii) A certification that the engine(s) changing classification meet or will meet the new applicable emission, operation, and fuel sulfur limits listed in the notification as required under Condition 37.1a prior to the stated date of the intended change in operational status; and

(iii) The information required in 40 C.F.R. 63.9(b)(2)(i) – (v).

[40 C.F.R. 63.9(b)(2), Subpart A]

37.2. Conduct initial performance test or other initial compliance demonstration within 180 days after changing from an emergency engine to a non-emergency engine or 180 days after the compliance date set in Condition 33 (i.e., by October 30, 2013), whichever is later according to the provisions in 40 C.F.R. 63.7(a)(2), except as set out by 40 C.F.R. 63.6620(f – h).

37.3. Comply with the performance test notification and reporting requirements and deadlines outlined in 40 C.F.R. 63.7(b), 63,7(c), 63.9(h)(2), and 63.10(d)(2).

37.4. Comply with all the NESHAP Subpart ZZZZ emissions standards, operating limitations, fuel requirements, notification, performance test, compliance demonstration, monitoring, recordkeeping, and reporting requirements, as well as the associated NESHAP Subpart A requirements applicable to the affected non-emergency unit(s).

[40 C.F.R. 63.6595(a)(7), 63.6612, 63.6640(f)(1), Subpart ZZZZ]
[40 C.F.R. 63.7(a) – (c), 63.9(h)(2), 63.10(d)(2), Subpart A]

Section 5. General Conditions

Standard Terms and Conditions

38. 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)]

39. 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)]

40. 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)]

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

[18 AAC 50.326(j)(1), 50.400, 50.403, & 50.405]
[AS 37.10.052(b), 11/04; AS 46.14.240, 8/1/07]

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

42.1. the stationary source's assessable potential to emit of 4,860 TPY; or

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

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

b. material balance calculations;

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

d. other methods and calculations approved by the Department.

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

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

43.1. 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., Suite 303, Juneau, AK 99801-1795; the submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates; or

43.2. if no estimate is submitted on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit set forth in Condition 42.1.

[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)]

44. Good Air Pollution Control Practice. Except as set forth in Condition 44.4, the Permittee shall do the following for EU IDs 1, 2, 6 through 9, 13 through 19, and 21 through 25:

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

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

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

44.4. EU IDs 15, 16, and 21 through 25 are subject to this condition only until the applicable compliance date as set forth in Condition 33.

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

45. 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)]

46. 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. Monitoring shall consist of an annual certification that reasonable precautions were taken.

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

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

[18 AAC 50.055(g)]

48. 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)]

48.1. Monitoring, Recordkeeping, and Reporting for Condition 48:

a. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 70.

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 48.

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

a. after an investigation because of a complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of Condition 48; or

b. the Department notifies the Permittee that it has found a violation of Condition 48.

48.3. The Permittee shall keep records of

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

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

c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 48; and

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

48.4. With each operating report required under Condition 71, and for the period covered by the report, the Permittee shall include a brief summary report which must include:

a. the number of complaints received;

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

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

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

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

49. Technology-Based Emission Standard. If an unavoidable emergency, malfunction, or non-routine repair, as defined in 18 AAC 50.235(d), causes emissions in excess of a technology-based emission standard[14] listed in Conditions 27, 28, and 29, the Permittee shall take all reasonable steps to minimize levels of emissions that exceed the standard. Excess emissions reporting under Condition 70 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 70.

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

50. Asbestos NESHAP. The Permittee shall comply with the requirements set forth in 40 C.F.R. 61.145 and 40 C.F.R. 61.150, 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]

51. Refrigerant Recycling and Disposal. The Permittee shall comply with the applicable standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F. Applicable requirements include 40 C.F.R. 82.154, 82.156, 82.161, 82.162, and 82.166.

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

NESHAPs Applicability Determinations

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

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

Halon Prohibitions, 40 C.F.R. 82

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

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

[14] *Technology-based emission standard* means a best available control technology standard (BACT); a lowest achievable emission rate standard (LAER); a maximum achievable control technology standard established under 40 C.F.R. 63, Subpart B, adopted by reference in 18 AAC 50.040(c); a standard adopted by reference in 18 AAC 50.040(a) or (c); and any other similar standard for which the stringency of the standard is based on determinations of what is technologically feasible, considering relevant factors. Such other standards might include those found in 40 C.F.R. 82, Protection of Stratospheric Ozone.

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

[18 AAC 50.040(d)]
[40 C.F.R. 82.270 (b)-(f)]

Open Burning Requirements

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

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

55.2. Compliance with this condition shall be an annual certification conducted under Condition 72.

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

Section 6. General Source Testing and Monitoring Requirements

56. 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)]

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

[18 AAC 50.220(b)]

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

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

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

58.1. 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]

58.2. 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]

58.3. 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]

58.4. 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)]

58.5. 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]

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

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

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

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

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

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

60. Test Exemption. The Permittee is not required to comply with Conditions 62, 63 and 64 when the exhaust is observed for visible emissions using the Method 9 Plan (Condition 2.1).

[18 AAC 50.345(a)]

61. 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)]

62. Test Plans. Except as provided in Condition 60, before conducting any source tests, the Permittee shall submit a plan to the Department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance and must specify how the emission unit will operate during the test and how the Permittee will document that operation. The Permittee shall submit a complete plan within 60 days after receiving a request under Condition 56 and at least 30 days before the scheduled date of any test unless the Department agrees in writing to some other time period. Retesting may be performed without resubmitting the plan.

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

63. Test Notification. Except as provided in Condition 60, 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)]

64. Test Reports. Except as provided in Condition 60, within 60 days after completing a source test, the Permittee shall submit two copies of the results in the format set out in the *Source Test Report Outline*, adopted by reference in 18 AAC 50.030. The Permittee shall certify the results in the manner set out in Condition 67. 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)]

65. Particulate Matter Calculations. In source testing for compliance with the particulate matter standards in Conditions 6 and 17.2, the three-hour average is determined using the average of three one-hour test runs.

[18 AAC 50.220(f)]

Section 7. General Recordkeeping and Reporting Requirements

Recordkeeping Requirements

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

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

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

66.2. 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

67. 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.

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

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

b. the person providing the electronic signature has made an agreement, with the certifying authority described in Condition 67.1.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)]

68. Submittals. Unless otherwise directed by the Department or this permit, the Permittee shall send an original and one copy of reports, compliance certifications, and other submittals required by this permit to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician. The Permittee may, upon consultation with the Compliance Technician regarding software compatibility, provide electronic copies of data reports, source test reports, or other records under a cover letter certified in accordance with Condition 67.

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

69. 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)]

70. Excess Emissions and Permit Deviation Reports.

70.1. Except as provided in Condition 48, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

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

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

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

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

c. report all other excess emissions and permit deviations

(i) within 30 days of the end of the month in which the excess emissions or deviations occurred, except as provided in Conditions 70.1.c(ii) and 70.1.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 70.1.c(i); or

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

70.2. When reporting excess emissions or permit deviations, the Permittee shall report using either the Department's on-line form, which can be found at http://www.dec.state.ak.us/air/ap/site.htm or https://myalaska.state.ak.us/deca/air/airtoolsweb/, 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.

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

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

71. Operating Reports. During the life of this permit[15], the Permittee shall submit to the Department an original and one copy of an operating report by May 15 for the period January 1 to March 31, by August 15 for the period April 1 to June 30, by November 15 for the period July 1 to September 30, and by February 15 for the period October 1 to December 31 of the previous year.

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

71.2. If excess emissions or permit deviations that occurred during the reporting period are not reported under Condition 71.1, either

a. The Permittee shall identify

(i) the date of the deviation;

(ii) the equipment involved;

(iii) the permit condition affected;

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

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

b. When excess emissions or permit deviations have already been reported under Condition 70 the Permittee shall cite the date or dates of those reports.

71.3. The operating report must include for the period covered by the report a listing of emissions monitored under Conditions 2.1.e and 28.2.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.

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

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

72. Annual Compliance Certification. Each year by March 31, the Permittee shall compile and submit to the Department an original and one copy of an annual compliance certification report[16].

72.1. 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.

72.2. **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.

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

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

73. NSPS and NESHAP Reports. The Permittee shall:

73.1. **Reports**: Attach to the operating report required by Condition 71, 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 during the period covered by the report; and

[16] See Condition 72.2 for clarification on the number of reports required.

73.2. **Waivers**: Upon request by the Department, provide a written copy of any EPA-granted alternative monitoring requirement, custom monitoring schedule or waiver of the Federal emission standards, recordkeeping, monitoring, performance testing, or reporting requirements. The Permittee shall keep a copy of each 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, 60.10(d and f), & 71.6(c)(6)]

74. Emission Inventory Reporting. The Permittee shall submit to the Department reports of actual emissions, by emission unit, of CO, NH3, NOX, PM10, PM2.5, SO2, VOCs and lead (Pb) (and lead compounds) using the form in Section 15 of this permit, each year by March 31, as the stationary source's potential to emit emissions for the previous calendar year equal or exceed 2500 TPY of NOX.

74.1. 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 (final rule published in 73 FR 76556 (December 17, 2008)) for each stack associated with an emission unit.

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

Section 8. Permit Changes and Renewal

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

75.1. 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[17];

75.2. The information shall be submitted to the same address as in Condition 72.3.

75.3. 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

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

[18 AAC 50.040(j)(7), 50.326(b), & 50.345(b)(7)]
[40 C.F.R. 71.10(d)(1)]

76. 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)]

77. 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:

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

77.2. 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;

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

77.4. 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)]

[17] The documents required in Condition 75.1 are submitted to the Department's Anchorage office. The current address for the Anchorage office is: ADEC, 619 East Ship Creek Avenue, Suite 249, Anchorage, AK 99501.

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

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

78.2. For each such change, the written notification required by Condition 78.1 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.

78.3. The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made pursuant to Condition 78.

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

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

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

Section 9. Compliance Requirements

General Compliance Requirements

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

80.1. included and specifically identified in the permit; or

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

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

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

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

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

a. an enforcement action;

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

c. denial of an operating permit renewal application.

[18 AAC 50.040(j), 50.326(j) & 50.345(a) & (c)]
[40 C.F.R. 71.6(c)(3) & 71.5(c)(8)(iii)(A)]

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

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

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

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

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

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

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

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

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

[18 AAC 50.040(j) & 50.326(j)]
[40 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.

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

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

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

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

86. Table D identifies the emission units that are not subject to the specified requirements at the time of permit issuance. If any of the requirements listed in Table D become applicable during the permit term, the Permittee shall comply with such requirements on a timely basis. The Permittee shall also provide appropriate notification and apply for a construction permit and/or an operating permit revision, as necessary.

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

Table D - Permit Shields Granted

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
All Gas-Fired Heaters	40 C.F.R. 60, Subpart D -Standards of Performance for Fossil-Fuel-Fired Steam Generators	Heat input capacities below threshold (250 MMBtu/hr); and units not classified as Fossil-Fuel-Fired Steam Generators, as defined in subpart.
	40 C.F.R. 60, Subpart Da -Standards of Performance for Electric Utility Steam Generating Units	Heat input capacities below threshold (250 MMBtu/hr); and units not classified as Electric Utility Steam Generating Units, as defined in subpart.
	40 C.F.R. 60, Subpart Db -Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	Heat input capacities below threshold (100 MMBtu/hr).
Gas–Fired Heaters NGH-15-2801 and NGH-15-2811	40 C.F.R. 60, Subpart Dc – Standards of Performance for Small Industrial – Commercial – Institutional Steam Generating Units	Heat input capacities below threshold (10 MMBtu/hr).
Gas-Fired Heaters NGH-15-1431, NGH-15-1481, NGH-15-1433, and NGH-15-1491	40 C.F.R. 60, Subpart Dc – Standards of Performance for Small Industrial – Commercial – Institutional Steam Generating Units	Commenced construction prior to effective date of subpart (6/9/89) and have not been modified, reconstructed or replaced.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
Gas-Fired Heaters NGH-15-1495, NGH-15-1496, and NGH-15-14001	40 C.F.R. 60, Subpart Dc – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units §60.42c – Standard for Sulfur Dioxide (SO_2)	Standards for SO_2 and PM and related performance test, monitoring, and reporting requirements not applicable for affected stationary source fired on fuel gas.
	§60.43c – Standard for Particulate Matter	
	§60.44c – Compliance and Performance Tests Methods and Procedures for SO_2 40 C.F.R. 60, Subpart A – General Provisions §60.8 – Performance Test	
	§60.45c – Compliance and Performance Tests Methods and Procedures for PM §60.8 – Performance Test	
	§60.46c – Emission Monitoring for SO_2	
	§60.47c – Emission Monitoring for PM	
	§60.48c(a)(4)-(f) & (h) – Reporting and Recordkeeping Requirements	
	§60.48c(a)(2)-(3) - Reporting and Recordkeeping Requirements	Affected unit is not subject to any requirements that limit the annual capacity factor for any fuel or mixture of fuels. Affected unit fires only fuel gas.
	40 C.F.R. 60, Subpart A – General Provisions §60.7(a)(1) & (3) – Initial Notification 40 C.F.R. 60, Subpart Dc §60.48c(a)(1) – Notifications	Obsolete requirements – completed as required.
	§60.7(a)(4) – Notification and Recordkeeping	This requirement only applies to "existing facilities", as defined in 40 C.F.R. 60.2.
	§60.7(c) & (d) – Excess Emission Reporting 40 C.F.R. 60, Subpart Dc	The provisions of §60.7(c) & (d) apply only to New Source Performance Standards which require the installation of a continuous monitoring system (CMS) or monitoring device, as defined in §60.2, or as required under specific NSPS subparts for periodic monitoring. The affected fuel gas-fired heater is not required by Subpart Dc to operate with a CMS or monitoring device nor are there any applicable emission limits for the fuel gas-fired heater to which "excess emissions" could apply.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
All Gas-Fired Heaters	40 C.F.R. 63, Subpart DDDDD – National Emissions Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters	Flow Station #1 is not a major source of HAPs.
All Reciprocating IC Engines	40 C.F.R. 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	Construction, modification, or reconstruction of each IC engine commenced prior to the applicability date of July 11, 2005. The permit shield for Subpart IIII only applies to currently installed units until modified, reconstructed or replaced.
Existing Emergency Engines - EU IDs 15, 16, and 21 – 25 (EDG-15-2882, EDG-15-1553C, 80-857, 80-803, 80-810, 80-874, 80-801)	40 C.F.R. 63.6600, §63.6601, and §63.6602, Subpart ZZZZ - Emission Limitations	The stationary source is not a major source of HAP emissions.
	40 C.F.R. 63.6610 and §63.6611, Subpart ZZZZ – Testing and Initial Compliance Requirements	The stationary source is not a major source of HAP emissions.
	40 C.F.R. 63.6655(a) – (d), Subpart ZZZZ - Recordkeeping Requirements	There are no emission or operating limits which apply to the engines. Additionally, the engines do not fire landfill or digester gas and a CEMS or CPMS is not required.
	40 C.F.R. 63.5, Subpart A – Construction and Reconstruction	The preconstruction review requirements in this section apply to new affected sources and reconstructed affected sources that are major-emitting. Stationary source is an area source of HAP emissions and these engines are existing engines.
	40 C.F.R. 63.7, Subpart A – Performance Testing Requirements	There are no performance testing requirements that apply to these engines.
	40 C.F.R. 63.8, Subpart A – Monitoring	Per 40 C.F.R. 63.6645(a)(5), these engines are not subject to the requirements of §63.8(e), (f)(4) and (f)(6).
Storage Tanks 15-1273, 15-1931, 15-1932, 15-1933, 15-1934, 15-1935, 15-1937, 15-1938, 15-1500-29, and 17-1902	40 C.F.R. 60, Subpart K - Standards of Performance for Storage Vessels for Petroleum Liquids	Vessel not storing a petroleum liquid, as defined in subpart; and/or vessel storage capacity below threshold (40,000 gallons); and/or vapor pressure of stored liquid below thresholds; and/or storage prior to custody transfer; and/or commenced construction after the effective date of subpart (5/19/78), and/or vessel is designed to operate as a pressure vessel, depending upon tank.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
	40 C.F.R. 60, Subpart Ka – Standards of Performance for Storage Vessels of Petroleum Liquids	Vessel not storing a petroleum liquid, as defined in subpart; and/or vessel storage capacity below thresholds (40,000/420,000 gallons); and/or vapor pressure of stored liquid below thresholds; and/or storage prior to custody transfer; and/or commenced construction prior to or after the effective dates of subpart (5/18/78 - 7/23/84), and/or vessel is designed to operate as a pressure vessel, depending upon tank.
	40 C.F.R. 60, Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)	Vessel not storing a volatile organic liquid (VOL) or petroleum liquid, as defined in subpart; and/or vessel storage capacity below thresholds; and/or vapor pressure of stored liquid below thresholds; and/or storage prior to custody transfer; and/or commenced construction prior to or after the effective date of subpart (7/23/84), and/or vessel is designed to operate as a pressure vessel, depending upon tank.
Storage Tank: 15-1951	40 C.F.R. 60, Subpart K - Standards of Performance for Storage Vessels for Petroleum Liquids	Subpart K does not apply to tanks constructed after May 18, 1978. This tank commenced construction in 1981.
	40 C.F.R. 60, Subpart A – General Provisions §60.7(a)(1) & (3) – Notification and Recordkeeping (Initial Notification)	Obsolete requirements – completed as required.
	§60.7(a)(4) - Notification and Recordkeeping	This requirement only applies to "existing facilities," as defined in 40 C.F.R. 60.2.
	§60.7(c) & (d) – Excess Emission Reporting for 40 C.F.R. 60, Subpart Ka	The provisions of §60.7(c) & (d) apply only to NSPS which require the installation of a continuous monitoring system (CMS) or monitoring device, as defined in §60.2; BPXA is not required to install a CMS or monitoring device per Subpart Ka.
	§60.8 – Performance Tests for 40 C.F.R. 60, Subpart Ka	There are no performance test requirements for closed vent systems.
	§60.18 – General Control Device Requirements for 40 C.F.R. 60, Subpart Ka	40 C.F.R. 60.18 only applies to "facilities covered by subparts referring to this section" [ref. §60.18(a)]; Subpart Ka does not reference §60.18.
	40 C.F.R. 60, Subpart Ka - Standards of Performance for Storage Vessels of Petroleum Liquids §60.113a(a)(2)(iii) – Testing and Procedures	Obsolete requirement – completed as required. BPXA submitted an O&M plan to the U.S. EPA for tank tag no. 15-1951 in September 2003.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
	40 C.F.R. 60, Subpart Ka §60.115a – Monitoring of Operations	Storage vessels equipped with a vapor recovery return or disposal system in accordance with the requirements of §60.112a(a)(3) are exempt from §60.115 – Monitoring of Operations [ref. §60.115a(d)(2)].
	40 C.F.R. 60, Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)	Subpart Kb applies to tanks constructed after July 23, 1984. This tank commenced construction in 1981.
	40 C.F.R. 64 – Compliance Assurance Monitoring	The CAM rule defines control device to include only add-on controls and excludes inherent process equipment. The closed vent system for this tank is inherent process equipment which was installed and is operated primarily for material recovery and safety reasons, not for compliance with air quality regulations.
Gas-Fired Turbines NGT-15-1801 and NGT-15-1802	40 C.F.R. 60, Subpart GG – Standards of Performance for Stationary Gas Turbines	Commenced construction prior to effective date of subpart (10/3/77). No "modification" occurred as a result of Circamet Can replacement of these turbines; source testing inconclusive regarding an increase in emission rates.
Gas-Fired Turbine NGT-15-15107	40 C.F.R. 60, Subpart GG §60.332 - Standards for NO_X 40 C.F.R. 60, Subpart A -General Provisions §60.8(a) – Performance Tests (NO_X)	Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hr) but less than or equal to 107.2 gigajoules per hour based on the lower heating value of the fuel fired and that have commenced construction prior to October 3, 1982 are exempt from §60.332 [§60.332(e)].
Gas-Fired Turbines NGT-15-1803 and NGT-15-1804	40 C.F.R. 60, Subpart GG -Standards of Performance for Stationary Gas Turbines §60.332(a)(1) - Standards for NO_X	Standard applies to Electric Utility Stationary Gas Turbines, as defined in subpart. These units are not an Electric Utility Stationary Gas Turbine as defined in Subpart GG.
	40 C.F.R. 60, Subpart GG §60.334(a), (b), and (d) – Monitoring of Operations §60.335(b)(4) – Test Methods and Procedures	Applies only to affected turbines equipped with water injection to control emissions of NO_X. These units are not equipped with water injection to control emissions of NO_X.
	§§60.334(e), (f) – Monitoring of Operations	Applies only to affected turbines that commence construction after July 8, 2004. Emission unit commenced construction prior to this date.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
	§60.334(g) – Monitoring of Operations	Applies only to affected turbines subject to the continuous monitoring requirements of 40 C.F.R. 60.334(a), (d), or (f).
	§60.334(h)(2) – Monitoring of Operations	BPXA has not claimed an allowance for fuel bound nitrogen to calculate the applicable NO_X emission limit under §60.332.
	40 C.F.R. 60, Subpart A -General Provisions §60.7(a)(1) & (3) -Notification and Recordkeeping (Initial Notification) §60.8(a) – Performance Test, (Initial Performance Test Only) 40 C.F.R. 60, Subpart GG §60.335(b), (c)(l), (c)(3) - Test Methods and Procedures	Obsolete requirements - completed as required.
	§60.7(a)(4) - Notification and Recordkeeping	This requirement only applies to "existing facilities", as defined in 40 C.F.R. 60.2.
All Combustion Turbines	40 C.F.R. 60, Subpart KKKK – Standards of Performance for Stationary Combustion Turbines	Construction, modification, or reconstruction of the heat input to each turbine commenced prior to the applicability date of February 18, 2005. The permit shield for Subpart KKKK only applies to currently installed units until modified, reconstructed or replaced.
	40 C.F.R. 63, Subpart YYYY – National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines	Flow Station #1 is not a major source of HAPs and turbines located on the North Slope of Alaska are categorically exempt from this rule.
All Flares	40 C.F.R. 60, Subpart A – General Provisions §60.18 – General Control Device Requirements	The flares are not control devices and are not necessary for compliance with the 95% efficiency standard. The flares are used as good air pollution control practice to minimize emissions during periods of process malfunction, startup, and shutdown.
	40 C.F.R. 60, Subpart J -Standards of Performance for Petroleum Refineries 40 C.F.R. 60, Subpart GGG -Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries 40 C.F.R. 60, Subpart QQQ - Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems.	Stationary source does not meet the definition for a petroleum refinery.
	40 C.F.R. 60, Subpart KKK - Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants products.	Stationary source is not a natural gas processing plant as defined in subpart.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
	40 C.F.R. 60, Subpart LLL – Standards of Performance for Onshore Natural Gas Processing Plants: SO_2 Emissions	Stationary source does not operate natural gas sweetening units.
	40 C.F.R. 61, Subpart A - General Provisions	Requirements only apply to stationary sources subject to any provision of 40 C.F.R. 61.
	40 C.F.R. 61, Subpart J - National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene	No process components in benzene service, as defined by subpart (10 percent benzene by weight).
	40 C.F.R. 61, Subpart M - National Emission Standard for Asbestos §61.142 - Standard for Asbestos Mills	Stationary source is not an Asbestos Mill.
	§61.143 - Standards for Roadways	Stationary source roadways not exposed to asbestos tailings or asbestos containing waste.
	§61.144 - Standard for Manufacturing	Stationary source does not engage in any manufacturing operations using commercial asbestos.
	§61.146 - Standard for Spraying	Stationary source does not spray apply asbestos containing materials.
	§61.147 - Standard for Fabricating	Stationary source does not engage in any fabricating operations using commercial asbestos.
	§61.148 - Standard for Insulating Materials	Stationary source does not install or reinstall, on any stationary source component, insulation material containing commercial asbestos.
	§61.149 - Standard for Waste Disposal for Asbestos Mills	Applies only to those stationary sources subject to §61.142 (Asbestos Mills).
	§61.151 - Standard for Inactive Waste Disposal Sites for Asbestos Mills and Manufacturing and Fabricating Operations	Applies only to those stationary sources subject to §§61.142, 61.144, or 61.147 (Asbestos Mills, manufacturing or fabricating).
	§61.152 - Standard for Air-Cleaning	Stationary source does not use air cleaning equipment.
	§61.153 - Standard for Reporting	No reporting requirements apply for sources subject to §61.145 (demolition and renovation) [ref. §61.153(a)].
	§61.154 - Standards for Active Waste Disposal Sites	Stationary source is not an active waste disposal site and does not receive asbestos containing waste material.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
	§61.155 - Standard for Inactive Waste Disposal Sites for Asbestos Mills and Manufacturing and Fabricating Operations	Stationary source does not process regulated asbestos containing material (RACM).
Activities subject to 40 C.F.R. 61 Subpart M – Standard for Demolition and Renovation (§61.145)	40 C.F.R. 61, Subpart A - General Provisions §61.05(a) - Prohibited Activities §61.07 - Application for Approval of Construction or Modification §61.09 -Notification of Startup	Owners or operators of demolition and renovation operations are exempt from the requirements of §§61.05(a), 61.07, and 61.09 [ref. 40 C.F.R. 61.145(a)(5)].
	§61.10 - Source Reporting and Waiver Request	Demolition and renovation operations are exempt from §61.10(a) [ref. 40 C.F.R. 61.153(b)].
	§61.13 -Emission Tests §61.14 - Monitoring Requirements	Emission tests or monitoring is not required under the standards for demolition and renovation [§61.145].
Stationary Source-Wide	40 C.F.R. 61, Subpart V - National Emission Standard for Equipment Leaks (Fugitive Emission Sources)	Stationary source does not operate equipment in volatile hazardous air pollutant (VHAP) service (>10 percent VHAP by weight).
	40 C.F.R. 61, Subpart Y - National Emission Standard for Benzene Emissions from Benzene storage vessels	Stationary source does not operate storage vessels in benzene service.
	40 C.F.R. 61, Subpart BB -National Emission Standard Benzene Emissions from Benzene Transfer Operations	Stationary source does not conduct benzene transfer operations.
	40 C.F.R. 61, Subpart FF - National Emission Standard for Benzene Waste Operations	Stationary source does not conduct benzene waste operations.
	40 C.F.R. 63, Subpart B – Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections 112(g) and 112(j).	Stationary source is not a major source of HAPs.
	40 C.F.R. 63, Subpart T - National Emission Standards for Halogenated Solvent Cleaning	Stationary source does not operate halogenated solvent cleaning machines.
	40 C.F.R. 63, Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries	Stationary source does not meet the definition for a petroleum refinery.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
	40 C.F.R. 63, Subpart HH – National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities	Stationary source qualifies for the "black oil exemption" as defined in 40 C.F.R. 63.761. Stationary source is also not a major source of HAP as defined in 40 C.F.R. 63.761.
	40 C.F.R. 63, Subpart HHH – National Emission Standards for Hazardous Air Pollutants for Natural Gas Transmission and Storage Facilities	Stationary source is considered part of the oil and natural gas production source category (Subpart HH) and not part of the natural gas transmission and storage category (Subpart HHH) because it transports natural gas prior to the point of custody transfer where operations may be affected by Subpart HHH. Also, stationary source is also not a major source of HAP.
	40 C.F.R. 63, Subpart EEEE – National Emission Standards for Organic Liquid Distribution	Stationary source is not a major source of HAPs and does not distribute organic liquids.
	40 C.F.R. 64 – Compliance Assurance Monitoring [All units except Overflow/Dirty Water Tank (15-1951)]	Stationary source does not use a control device to achieve compliance with any emission limitation or standard.
	40 C.F.R. 68 - Accidental Release Prevention Requirements: Risk Management Programs [§ 112(r)]	"Naturally occurring hydrocarbon mixtures" (crude oil, condensate, natural gas and produced water), prior to entry into a petroleum refining process unit (NAICS code 32411) or a natural gas processing plant (NAICS code 211112) are exempt from the threshold determination. (See Final Rule exempting from threshold determination regulated flammable substances in naturally occurring hydrocarbon mixtures prior to initial processing, 63 FR 640 [January 6, 1998]). Less than 10,000 lbs of other mixtures containing regulated flammable substances that meet the criteria for an NFPA rating of 4 for flammability are stored at the stationary source. Therefore, FS#1, a crude petroleum and natural gas production facility, (NAICS code 211111) does not process or store regulated flammable or toxic substances in excess of threshold quantities.
	40 C.F.R. 82.1, Subpart A - Production and Consumption Controls	Stationary source does not produce, transform, destroy, import or export Class l or Group I or II substances or products.
	40 C.F.R. 82.30, Subpart B - Servicing of Motor Vehicle Air Conditioners	Stationary source does not service motor vehicle air conditioners.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
	40 C.F.R. 82.60, Subpart C -Ban on Nonessential Products Containing Class I Substances and Ban on Nonessential Products Containing or Manufactured with Class II Substances	Stationary source is not a manufacturer or distributor of Class I and II products or substances.
	40 C.F.R. 82.80, Subpart D – Federal Procurement	Subpart applies only to Federal Departments, agencies, and instrumentalities.
	40 C.F.R. 82.100, Subpart E - The Labeling of Products Using Ozone-Depleting Substances.	Stationary source is not a manufacturer or distributor of Class I and II products or substances.
	40 C.F.R. 82.158, Subpart F - Recycling and Emissions Reduction.	Stationary source does not manufacture or import recovery and recycling equipment.
	40 C.F.R. 82.160 - Approved Equipment Testing Organizations	Stationary source does not contract equipment testing organizations to certify recovery and recycling equipment.
	40 C.F.R. 82.164 – Reclaimer Certification	Stationary source does not sell reclaimed refrigerant.
	40 C.F.R. 82, Subpart F, Appendix C - Method for Testing Recovery Devices for Use With Small Appliances	Stationary source is not a third party entity that certifies recovery equipment.
	40 C.F.R. 82, Subpart F, Appendix D - Standards for Becoming a Certifying Program for Technicians	Stationary source does not have a technician certification program.
	40 C.F.R. 82.174(a) Subpart G - Significant New Alternatives Policy Program: Prohibitions	Stationary source does not manufacture substitute chemicals or products for ozone-depleting compounds.
	40 C.F.R. 82.270(a), Subpart H - Halon Emissions Reduction	Stationary source does not manufacture halon.
All Storage Tanks	40 C.F.R. 63, Subpart OO - National Emission Standards for Tanks - Level 1	Provisions only apply to tanks affected by 40 C.F.R. 60, 61, or 63 that specifically reference 40 C.F.R. 63, Subpart OO.
	40 C.F.R. 63, Subpart SS – National Emission Standards for Closed Vent Systems	Provisions only apply to tanks affected by 40 C.F.R. 60, 61, or 63 that specifically reference 40 C.F.R. 63, Subpart SS.
Drain Systems	40 C.F.R. 63, Subpart RR - National Emission Standards for Individual Drain Systems	Provisions only apply to drain systems affected by 40 C.F.R. 60, 61, or 63 that specifically reference 40 C.F.R. 63, Subpart RR.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
Oil-Water Separators	40 C.F.R. 63, Subpart VV - National Emission Standards for Oil-Water Separators and Organic-Water Separators	Provisions only apply to oil-water separators and organic-water separators affected by 40 C.F.R. 60, 61, or 63 that specifically reference 40 C.F.R. 63, Subpart VV.
All Nonroad Engines	18 AAC 50.055(a)(1) – Fuel-Burning Equipment Emission Standards: Visible Emissions 18 AAC 50.055(b)(1) – Fuel-Burning Equipment Emissions Standards: Particulate Matter 18 AAC 50.055(c) – Fuel-Burning Equipment Emissions Standards: Sulfur Compound Emissions	Nonroad (mobile) internal combustion engines are not included in the definition of fuel-burning equipment (18 AAC 50.990).

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

Section 11. Visible Emissions Forms

VISIBLE EMISSION OBSERVATION FORM

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

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

  Wet Bulb Temperature: can be measured using a sling psychrometer

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

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

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

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

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

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

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

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

Page No.__________

Source Name | Type of Source

Address

City | State | Zip

Phone # (Key Contact) | Source ID Number

Process Equipment | Operating Mode

Control Equipment | Operating Mode

Describe Emission Point

Height above ground level | Height relative to observer | Inclinometer Reading

Distance From Observer | 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

Wind Speed | Wind Direction From (Start | End)

Ambient Temperature | Wet Bulb Temp | RH percent

NOTES: 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:
Title | Date

Print Observer's Name
Observer's Signature | Date
Organization
Certified By: | Date

Section 12. Emission Factors

Use the emission factors in Table E to calculate the annual emission rates for Condition 10.1.

Table E – Emission Factors

Type of Equipment	NO_X	CO	PM
Gas Turbines, EU IDs 3 through 5	Allowable concentration or representative source test data if less than allowable concentration	Representative source test data, if available; otherwise, use 0.082 lb/MMBtu (AP-42, 4/00)	0.014 lb/MMBtu (allowable) or representative source test data if less than allowable concentration.

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

Section 13. Material Balance Calculation

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

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

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

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

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

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

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

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

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

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

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

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

The fuel weight percent (wt%) of sulfur is obtained pursuant to Conditions 9.1 and/or 9.8 . The fuel weight percents of carbon and hydrogen are obtained from the fuel refiner.

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

Enter all of the data in percentages without dividing the percentages by 100. For example, if wt%S_{fuel} = 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. ADEC Notification Form[18]

Flow Station #1	AQ0167TVP02
Stationary Source Name	**Air Quality Permit No.**
BP Exploration (Alaska), Inc.	
Company Name	**Date**

When did you discover the Excess Emissions/Permit Deviation?

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

When did the event/deviation occur?

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

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

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

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

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

☐ Excess Emissions – Complete Section 1 and Certify

☐ Deviation from Permit Condition – Complete Section 2 and Certify

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

Section 1. Excess Emissions

- Was the exceedance: ☐ Intermittent or ☐ Continuous
- 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 _____

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

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

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

[18] Revised as of August 20, 2008.

- Type of Incident (please check only one):

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

☐ Fugitive Emissions ☐ Emission Limit Exceeded ☐ Other _____

☐ Marine Vessel Opacity ☐ Flaring _____

- Unavoidable Emissions:

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

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

Certify Report (Go to end of form.)

Section 2. Permit Deviations

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

☐ Emission Unit-Specific

☐ Failure to Monitor/Report

☐ General Source Test/Monitoring Requirements

☐ Recording/Reporting/Compliance Certification

☐ Standard Conditions Not Included in the Permit

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

☐ Generally Applicable Requirements

☐ Reporting/Monitoring for Diesel Engines

☐ Recordkeeping Failure

☐ Insignificant Emission Unit

☐ Stationary Source Wide

(b) Emission Unit Involved:

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

EU ID	EU Name	Permit Condition/ Potential Deviation

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

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

Certification:

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

Printed Name: _____ Title: _____ Date: _____

Signature: _____ Phone Number: _____

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

To Submit this Report:

Fax to: 907-451-2187

Or

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

If faxed or emailed, the report must be certified within the Operating Report required for the same reporting period per Condition 71.

Or

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

Or

Phone Notification: 907-451-5173

Phone notifications require a written follow-up report.

Or

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

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

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

[18 AAC 50.346(b)(3)]

Section 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. Make additional copies as needed.

Inventory start date:	
Inventory end date:	
Inventory Type:	

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

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

	Capture Efficiency (%):
	Total Capture Efficiency (%):
	Pollutants Controlled

Processes (List All):	
	PROCESS:
	SCC Code:
	Material Processed:
	Operational Periods:
	FUEL INFORMATION
	Ash Content (weight %):
	Elem. Sulfur Content (weight %):
	H_2S Sulfur Content (ppmv):
	Heat Content (MMBtu/1000 gal or MMBtu/MMscf):
	Heat Input (MMBtu/hr):
	Heat Output (MMBtu/hr):
	THROUGHPUT
	Total Amount:
	Summer %:
	Fall %:
	Winter %:
	Spring %:
	Days/Week of Operation:
	Weeks/Year of Operation:
	Hours/Day of Operation:
	Hours/Year of Operation:

EMISSIONS					
Pollutant	**Emission Factor**	**Emission Factor Numerator**	**Emission Factor Denominator**	**Emission Factor Source**	**Tons Emitted**
CO					
NH_3					
NO_X					
PM_{10}-PRI					
$PM_{2.5}$-PRI					
SO_2					
VOC					
Lead and lead compounds					

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

Certification:

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

Printed Name:_____Title_____Date _____

Signature:_____ Phone number_____

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

To Submit this report:

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

Or

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

[18 AAC 50.346(b)(9)]

Alaska Department of Environmental Conservation
Air Permits Program

Public Comment -August 25, 2011

BP Exploration (Alaska), Inc.
Flow Station #1

STATEMENT OF BASIS

of the terms and conditions for
Permit No. AQ0167TVP02

Reviewed by: Jim Plosay
ADEC AQ/APP Juneau

Prepared by: Enviroplan Consulting
Permit Writer: Tanya White

INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. AQ0167TVP02.

STATIONARY SOURCE IDENTIFICATION

Section 1 of Operating Permit No. AQ0167TVP02 contains information on the stationary source as provided in the Title V permit application.

The stationary source is owned by BP Exploration (Alaska) Inc., ConocoPhillips Alaska, Inc., Chevron USA, Inc. and ExxonMobil Corporation, and operated by BP Exploration (Alaska) Inc., and BP Exploration (Alaska) Inc. is the Permittee for the stationary source's operating permit. The SIC code for this stationary source is 1311 – Crude Petroleum and Natural Gas Production.

The stationary source receives three-phase crude oil from the surrounding production pads where it is separated into crude oil for sale, produced water for reinjection, and natural gas for use as fuel and for reinjection.

Drill Site Operations. Production/injection wells are typically grouped together on a gravel pad, with their well chokes and well testing equipment enclosed in modules. For purposes of the Oil and Natural Gas (ONG) MACT, the drill site heaters are each located on separate surface sites which are not aggregated for major source determinations. The drill sites are not affected by the ONG MACT, as there are no glycol dehydration units or storage tanks with flash emissions at these sites.

Production fluids from these wells are often commingled into common carrying lines at these drill sites which then flow to Flow Station #1 for processing. Some drill sites which produce cooler fluids or operate at lower rates require adding heat to prevent line plugging from wax deposits. This heat is provided by drill site heaters which are indirect heaters that employ a heat transfer media. Additionally, fluids (sea water, produced water, enhanced oil recovery fluids, etc.) can be routed to drill sites for diversion into injection wells. As the need arises, mobile equipment is used at drill sites to either service an existing well or drill a new well.

For purposes of Title I and Title V (Part 71) permitting, the Department has determined this stationary source to consist of the Flow Station #1 (FS#1) production pad structures and associated permanent emission units and the Prudhoe Bay Unit drill sites (DS) 1, 2, 5, 12, and 18. Temporary emission units and mobile equipment (e.g., drill rigs and associated activities and equipment) that periodically operate at the drill sites are not governed by this permit.

EMISSION UNIT INVENTORY AND DESCRIPTION

Under 18 AAC 50.326(a), the Department requires operating permit applications to include identification of all emissions-related information, as described under 40 C.F.R. 71.5(c)(3).

The emission units at the Flow Station #1 that are classified and have specific monitoring, recordkeeping, and reporting requirements are listed in Table A of Operating Permit No. AQ0167TVP02.

Table A of Operating Permit No. AQ0167TVP02 contains information on the emission units regulated by this permit as provided in the permit application. The table is provided for

informational and identification purposes only. Specifically, the emission unit rating/size provided in the table is not intended to create an enforceable limit.

In addition to the emission units listed in Table A, this stationary source also has an inventory of storage tanks with a storage capacity greater than 10,000 gallons. While two of the tanks are also listed in Table A as significant emission units, the following is a full listing of such storage tanks:

Table F – Inventory of Storage Tanks at Flow Station #1 with a Storage Capacity Greater than 10,000 Gallons[(a)]

Tag No.	Capacity (gallons)	Service	Installation, Delivery, or Commenced Construction Date
15-1273	11,200	Triethylene Glycol	1977 (estimated)
15-1931	31,710	Arctic (No. 1) Diesel	1975
15-1932	76,020	Ethylene Glycol (UCARTHERM 60/40)	Commenced Construction 1974 and Installed 1975
15-1933[(b)]	428,300	Slop Oil	Commenced Construction 1974 and Installed 1975
15-1934	428,300	Slop Oil	Commenced Construction 1974 and Installed 1975
15-1935	428,300	Fire Water	1978
15-1937	136,710	Produced Water	1975
15-1938	18,060	Skim Oil	Commenced Construction 1974 and Installed 1975
15-1951[(b)]	420,000	Produced Water	Commenced Construction 1981 and Installed 1982
15-1500-29	10,000	Scale Inhibitor	1986
17-1902	84,000	Methanol/Water	Commenced Construction 1981 Installed 1982
15-1900-10	24,990	Emulsion Breaker	1981 (Out of Service)

Notes:

(a) Information in this table was provided to the Department on April 14, 2011 by BPXA in a permit renewal application amendment.

(b) Tanks 15-1951 (EU ID 20) and 15-1933 (EU ID 26) are included in Table A of Permit No. AQ0167TVP02. There are no specific permitting requirements for EU ID 26 in this permit.

EMISSIONS

A summary of the potential to emit (PTE)[1] and assessable PTE, as indicated in the permit application submitted by BP Exploration (Alaska) Inc. for Flow Station #1 and verified by the Department, is shown in the table below.

Table G - Emissions Summary, in Tons Per Year (TPY)

Pollutant	NO_X	CO	PM-10	SO_2	CO_2e[(f)]	VOC	HAPs	Total
FS#1 (Production Facility) PTE[(a)]	2,877.84	1,156.93	73.21	171.80	665,687.23	77.03	20.18	4,376.99
Drill Site PTE[(b)]	370.90	83.07	16.72	15.13	14,534.94	17.39	0.28	503.49
IEU Portable Heaters[(c, d)] PTE	9.75	2.47	0.53	10.20	9,537.73	0.17	0.46	23.58
Total PTE	3,258.49	1,242.47	90.46	197.13	689,759.90[(g)]	94.59	20.92[(b)]	694,663.96
Assessable PTE	3,248.74	1,240.00	89.93	186.93	--[(g)]	94.42	--[(e)]	4,860.02

Notes:

(a) The production pad includes diesel-fired engines EU ID 15 and EU ID 16 as well as tanks, turbines, heaters, and flares.

(b) The "drill site" with the highest HAP total (Drill Site 12) is summarized here. Drill sites are not aggregated when determining the HAP major source status of the sites (see discussion below). The total combined HAP emissions from other individual FS#1 drill sites are similar. The drill site includes diesel-fired engines EU IDs 21 through 25.

(c) One seventh of the total estimated HAP emissions from all portable IEU heaters used throughout the Greater Prudhoe Bay are summarized here. Since the portable IEU heaters are used throughout the Greater Prudhoe Bay field, the total emissions have been split equally among the seven GPB production facilities (LPC, GC-1, GC-2, GC-3, FS#1, FS#2, and FS#3. An aggregated value at any individual drill site or production facility is unknown and varies considerably.

(d) Nonroad engine HAP emissions are not included since emissions from nonroad engines are not used when determining the classification (major or minor) of a stationary source under AS 46.14.130.

(e) The PTE of each single HAP is less than 10 tons per year. HAP emissions are almost all VOCs, therefore, to avoid double counting HAP emissions are not included in the HAP column.

(f) Greenhouse gas (GHG) means the air pollutant defined in 40 C.F.R. 86.1818-12(a) as the aggregate group of six greenhouse gases: carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The stationary source emits or has the potential to emit only CO_2, N_2O and CH_4.

(g) CO_2e or carbon dioxide equivalent emissions are defined as the sum of the mass emissions of each individual GHG adjusted for its global warming potential (GWP). Total GHG CO_2e calculations submitted by the Permittee on April 11, 2011.

The assessable PTE listed under Condition 42.1 is the sum of the emissions of each individual regulated air pollutant for which the stationary source has the potential to emit quantities greater than 10 TPY, or greater than GHG permitting thresholds[2]. The emissions listed in Table A are

[1] *Potential to Emit* or *PTE* means the maximum capacity of a stationary source to emit a pollutant under its physical or operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is Federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source, as defined in AS 46.14.990(23), effective 12/3/05.

[2] See EPA's November 2010 PSD and Title V Permitting Guidance, Table V-A.

estimates that are for informational use only. The listing of the emissions does not create an enforceable limit to the stationary source.

For criteria pollutants, emissions are as provided in the application, as follows: GE MS 5352B and EGT (Ruston) TB 5000 turbine PTE values for NO_X, CO and PM-10 are set by the BACT limits stated in Condition 10 of the permit. Otherwise, turbine PTE values for all criteria pollutants except SO_2 are estimated based on AP-42 Tables 3.1-1 and 3.1-2a (4/00).

Econotherm Glycol Heater and Smith TEG Reboiler NO_X emissions were based on allowable short-term BACT limits stated in Condition 11 of the permit. Otherwise, gas-fired heater PTE values for all criteria pollutants, except SO_2, are estimated based on AP-42 Tables 1.4-1 and 1.4-2 (7/98).

EU IDs 15 and 16 engine PTE values for all criteria pollutants except SO_2 are based on an operating time limit of 200 hours per consecutive 12-month period for the emergency generator and fire water pump engines, and estimated based on AP-42 Table 3.4-1 (10/96) and AP-42 Table 3.3-1 (10/96). EU IDs 21 through 25 engine PTE values for all criteria pollutants except SO_2 are based on AP-42 Table 3.4-1 (10/96) and AP-42 Table 3.3-1 (10/96).

Flare PTE values for all criteria pollutants except SO_2 are based on AP-42 Tables 13.5-1 (Sept 91) and 13.5-2 (Sept 91).

All SO_2 PTE values are based on sulfur mass balance and an assumed liquid fuel sulfur content of 0.15% by weight and 150 ppmv H_2S in the fuel gas.

HAP emissions were estimated in the permit renewal application. AP-42 emission factors were used to estimate HAP emissions for liquid fuel-fired emission units EU IDs 15, 16, and 21 through 25 (assuming 200 hours of operation per year for each emergency engine EU IDs 15 and 16). Emission factors from the database available from the Ventura County Air Pollution Control District (VCAPCD) were used to estimate flare emissions. There are no HAPs emissions from Tank tag no. 15-1951 because this tank is equipped with a closed vent system, which eliminates all emissions from the tank. Total aggregate HAP emissions are estimated at 20.92 TPY with a maximum single HAP (n-hexane) emission rate of 6.33 TPY.

The HAP emissions shown in Table G are the total HAP PTE for all regulated emission units at all Flow Station #1 locations. However, per 40 C.F.R. 71.2, emissions from oil or gas exploration or production wells with their associated equipment are not aggregated when determining the total potential to emit HAPs. Therefore, emissions from units located at any drill site are not aggregated when determining the HAPs major status of the stationary source. The HAPs emissions total for the Production pad emission units (i.e. excluding emissions from units at drill sites) is approximately 20.64 TPY.

Based on these findings, FS#1 is not a major source of HAP emissions since the calculated HAP emissions are less than the triggers of 10/25 TPY.

BASIS FOR REQUIRING AN OPERATING PERMIT

In accordance with AS 46.14.130(b), an owner or operator of a Title V source[3] must obtain a Title V permit consistent with 40 C.F.R. Part 71, as adopted by reference in 18 AAC 50.040.

[3] *Title V source* means a stationary source classified as needing a permit under AS 46.14.130(b) [ref. 18 AAC 50.990(111)].

Except for stationary sources exempted or deferred by AS 46.14.120(e) or (f), AS 46.14.130(b) lists three categories of sources that require an operating permit:

- A major source;
- A stationary source including an area source subject to Federal new source performance standards under Section 111 of the Clean Air Act or national emission standards for hazardous air pollutants under Section 112 of the Clean Air Act; and
- Another stationary source designated by the Federal Administrator by regulation.

This stationary source requires an operating permit because it is classified under 18 AAC 50.326(a) and 40 C.F.R. 71.3(a) as

- A major stationary source as defined in Section 302 of the Clean Air Act that directly emits, or has the potential to emit, 100 TPY or more of any air pollutant;
- A source, including an existing or newly constructed GHG emission source, that emits or has a PTE equal to or greater than 100,000 TPY of CO_2e **and** 100 TPY GHGs on a mass basis.

AIR QUALITY PERMITS

Previous Air Quality Permit-to-Operate

The most recent permit-to-operate issued for this facility is Permit-to-Operate No. AQ0167TVP01. This permit-to-operate included all construction authorizations issued through March 31, 2003, and was issued after January 18, 1997 (the effective date of the divided Title I/Title V permitting program). In addition, EPA Prevention of Significant Deterioration (PSD) permit number PSD-X80-09, as amended through August 29, 1997 contains specific BACT requirements for Flow Station #1. All stationary source-specific requirements established in these previous permits are included in the renewed Title V operating permit as described in Table H.

Title I (Construction and Minor) Permits

The Department issued no construction permit for this stationary source after January 17, 1997 (the effective date of the divided operating and construction-permitting program). PAL000447 for EU ID 21 (Generator DS1) and PAL000451 for EU ID 24 (Generator DS12), both issued on January 1, 1999, were rescinded on March 3, 2005.

Title V Operating Permit Application, Revisions and Renewal History

The Permittee submitted a permit renewal application on September 28, 2007.

Additional information (PTE emission calculations in an Excel format) was received on April 17, 2008.

Additional information was received on December 17, 2010. This information included a 40 C.F.R. 63, Subpart ZZZZ citation-level applicability determination.

Additional information was received on April 11, 2011. This information included revised source identification information, general emissions information, proposed terms and conditions for 40 C.F.R. 63, Subpart ZZZZ, updated HAP and Greenhouse Gas Emissions PTE estimates, a storage tank inventory and basis for NSPS Subpart K, Ka, and Kb shields, permit shield requests

for 40 C.F.R. 63, Subpart ZZZZ and 40 C.F.R. 60, Subparts K, Ka, and Kb, and tank emission estimates (VOCs and HAPs).

COMPLIANCE HISTORY

The stationary source has operated at its current location since 1977. Review of the permit files for this stationary source, which includes the past inspection reports indicate a stationary source that is intermittently out of compliance with Conditions 3, 5.1a, 21.1 and 37 of Permit No. AQ0167TVP01 and Air Quality Control Regulations.

APPLICABLE REQUIREMENTS FROM PRE-CONSTRUCTION PERMITS

Incorporated by reference at 18 AAC 50.326(j), 40 C.F.R. Part 71.6 defines "applicable requirement" to include the terms and conditions of any pre-construction permit issued under rules approved in Alaska's State Implementation Plan (SIP).

Alaska's SIP included the following types of pre-construction permits:

- Permit-to-operate issued before January 18, 1997 (these permits cover both construction and operations);
- Construction Permits issued after January 17, 1997; and
- Minor permits issued after October 1, 2004.

Pre-construction permit terms and conditions include both source-specific conditions and conditions derived from regulatory applicable requirements such as standard conditions, generally applicable conditions and conditions that quote or paraphrase requirements in regulation.

These requirements include, but are not limited to, each emission unit- or source-specific requirement established in these permits issued under 18 AAC 50 that are still in effect at the time of this operating permit issuance. Table H below lists the requirements carried over from Permit to Operate No. AQ0167TVP01 into Operating Permit No. AQ0167TVP02 to ensure compliance with the applicable requirements.

Table H - Comparison of Previous Permit-to-Operate No. AQ0167TVP01 Conditions to Operating Permit No. AQ0167TVP02 Conditions[4]

Permit No. AQ0167TVP01 Condition number	Description of Requirement	Permit No. AQ0167TVP02 Condition Number	How condition was revised
3a, 3c and 3d	Visible Emissions Standards	1	Effective 9/13/07, the EPA approved certain changes to the SIP limits, including removal of the "more than 3 minutes in any one hour criterion". The approval eliminated the need for the footnotes found in the permit in association with these conditions and allows the deletion of the "3-minute" criterion.
3.2	Monitoring, Recording and Reporting Requirements	1.3	Conditions revised to require annual certification of compliance with the opacity standard when certain operating limits are met. Otherwise, the Permittee must follow the MR&R requirements under Conditions 3 - 5.
4.2	Monitoring, Recording and Reporting Requirements	6.2	Conditions revised to require annual certification of compliance with the opacity standard when certain operating limits are met. Otherwise, the Permittee must follow the MR&R requirements under Conditions 8 and 10.
5.2	Sulfur Compound Emissions, Liquid Fuel	9	Condition format revised. Added EU IDs 21 through 25 to condition.
Exhibit D #3	Fuel Consumption Monitoring	12	Added EU IDs 21 through 25 to condition.
Exhibit D #3	Hours of Operation Monitoring	13	Added EU IDs 21 through 25 to condition.
15	NSPS Subpart A Excess Emissions and Monitoring Systems Performance Report.	20	Revised to make reporting consistent with the custom fuel monitoring schedule dated October 18, 1993 and specific to NSPS Subpart GG monitoring requirements.
21	NSPS Subpart GG Fuel Sulfur Monitoring and Reporting.	29	Revised to include the EPA-approved NSPS Subpart GG Fuel Sulfur Monitoring Requirements (as of July 8, 2004 revision) with revisions as allowed under EPA-approved October 2, 1997

[4] This table does not include all standard and general conditions.

Permit No. AQ0167TVP01 Condition number	Description of Requirement	Permit No. AQ0167TVP02 Condition Number	How condition was revised
			alternate H_2S sampling method and the July 13, 1993 custom fuel monitoring schedule (with additional clarifications given in correspondence dated 8/20/93, 10/18/93, and 8/19/96). In addition, the permit has been revised to include the provision for an annual reporting frequency as stated in the October 18, 1993 EPA letter.
35	NSPS Subpart Ka	27	This condition includes the requirements of NSPS Subpart Ka that apply to the Overflow/Dirty Water Tank (tag no.15-1951) and is intended to replace Condition 35 of AQ0167TVP01.

NON-APPLICABLE REQUIREMENTS

Each permit is required to contain a discussion of all applicable requirements as set forth in 40 C.F.R. 71.6(a) adopted in 18 AAC 50.040(j). This section discusses standard conditions that have been removed from the permit or are not included for specific reasons.

- **NSPS Subpart K**: The requirements of 40 C.F.R. 60, Subpart K (Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After June 11, 1973 and Prior to May 19, 1978) do not apply to EU ID 16, which was constructed in 1984 and has a storage capacity greater than 40,000 gallons, included in Table A, because the volatile organic liquid is processed prior to custody transfer.
- **Risk Management Plan (40 C.F.R. 68):** The stationary source is not subject to the general duty clause under the Clean Air Act Section 112(r)(1) (40 C.F.R. 68.10) because FS#1, a crude petroleum and natural gas production facility does not process or store regulated flammable or toxic substances in excess of threshold quantities in a process as determined in §68.115.
- **Compliance Assurance Monitoring (40 C.F.R. 64):** The stationary source does not use a control device to achieve compliance with any emission limitation or standard and is therefore not subject to Compliance Assurance Monitoring as it does not satisfy the criteria of 40 C.F.R. 64.2(a)(2).

STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The State and Federal regulations for each condition are cited in Operating Permit No. AQ0167TVP02. This Statement of Basis provides the legal and factual basis for each term and condition as set forth in 40 C.F.R. 71.6(a)(1)(i).

Conditions 1 - 5 , Visible Emissions Standard and MR&R

Legal Basis: These conditions ensure compliance with the applicable requirements in 18 AAC 50.055(a).

- 18 AAC 50.055(a) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 1 through 19 and 21 through 25 are fuel-burning equipment.

U.S. EPA incorporated these standards as revised in 2002 into the SIP effective September 13, 2007.

Factual Basis: Condition 1 prohibits the Permittee from causing or allowing visible emissions in excess of the applicable standard in 18 AAC 50.055(a)(1).

MR&R requirements are listed in Conditions 2 through 5 of the permit.

These conditions have been adopted into regulation as Standard Conditions.

The Permittee must establish by actual visual observations that can be supplemented by other means, such as a defined Stationary Source Operation and Maintenance Program that the stationary source is in continuous compliance with the State's emission standards for visible emissions and particulate matter.

These conditions detail a stepwise process for monitoring compliance with the State's visible emissions and particulate matter standards for liquid and gas fired emission units. Equipment types covered by these conditions are internal combustion engines, turbines, heaters, boilers, and flares. Initial monitoring frequency schedules are established along with subsequent reductions or increases in frequency depending on the results of the self-monitoring program.

Reasonable action thresholds are established in these conditions that require the Permittee to progressively address potential visible emission problems from emission units either through maintenance programs and/or more rigorous tests that will quantify whether a specific emission standard has been exceeded.

Condition 5 was developed to provide a standardized version of flare monitoring that is not dependent upon the type or design of upstream equipment. It has been claimed that gas-fired flares normally burn without emitting visible emissions, but actual field data demonstrating this assumption is not available. However, gas-fired flares have been shown to smoke when a control device, i.e. a knockout drum, flare scrubber, gas or steam assist, or vapor recovery system malfunctions. Thus, the Condition sets out a protocol to collect actual field data to determine compliance with the 20 percent opacity standard for flares.

Gas-Fired Fuel Burning Equipment:

Monitoring – The monitoring of gas-fired emission units for visible emissions is waived, i.e. no source testing will be required. The Department has found that natural gas-fired

equipment inherently has negligible PM emissions. However, the Department can request a source test for PM emissions from any smoking equipment.

Reporting – The Permittee must state in each operating report whether only gaseous fuels were used in the equipment during the period covered by the report.

Liquid Fuel-Fired Burning Equipment:

Monitoring – The visible emissions shall be observed using Method-9 as detailed in Condition 2. The Permittee has opted not to use the Smoke/No Smoke plan, so this option has been removed from the permit. For EU IDs 15 and 16, the Permittee is required to do Visible Emissions Observations according to Section 3 if they operate more than the operating time limit in Condition 16 (200 hours in any rolling 12-month period). For EU IDs 21 through 25, the Permittee is required to do Visible Emissions Observations according to Section 3 if they operate more than 400 hours in any rolling 12-month period. Visible emissions must be observed using the Method-9 Plan as detailed in Section 3. Corrective actions such as maintenance procedures and either more frequent or less frequent testing may be required depending on the results of the observations.

Recordkeeping – The Permittee is required to record the results of all visible emission observations and record any actions taken to reduce visible emissions.

Reporting - The Permittee is required to report: 1) incidents when emissions in excess of the opacity threshold values have been observed, 2) and results of PM source tests. The Permittee is required to include copies of the results of all visible emission observations with the operating report.

Flares:

Monitoring for flares (EU IDs 17 through 19) requires Method 9 observations of scheduled flaring events lasting more than one hour. The Permittee must report the results of these observations to the Department.

Conditions 6 - 8, Particulate Matter (PM) Standard and MR&R

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.055(b). This requirement applies to operation of all industrial processes and fuel burning equipment in Alaska.

- EU IDs 1 through 19 and 21 through 25 are fuel-burning equipment.

These PM standards also apply because they are contained in the Federally approved SIP effective September 13, 2007.

Factual Basis: Condition 6 prohibits emissions in excess of the State PM (also called grain loading) standard applicable to fuel-burning equipment and industrial processes. The Permittee shall not cause or allow fuel-burning equipment nor industrial processes to violate this standard.

MR&R requirements are listed in Conditions 7 and 8 of the permit.

The Permittee must establish by actual visual observations which can be supplemented by other means, such as a defined Operation and Maintenance Program that the emission unit is in continuous compliance with the State's emission standards for particulate matter.

Gas-Fired Fuel Burning Equipment:

Monitoring – The monitoring of gas-fired emission units for particulate matter is waived, i.e. no source testing will be required. The Department has found that natural gas-fired equipment inherently has negligible PM emissions. However, the Department can request a source test for PM emissions from any smoking equipment.

Reporting – The Permittee must state in each operating report whether only gaseous fuels were used in the equipment during the period covered by the report.

Liquid Fuel-Fired Burning Equipment:

Monitoring – For EU IDs 15 and 16, as long as the emission units do not operate more than the operating time limit in Condition 16 (200 hours in any rolling 12-month period) and for EU IDs 21 through 25 as long as the emission units do not operate more than 400 hours in any rolling 12-month period, monitoring shall consist of an annual compliance certification.

Recordkeeping - The Permittee is required to record the results of PM source tests.

Reporting - The Permittee is required to report: 1) incidents when emissions in excess of the opacity threshold values have been observed, 2) and results of PM source tests. The Permittee is required to include copies of the results of all visible emission observations with the operating report.

Flares:

Monitoring of gas-fired flares for particulate matter is waived, i.e. no source testing will be required, because of the difficulty and questionable results these tests produce when applied to flares. The Department has recognized this fact by incorporating the waiver in the State Implementation Plan adopted in November 1984, which has not been Federally approved. No recordkeeping or reporting is required.

Condition 9, Sulfur Compound Emissions

Legal Basis: This condition requires the Permittee to comply with the sulfur compound emission standard for all fuel-burning equipment and industrial processes in the State of Alaska.

- EU IDs 1 through 19 and 21 through 25 are fuel-burning equipment.

These sulfur compound standards also apply because they are contained in the Federally approved SIP effective September 13, 2007.

Factual Basis: The condition requires the Permittee to comply with the sulfur compound emission standard applicable to fuel-burning equipment. The Permittee may not cause or allow the affected equipment to violate this standard.

Sulfur dioxide comes from the sulfur in the fuel (e.g. coal, natural gas, fuel oils). Fuel sulfur testing will verify compliance with the SO_2 emission standard.

Liquid Fuels:

For oil fired fuel burning equipment, the MR&R conditions are Standard Permit Conditions XI and XII adopted into regulation pursuant to AS 46.14.010(e).

The Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emission unit or stationary source operational or compliance factors indicate the unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard conditions as modified meets the requirements of 40 C.F.R. 71.6(a)(3).

Gaseous Fuels:

For EU IDs 3 through 5, Condition 9.4 includes an option to reduce the frequency of periodic monitoring if a demonstration has been made that the fuel gas meets the definition of natural gas using the provisions allowed under NSPS Subpart GG, which are stated in Condition 29.1.b of the permit. Monitoring must still be conducted periodically in order to obtain the data needed to estimate actual SO_2 emissions for fees.

Condition 9.5 requires the Permittee to obtain a monthly statement from the fuel supplier or conduct a monthly analysis for the fuel gas sulfur content using either ASTM D4084, D5504, D4810, D4913, D6228 or GPA Standard 2377, or a listed method approved in 18 AAC 50.035(b)-(c) or 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1).

The Permittee is required to report as State excess emissions whenever the fuel combusted causes sulfur compound emissions to exceed the standards in this condition. The Permittee is required to include copies of the records of monthly statement from the fuel supplier or the sulfur content analysis with the operating report.

Conditions 10 through 16, Legacy Permit Requirements

Legal Basis: The Permittee is required to comply with all effective stationary source-specific requirements that were carried forward from previous EPA PSD permits, SIP approved permits to operate issued before January 18, 1997, SIP approved construction permit(s), SIP approved minor permits, or owner requested limits established under 18 AAC 50.225. These requirements include Best Available Control Technology limits, limits to ensure compliance with the attainment or maintenance of ambient air quality standards or maximum allowable ambient concentrations, and owner requested limits. State pre-construction requirements apply because they were originally developed through case-by-case action under a Federally approved SIP. EPA approved the latest SIP effective September 13, 2007.

Factual Basis: The BACT conditions (Conditions 10 through 13) apply because they were developed during PSD reviews of the stationary source by both the EPA and the Department. These conditions require the Permittee to comply with the emission limits derived from BACT analysis. The Permittee may not cause or allow their equipment to violate these limits.

Between 1979 and 1981, EPA Region 10 issued four PSD permits for Prudhoe Bay stationary sources. On August 29, 1997 EPA issued revisions to the four PSD permits. The primary revisions include identification of specific equipment and tag numbers, apportionment of either field-wide or stationary source-wide ton per year limits to unit specific limits, and updating emission limits based solely on AP-42 factors to values in the edition of AP-42 that were current in 1997.

As part of the EPA process it was demonstrated to Region 10 that on a ton per year basis an overall decrease in allowable emissions would occur under the permit revision. The only

exception was an increase in allowable SO_2 emissions due to subsequent permitting by the Department that raised the SO_2 BACT limit established by EPA in one of the four EPA permits issued (PSD IV).

The majority of these changes reflect the revised emission limits granted by EPA on August 29, 1997. The EPA revision established ton per year emission limitations on a group basis for turbines. For EU IDs 3 through 5, ton per year emission limits apply for NO_X, CO, and PM. For NO_X, CO, and PM EPA also established short-term BACT emission limits in other terms (i.e. ppm, lb/MMscf, or lb/MMBtu). An opacity limit of 10 percent was also established for EU IDs 3 through 5.

The EPA revisions have been incorporated into this Title V Operating Permit. For EU IDs 3 through 5 the Permittee is required to calculate and report emission levels for the NO_X, CO, and PM. Monitoring for compliance with the short-term BACT emission limit for NO_X is identical to that for Subpart GG turbines.

For EU IDs 10 through 12, and 18 and 19 ADEC established short-term BACT NO_X emission limits during review of the GHX II project. Monitoring consists of inspections of maintenance records.

Monitoring – For annual emission limits contained in Table B and Table C the Permittee will use fuel consumption and/or hours of operation along with the emission factors contained in Section 12 to calculate monthly emissions and then use the monthly values to determine the 12-month period summation of emissions. The Department added a requirement to conduct source testing to verify emission factors and to add visible emission monitoring for units subject to the 10% opacity limit.

Recordkeeping – Maintain records of monthly emission levels.

Reporting – Report compliance with annual emission limits for EU IDs 3 through 5. Notify the Department when annual emission limits are exceeded.

Condition 10 includes MR&R to ensure compliance with BACT emissions limitations including NO_X, CO, PM and opacity. Recurring testing was instituted to ensure compliance with the short term BACT limits during the relevant period that represent's the stationary sources compliance with the permit limits. Opacity monitoring for the more stringent BACT opacity limit was added, parts of which were taken from previous BPXA permits (SIPE, AQ0170TVP02).

Conditions 12 through 16 are carried forward from Title V Operating Permit AQ0167TVP01 which in turn capture those requirements from the original Permit to Operate 9273-AA017. These conditions contain requirements to measure fuel consumption so that emission levels may be calculated, to monitor flue gas for heaters rated at greater than 43 MMBtu/hr, and to monitor operating hours for emergency equipment and gas-fired turbines and heaters. Conditions 12 and 13 were revised during this review to include emergency generators EU IDs 21 through 25. Condition 15.1 was added to more closely capture the original monitoring obligations, brought forward into this permit.

Condition 16 requires the Permittee to limit the number of hours of operation per consecutive 12-month period for the emergency equipment, EU IDs 15 and 16. The exceedance of the operational hour-limit is not a violation if the Department determines that the exceedance is due to an emergency.

Condition 17, Insignificant Emission Units

Legal Basis: The Permittee is required to meet State emission standards set out in 18 AAC 50.055 for all industrial processes and fuel-burning equipment, regardless of size.

Factual Basis: The conditions re-iterate the emission standards and require compliance for insignificant emission units. The Permittee may not cause or allow their equipment to violate these standards. Insignificant emission units are not listed in the permit unless specific monitoring, recordkeeping and reporting are necessary to ensure compliance.

The Department finds that the insignificant units at this stationary source do not require specific monitoring, recordkeeping and reporting to ensure compliance under these conditions.

Condition 17.4.a requires certification that the units did not exceed state emission standards during the previous year and did not emit any prohibited air pollution.

Conditions 18 – 25, NSPS Subpart A Requirements

Legal Basis: The Permittee must comply with the applicable New Source Performance Standard (NSPS) provisions incorporated by reference the NSPS effective October 8, 2009 for specific industrial activities, as listed in 18 AAC 50.040[5].

Most affected facilities subject to an NSPS are subject to Subpart A. At this stationary source, EU IDs 3 through 5 are subject to NSPS Subpart GG, EU IDs 10 through 12 are subject to NSPS Subpart Dc, and EU ID 20 is subject to NSPS Subpart Ka and therefore subject to Subpart A.

Conditions 18.1 through 18.3 - The Permittee has already complied with the notification requirements in 40 C.F.R. 60.7 (a)(1) - (4) for EU IDs 3 through 5. However, the Permittee is still subject to these requirements in the event of a new NSPS affected facility[6] or in the event of a modification or reconstruction of an existing facility[7] into an affected facility.

Condition 18.4 - The requirements to notify the EPA and the Department of any proposed replacement of components of an existing facility (40 C.F.R. 60.15) apply in the event that 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.

Condition 19 - Start-up, shutdown, or malfunction record maintenance requirements in 40 C.F.R. 60.7(b) are applicable to all NSPS affected facilities subject to Subpart A.

Conditions 20 and 21 - NSPS excess emission reporting requirements and summary report form in 40 C.F.R. 60.7(c) & (d) are applicable to EU IDs 3 through 5. The Department has included in Attachment A of the Statement of Basis a copy of the Federal EEMSP summary report form for use by the Permittee. The Permittee obtained EPA approval for annual instead of semi-annual fuel sulfur reporting in a letter from Jim McCormick (EPA Region 10) to Arco Alaska, Inc. dated Oct. 18, 1993. Therefore, the EEMSP reports that address

[5] EPA has not delegated to the Department the authority to administer the NSPS program as of the issue date of this permit

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

[7] *Existing facility* means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in this part, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type, as defined in 40 C.F.R. 60.2, effective 7/1/07.

fuel gas H_2S monitoring for Subpart GG-affected turbines are required to be submitted at least annually for these units instead of semi-annually.

Condition 22 - The Permittee has already complied with the initial performance test requirements in 40 C.F.R. 60.8 for EU IDs 3 through 5. Therefore, the Permittee is not required to comply with 40 C.F.R. 60.8(b) through (e) for EU IDs 3 through 5. However, the Permittee is still subject to these requirements in the event of a new NSPS affected facility, in the event of a modification or reconstruction of an existing facility into an affected facility or at such other times as may be required by the EPA. Condition 23 - Good air pollution control practices in 40 C.F.R. 60.11 are applicable to all NSPS affected facilities subject to Subpart A (EU IDs 3 through 5, 10 through 12, and 20).

Condition 24 - states that any credible evidence may be used to demonstrate compliance or establishing violations of relevant NSPS standards for EU IDs 3 through 5, and 20. Although this condition imposes no currently applicable requirement or emission limit, it is included in the permit to ensure that the stationary source is not inadvertently shielded from this requirement and is aware of the requirement.

Condition 25 - Concealment of emissions prohibitions in 40 C.F. R. 60.12 are applicable to EU IDs 3 through 5.

The flare is not subject to 40 C.F. R. 60.18 because it is a safety device and not a control device. It does not receive any tank vapors from any NSPS regulated emission units.

Recordkeeping requirements in 40 C.F.R. 60.7(f) are applicable to all NSPS affected facilities. (Satisfied by Condition 66).

Factual Basis: General provisions of 40 C.F.R. 60, Subpart A apply to owners or operators who are subject to a relevant subpart under Part 60, except when otherwise specified in an applicable subpart or relevant standard. The intent of Subpart A is to eliminate the repetition of requirements applicable to all owners or operators affected by NSPS.

Condition 26, NSPS Subpart Dc Requirements

Legal Basis: NSPS Subpart Dc applies to steam generating units for which construction, modification, or reconstruction commenced after June 9, 1989 and have maximum design heat input capacities of 29 MW (100 MMBtu/hr) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr). EU IDs 10 through 12 were constructed in 1994, and have maximum design heat input capacities of 79.9, 67.8 and 16.185 MMBtu/hr, respectively; and are therefore subject to Subpart Dc.

EU IDs 10 through 12 burn natural gas fuel. Therefore, the only requirements this subpart require are notification and fuel monitoring. The Permittee has already complied with the initial notification requirement.

Factual Basis: EU IDs 10 through 12 burn only natural gas and are not subject to the SO_2 standard in 40 C.F.R. 60.42c or the PM standard in 40 C.F.R. 60.43c. In accordance with 40 C.F.R. 60.48c(g)(1), the Permittee shall record the amounts of each fuel combusted during each operating day in EU IDs 10 through 12; or monitor according to an EPA approved custom fuel-monitoring schedule.

Condition 27, NSPS Subpart Ka Requirements

Legal Basis: NSPS Subpart Ka applies to storage vessels for petroleum liquids with storage capacity > 40,000 gallons that were built or modified after May 18, 1978 and prior to July 23, 1984. EU ID 20 was constructed during this time frame. This affected facility has a storage capacity of greater than 40,000 gallons and store petroleum liquids.

Factual Basis: If the true vapor pressure of the liquid stored within a tank is maintained below 1.0 psia, then there are no operational monitoring requirements. If the true vapor pressure is maintained below 1.5 psia, then there are no applicable equipment standards. If these conditions are met, then there are no applicable requirements other than those found in 40 C.F.R. 60, Subpart A. Otherwise, Condition 27 requires the Permittee to operate and maintain EU ID 20 and the closed vent vapor recovery system (installed according to the specifications of 40 C.F.R. 60.112a(a)(3)) in accordance Operations and Maintenance Plan on file with the EPA.

Conditions 28 - 29, NSPS Subpart GG Requirements

Legal Basis: These conditions prohibit the Permittee from exceeding emission standards set out in Subpart GG. NSPS Subpart GG applies to stationary gas turbines with a heat input at peak load (maximum load at 60 percent relative humidity, 59 ºF, and 14.7 psi) equal to or greater than 10.7 gigajoules per hour (10 MMBtu/hr), based on the lower heating value of the fuel fired and constructed, modified, or reconstructed after October 3, 1977. EU IDs 3 through 5 are subject to NSPS Subpart GG.

Factual Basis: These conditions incorporate NSPS Subpart GG NO_X emission and sulfur compound limits. The Permittee may not allow equipment to violate these standards. Per Condition 29.1.b and pursuant to 40 C.F.R. 60.334(h)(3), 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. Per Condition 29.1.c, an affected facility 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. The Permittee was granted an EPA-approved Custom Fuel Monitoring Schedule (7/13/93 with additional correspondence on 8/20/93, 10/18/93, and 8/19/96) and Alternate H_2S Sampling Method (10/2/97) allowing the Permittee to determine the sulfur content of the fuel gas at least monthly using ASTM D 4810-88, ASTM D 4913-89, Gas Producer's Association (GPA) Method 2377-86. The custom schedule also allows the Permittee to reduce the required frequency for reporting the fuel sulfur content to once per year, instead of the standard semi-annual requirement. 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.

NO_X Standard: For a turbine subject to 40 C.F.R. 60.332, the NO_X standard is determined by the following equation:

Where:

Y = manufacturer's maximum rated heat input (kJ/W-hr), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the affected stationary source. The value of Y shall not exceed 14.4 kJ/W-hr; and

F = NO_X emissions allowance for fuel bound nitrogen, percent by volume, assumed to be zero for distillate fuel oil and North Slope gaseous fuels.

Based on the manufacturer's heat rating at manufacturer's rated peak load, and assuming fuel bound nitrogen of zero, the NO_X standard is 173 ppmvd for EU IDs 3 and 4. EU ID 5 is exempt from 40 C.F.R. 60.332 Subpart GG NO_X requirements because it satisfies the exemption listed in 40 C.F.R. 60.332(e).

SO_2 Standard: The Permittee is required to comply with the following sulfur requirements for EU IDs 3 through 5 (turbines):

(1) do not cause or allow SO_2 emission in excess of 0.015 percent by volume, at 15 percent O_2 and on a dry basis (150 ppmv), or

(2) do not cause or allow the sulfur content for the fuel burned to exceed 0.8 percent by weight.

The Permittee has elected to comply with the SO_2 standard by not exceeding the 0.8 percent by weight sulfur content in the fuel burned by the affected emission units.

Exemptions: Gas turbines exempted from NSPS Subpart GG emission standards are as provided in 40 C.F.R. 60.332(e) – (l).

Conditions 28.2 through 28.4, NO_X Monitoring, Recordkeeping, and Reporting

Legal Basis: Periodic monitoring, recordkeeping, and reporting are included in Conditions 28.2 through 28.4 for all turbines that normally operate for greater than 400 hours in a 12 month period. This additional monitoring is necessary to ensure that turbine emissions comply with the applicable BACT, ORL, and NSPS NO_X standards and is required under 40 C.F.R. 71.6(a)(3) as the subpart does not contain MR&R sufficient for an operating permit.

Factual Basis: The Department does not have enough information to make categorical determinations that certain types of turbines, or turbines with emission test results below a certain percentage of the BACT, ORL, or Subpart GG NO_X emission limit will inherently comply with the limit at all times and will never need additional testing. After a sufficient body of NO_X data is gathered under monitoring conditions for compliance with BACT, ORL, and 40 C.F.R. 60, Subpart GG limits, the Department may find that it has enough information to make such categorical determinations. In that event, the Department would revise the NO_X monitoring conditions. The Department may determine that to assure compliance it is necessary to retain or increase the current monitoring frequency. Fuel-bound nitrogen monitoring is clarified in the latest version of NSPS Subpart GG to be required only when the fuel-bound nitrogen content has been used as a basis for relaxing the NO_X emission standard of the subpart per 40 C.F.R. 60.332(a)(3) & (4) and §60.334(h)(2). Therefore, fuel-bound nitrogen monitoring is not required even without an EPA waiver.

These conditions do not include the initial NSPS performance test requirements as the Subpart A conditions cover these requirements. An existing or new turbine under this permit that is still subject to the performance test requirement of 40 C.F.R. 60.8 is covered under the Subpart A related conditions.

The intent of these conditions is that turbines or groups of turbines be routinely tested on no less than a 5-year cycle. If the most recent performance test on a turbine showed NO_X emissions at less than or equal to 90 percent of the limits shown in Conditions 10 and/or 28, then periodic monitoring is required at the first applicable of three criteria: either within 5 years of the last performance test, or within a year of the effective date of the permit if a turbine normally operates more than 400 hours within a 12 month period, or within a year of exceeding 400 hours of operation within a 12-month period. For clarification, the Department added a 6 month cut-off date for triggering source testing within 1 year after the permit effective date in accordance with Condition 28.2.a(i)(B). The 6-month trigger identifies when Condition 28.2.a(i)(C) would be enacted to require source testing within 1 year of triggering 400 hours. This ensures that a unit would not appear to be out of compliance with Condition 28.2.a(i)(B) once it finally triggered Condition 28.2.a(i)(C).

If the most recent performance test showed operations at greater than 90 percent of any of the emissions listed in Conditions 10 and/or 28, then periodic monitoring source testing is required every year until two consecutive tests show emissions at less than or equal to 90 percent of the limit.

The condition does not state how load must be measured. For some turbines it may be possible to directly measure load as either mechanical or electrical output. For others, it may be necessary to calculate load indirectly based on measurements of other parameters. The Department is not attempting to dictate what method is most appropriate through the permit condition, but should evaluate the adequacy of methods of calculating load based on the load monitoring proposed by the Permittee.

Subpart GG defines "emergency gas turbine[8]" and exempts turbines meeting that definition from the GG emission standards. Some turbines may be operated as standby equipment but not meet the definition of emergency turbine, so the Department has added a Method 20, or Method 7E and either Method 3 or 3A, monitoring threshold of 400 hours per 12-month period. For turbines expected to operate less than 400 hours the Department has also added recordkeeping for hours of operation. The Department does not intend to require the Permittee to operate a turbine solely for the purpose of testing.

The condition requires testing at a range of loads, consistent with the performance test requirements in Subpart GG, that is, test at 30, 50, 75, and 100 percent load. If testing at these four loads is not reasonable, the condition allows the Permittee to propose to the Department what test loads will be reasonable and adequate, and the Department will have the responsibility to make a finding on that proposal. If EPA has already approved alternative test loads for the initial performance test the Department would allow those test loads if the information that went into that decision were still representative of the turbine operation.

[8] Emergency Gas Turbine means any stationary gas turbine that operates as a mechanical or electrical power source only when the primary power source for a facility has been rendered inoperable by an emergency situation, as defined in 40 C.F.R. 60.331(e), effective 7/1/07.

In Condition 28.2.b(ii)(C)(4), the Department considers "fuel type" to mean, for liquid fuels a type of fuel as described in an ASTM or similar fuel specification.

Load measurements or load calculations from load surrogate measurements are for one-hour periods. The intent is to match the averaging period for the test method. Method 20 identifies a number of traverse points that vary with the size of the stack. From these points the tester is to choose at least 8 points for NO_X measurements. The time at each point is to be at least one minute plus the average response time of the instrument. The recorded value is the average steady state response. Presumably, the steady state response would exclude some or all of the response time of the instrument. Three runs are to be done at each test load.

The three runs would represent 24 minutes of measurement time or more. A one-hour average load is therefore a reasonable approximation of a load period corresponding to the test method.

Conditions 29.1 through 29.4, SO_2 Monitoring, Recordkeeping, and Reporting

Legal Basis: These conditions require the Permittee to comply with NSPS Subpart GG SO_2 or fuel quality monitoring, recordkeeping, and reporting.

Factual Basis: Monitoring, recordkeeping, and reporting requirements for this condition are described in NSPS Subpart GG and have been referenced here. No additional monitoring outside of the Subpart GG requirements is necessary to ensure compliance with the NSPS SO_2 standard.

Monitoring: Condition 29.1 incorporates NSPS Subpart GG fuel sulfur monitoring requirements and the fuel gas monitoring requirements of the EPA approved alternative monitoring plan and schedule granted BPXA in accordance with 40 C.F.R. 60.334(i)(3). EPA approved the alternative fuel gas monitoring plan and schedule in correspondence dated July 13, 1993, August 20, 1993, October 18, 1993, August 19, 1996, and October 2, 1997. The approved alternative plans and schedules apply to EU IDs 3 through 5 since they commenced construction, reconstruction, or modification after October 3, 1977, but before July 8, 2004, per 40 C.F.R. 60.334(h)(4).

Per Conditions 29.1.b and 29.4.a(ii) and pursuant to 40 C.F.R. 60.334(h)(3) and §60.334(i), the Permittee may elect not to monitor or report the total sulfur content of the gaseous fuel combusted by affected emission units 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 and reporting.

Recordkeeping: The Permittee is required to maintain records of all sulfur monitoring data required by NSPS Subpart GG for five years as set out in 40.C.F.R. 71.6(a)(3)(ii)(B). This requirement is stated in Condition 66.

Reporting: NSPS Subpart GG fuel sulfur standard reporting requirements are incorporated in the permit in Condition 29.4. Flow Station #1 has an annual schedule for reporting fuel sulfur as per a custom fuel monitoring schedule (EPA Letter: 10/18/93).

For the purpose of the EEMSP reports and summary report required under 40 C.F.R. 60.7(c) and (d) and stated in Conditions 20 and 21, the Permittee is required to report as excess emissions any periods during which the sulfur content of the fuel being fired in the turbine

exceeds 0.8 percent. As of 7/1/07 (the adoption date of 40 C.F.R. 60 by the State of Alaska as of the effective date of this permit), Subpart GG [40 C.F.R. 60.334(j)(5)] requires EEMSP reporting 30 days after the end of each 6-month period, but the alternative monitoring schedule approved for the stationary source reduced the required frequency of these reports to at least annually. As stated in Conditions 20, 21, and 70, reports are to be submitted to the Department and EPA, and summarized in the operating report required under Condition 71. However, per Conditions 29.1.b and 29.4.a(iii), and pursuant to 40 C.F.R. 60.334(h)(3) and §60.334(i), the Permittee may elect not to monitor or report the total sulfur content of a gaseous fuel combusted by affected emission units if the fuel is demonstrated to meet the definition of natural gas under 40 C.F.R. 60.331(u), regardless of whether an existing custom schedule approved by the Administrator requires such monitoring and reporting.

In Condition 29.4.b, the Department requires that a copy of the results from the monitoring requirements in Condition 29.1 be included in the operating report required under Condition 71. State excess emissions and permit deviation reports are to be submitted in accordance with Condition 29.4.c.

Condition 30, NESHAP Subpart A Requirements

Legal Basis: The Department has incorporated by reference the NESHAP requirements effective July 30, 2010, for specific industrial activities, as listed in 18 AAC 50.040(c).

Most affected facilities subject to a NESHAP requirement are subject to Subpart A. The Permittee shall comply with the applicable requirements of 40 C.F.R 63 Subpart A in accordance with the provisions for applicability of Subpart A in 40 C.F.R. 63, Subpart HH Table 2 and Subpart ZZZZ Table 8.

Factual Basis: These conditions incorporate applicable 40 C.F.R. 63 requirements. The Permittee may not cause or allow violations of these requirements.

Condition 31, NESHAP Subpart HH Requirements

Legal Basis: A stationary source that exclusively processes, stores, or transfers black oil (as defined in 40 C.F.R. 63.761) is not subject to the requirements of 40 C.F.R. 63, Subpart HH. For the purposes of this subpart, a black oil facility that uses natural gas for fuel or generates gas from black oil shall qualify for this exemption.

Factual Basis: Recordkeeping requirements for this condition are described in 40 C.F.R. 63.10(b)(3).

Conditions 32 - 37, NESHAP Subpart ZZZZ Requirements

Legal Basis: The provisions of 40 C.F.R. 63, Subpart ZZZZ apply to owners or operators of a stationary Reciprocating Internal Combustion Engine (RICE) at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

Factual Basis: Pursuant to 40 C.F.R. 63.6585, diesel-fired emergency generators EU IDs 15, 16, and 21 through 25 are affected stationary RICEs subject to NESHAP Subpart ZZZZ. In accordance with 40 C.F.R. 63.6590(a)(1)(iii), EU IDs 15, 16, and 21 through 25 are considered existing stationary RICEs because they are located at an area source of HAPs and they were each constructed before June 12, 2006. EU IDs 15, 16, and 21 through 25 are emergency RICEs and are therefore not subject to any numerical emission limitations under

Subpart ZZZZ. Flow Station #1 is located in an area that is accessible by the Federal Alaska Highway System (FAHS).

For EU IDs 15, 16, and 21 through 25, the Permittee must comply with 40 C.F.R. 63, Subpart ZZZZ no later than May 3, 2013.

Per 40 C.F.R. 63.6645(a)(5), initial notification is not required for existing stationary emergency CI RICEs or existing stationary CI RICEs that are not subject to any numerical emission standards.

In accordance with 40 C.F.R. 63.6603(a), EU IDs 15, 16, and 21 through 25, must comply with the management practices in Table 2d of 40 C.F.R. 63 for Emergency CI engines.

The Permittee must comply with the good air control practices of 40 C.F.R. 63.6625(e).

The Permittee must comply with the operational limitations for emergency generators for EU IDs 15, 16, and 21 through 25 under 40 C.F.R. 63.6640(f).

For EU IDs 15, 16, and 21 through 25, the Permittee must comply with the installation and maintenance requirements of 40 C.F.R. 63.6625(e) and (f), including the requirement to install a non-resettable hour meter, if one is not already installed.

The Permittee must comply with the recordkeeping requirements of 40 C.F.R. 63.6655(e) and 40 C.F.R. 63.6660.

The Permittee must report any deviations from the operating limitations in Conditions 32 through 35.

The Permittee has designated EU IDs 21 through 25 as emergency RICE. However, specific requirements under Condition 37 have been included in the permit, which allow the Permittee to change the operating status of generators EU IDs 21 through 25 to "non-emergency" status, should these units fail to meet the "emergency" requirements in 40 C.F.R. 63.6640(f)(1). The unit(s) will be treated as non-emergency under Subpart ZZZZ for the remainder of the permit life once the unit(s) switched operations from emergency to non-emergency.

For any of EU IDs 21 through 25 (RICE units with ratings > 300 Hp) that become non-emergency, the unit would be subject to numerical CO emission standards and operational limitations as well as duel requirements for ULSD. EU IDs 21 through 25 operations as non-emergency engines may begin upon submittal of the notification to EPA and the Department required under Condition 37.1. An initial performance test and the associated required test notifications and reports must be completed according to the deadlines and requirements of 40 C.F.R. 63.6595(a)(7), 63.6612, 63.7(b) – (c), 63.9(h)(2), and 63.10(d)(2) after making a change to non-emergency status. The emission unit(s) must comply with all the NESHAP Subpart A and ZZZZ applicable to non-emergency RICE with ratings > 300 HP located at an area source. The Permittee may not revert to emergency operational status for any engine with the intent of relaxing the emission, operation, and fuel sulfur limits without first applying for a significant Title V permit amendment under 40 C.F.R. 71.7(e)(3). Operation as emergency engines cannot occur in this case until the amended Title V permit is issued.

Conditions 38 - 40, Standard Terms and Conditions

Legal Basis: These are standard conditions required under 18 AAC 50.345(a) and (e)-(g) for all operating permits. This provision is incorporated in the Federally approved Alaska operating permit program of November 30, 2001, as updated effective November 9, 2008.

Factual Basis: These are standard conditions that apply to all permits.

Condition 41, Administration Fees

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.400-405 as derived from AS 46.14.130. This condition requires the Permittee, owner, or operator to pay administration fees as set out in regulation. Paying administration fees is required as part of obtaining and holding a permit with the Department or as a fee for a Department action.

Factual Basis: The owner or operator of a stationary source who is required to apply for a permit under AS 46.14.130 shall pay to the Department all assessed permit administration fees. The regulations in 18 AAC 50.400-405 specify the amount, payment period, and the frequency of fees applicable to a permit action.

Conditions 42 - 43, Emission Fees

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.410-420. The regulations require all permits to include due dates for the payment of fees and any method the Permittee may use to re-compute assessable emissions.

Factual Basis: These emission fee conditions are Standard Permit Condition I under 18 AAC 50.346(b) adopted pursuant to AS 46.14.010(e). Except for the modification noted in the last paragraph of this "Factual Basis", the Department determined that these standard conditions adequately meet the requirements of AS 46.14.250. No emission unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source specific conditions would better meet these requirements. Therefore, the Department concluded that the standard conditions meet the requirements of AS 46.14.250.

These standard conditions require the Permittee to pay fees in accordance with the Department's billing regulations. The billing regulations set the due dates for payment of fees based on the billing date.

The assessable emissions are potential or projected emissions of each air pollutant equal to or greater than 10 tons per year authorized by the permit (AS 46.14.250(h)(1)).

The conditions allow the Permittee to calculate actual annual assessable emissions based on previous actual annual emissions. According to AS 46.14.250(h)(1)(B), assessable emissions are based on each air pollutant. Therefore, fees based on actual emissions shall be paid on any pollutant emitted whether or not the permit contains any limitation of that pollutant.

This standard condition specifies that, unless otherwise approved by the Department, calculations of assessable emission based on actual emissions use the most recent previous calendar year's emissions. Since each current year's assessable emission are based on the

previous year, the Department will not give refunds or make additional billings at the end of the current year if the estimated emissions and current year actual emissions do not match.

The Department modified the standard condition to correct Condition 43.2 such that it referenced "submitted" (i.e., postmarked) rather than "received" in accordance with the timeframe of Condition 43.1.

Condition 44, Good Air Pollution Control Practice

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.346(b)(5) and applies to all emission units, **except** those subject to Federal emission standards, those subject to continuous emission or parametric monitoring, and for insignificant emission units, i.e., except EU IDs 3 through 5, 10 through 12, and 20 as well as EU IDs 15, 16, and 21 through 25 after the compliance date in Condition 33.

Factual Basis: The condition requires the Permittee to comply with good air pollution control practices for all units.

The Department adopted this condition under 18 AAC 50.346(b) as Standard Permit Condition VI pursuant to AS 46.14.010(e). This condition has been modified in the permit as follows. The Department added the text "EU IDs 15, 16, and 21 through 25 are subject to this condition only until the applicable compliance date as set forth in Condition 33" because on the compliance date in Condition 33, EU IDs 15, 16, and 21 through 25 subject to NESHAPs Subpart ZZZZ will no longer be subject to this condition (as units subject to Federal emission standards) and will instead be required to comply with Condition 32.3. Records kept in accordance with Condition 44.2 for units previously subject to GAPCP need to be maintained for 5 years in accordance with Condition 66 even if a unit is no longer subject to this condition.

Beyond as noted above, the Department adopted this condition under 18 AAC 50.346(b) as Standard Permit Condition VI pursuant to AS 46.14.010(e). The Department determined that this standard condition adequately meets the requirements of 40 C.F.R. 71.6(a)(3). No emission unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source specific conditions would better meet these requirements. Therefore, the Department concluded that the standard condition meets the requirements of 40 C.F.R. 71.6(a)(3).

Maintaining and operating equipment in good working order is fundamental to preventing unnecessary or excess emissions. Standard conditions for monitoring compliance with emission standards are based on the assumption that good maintenance is performed. Without appropriate maintenance, equipment can deteriorate more quickly than with appropriate maintenance. If appropriate maintenance is not applied to the equipment, the Department may have to apply more frequent periodic monitoring requirements (unless the monitoring is already continuous) to ensure that the monitoring results are representative of actual emissions.

The Permittee is required to keep maintenance records to show that proper maintenance procedures were followed, and to make the records available to the Department. The Department may use these records as a trigger for requesting source testing if the records show that maintenance has been deferred.

Condition 45, Dilution

Legal Basis: This condition prohibits the Permittee from using dilution as an emission control strategy as set out in 18 AAC 50.045(a). This State regulation applies to the Permittee because the Permittee is subject to emission standards in 18 AAC 50.

Factual Basis: The condition prohibits the Permittee from diluting emissions as a means of compliance with any standard in 18 AAC 50.

Condition 46, Reasonable Precautions to Prevent Fugitive Dust

Legal Basis: This condition requires the Permittee to use reasonable precautions when handling, storing or transporting bulk materials or engaging in an industrial activity in accordance with the applicable requirement in 18 AAC 50.045(d). Bulk material handling requirements apply to the Permittee because the Permittee may engage in bulk material handling, transporting, or storing; or will engage in industrial activity at the stationary source.

Factual Basis: The condition requires the Permittee to comply with 18 AAC 50.045(d), and take reasonable action to prevent particulate matter (PM) from being emitted into the ambient air. Since the stationary source is not a significant source of fugitive PM emissions, there is no need for monitoring or recordkeeping.

Condition 47, Stack Injection

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.055(g). It prohibits the Permittee from releasing materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack (i.e. disposing of material by injecting it into a stack). Stack injection requirements apply to a stack or stationary source constructed or modified after November 1, 1982.

Factual Basis: No specific monitoring for this condition is practical. Compliance is ensured by inspections, because the unit or stack would need to be modified to accommodate stack injection.

Condition 48, Air Pollution Prohibited

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.110. The condition prohibits the Permittee from causing 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. Air Pollution Prohibited requirements apply to the stationary source because the stationary source will have emissions.

Factual Basis: While the other permit conditions and emissions limitations should ensure compliance with this condition, unforeseen emission impacts can cause violations of this standard. These violations would go undetected except for complaints from affected persons. Therefore, to monitor compliance, the Permittee must monitor and respond to complaints.

ADEC adopted this standard condition into 18 AAC 50.346(a) pursuant to AS 46.14.010(e). The Department determined that this condition adequately meets the requirements of 40

C.F.R. 71.6(a)(3). No emission unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source specific conditions would better meet these requirements. Therefore, the Department concluded that the standard condition meets the requirements of 40 C.F.R. 71.6(a)(3).

The Permittee is required to report any complaints and injurious emissions. The Permittee must keep records of the date, time, and nature of all complaints received and summary of the investigation and corrective actions undertaken for these complaints, and to submit copies of these records upon request of the Department.

Condition 49, Technology-Based Emission Standard

Legal Basis: The Permittee is required to take reasonable steps to minimize emissions if certain activity causes an exceedance of any technology-based emission standard in this permit. This condition ensures compliance with the applicable requirement in 18 AAC 50.235. Technology Based Emission Standard requirements apply to the stationary source because the stationary source contains equipment subject to a technology-based emission standard, such as BACT, MACT, LAER, NSPS or other "technologically feasible" determinations.

Factual Basis: The conditions of this permit list applicable technology-based emission standards and require excess emission reporting for each standard in accordance with Condition 70. Excess emission reporting under Condition 81 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 70.

Condition 50, Asbestos NESHAP

Legal Basis: The condition requires the Permittee to comply with asbestos demolition or renovation requirements in 40 C.F.R. 61, Subpart M. This condition ensures compliance with the applicable requirement in 18 AAC 50.040(b)(1) and (2)(F). The asbestos demolition and renovation requirements apply if the Permittee engages in asbestos demolition or renovation.

Factual Basis: Because these regulations include adequate monitoring and reporting requirements and because the Permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient to ensure compliance with these Federal regulations.

Condition 51, Refrigerant Recycling and Disposal

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.040(d) and applies if the Permittee engages in the recycling or disposal of certain refrigerants. The condition requires the Permittee to comply with the standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F that will apply if the Permittee uses certain refrigerants and engages in the recycling or disposal of certain refrigerants.

Factual Basis: Because these regulations include adequate monitoring and reporting requirements and because the Permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient to ensure compliance with this Federal regulation.

Condition 52, NESHAPs Applicability Determinations

Legal Basis: The Permittee has the responsibility to determine if specific Federal regulations apply to its stationary sources.

Factual Basis: The Permittee has conducted an analysis of the stationary source and determined that it is not a major HAPs stationary source based on emissions.

Conditions 53 - 54, Halon Prohibitions

Legal Basis: These prohibitions apply to all stationary sources that use halon for extinguishing fires and inert gas to reduce explosion risk. The condition prohibits the Permittee from causing or allowing violations of these prohibitions. Flow Station #1 uses halon and is, therefore, subject to the Federal regulations contained in 40 C.F.R. 82.

Factual Basis: These conditions incorporate applicable 40 C.F.R. 82 requirements. The Permittee may not cause or allow violations of these prohibitions.

Condition 55, Open Burning

Legal Basis: The condition requires the Permittee to comply with the regulatory requirements when conducting open burning at the stationary source. This condition ensures compliance with the applicable requirement in 18 AAC 50.065. The open burning state regulation in 18 AAC 50.065 applies to the Permittee if the Permittee conducts open burning at the stationary source.

Factual Basis: No specific monitoring is required for this condition. Condition 55.1 requires the Permittee to keep "sufficient records" to demonstrate compliance with the standards for conducting open burning, but does not specify what these records should contain.

More extensive monitoring and recordkeeping is not warranted because the Permittee does not conduct open burning as a routine part of their business. Also, most of the requirements are prohibitions, which are not easily monitored. Compliance is demonstrated through annual certification required under Condition 72.

Condition 56, Requested Source Tests

Legal Basis: The Permittee is required to conduct source tests as requested by the Department. The Department adopted this condition under 18 AAC 50.345(k) as part of its operating permit program approved by EPA November 30, 2001.

Factual Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.220(a) and applies because this is a standard condition to be included in all operating permits. Monitoring consists of conducting the requested source test.

Conditions 57 - 59, Operating Conditions, Reference Test Methods, Excess Air Requirements

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.220(b) and apply because the Permittee is required to conduct source tests by this permit. The Permittee is required to conduct source tests as set out in Conditions 57 through 59.

Factual Basis: These conditions supplement the specific monitoring requirements stated elsewhere in this permit. Compliance monitoring with Conditions 57 through 59 consist of the test reports required by Condition 64.

Condition 60, Test Exemption

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.345(a) and applies when the unit exhaust is observed for visible emissions.

Factual Basis: As provided in 18 AAC 50.345(a), the requirements for test plans, notifications and reports do not apply to visible emissions observations by smoke readers, except in connection with required particulate matter testing.

Conditions 61 - 64, Test Deadline Extension, Test Plans, Notifications and Reports

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.345(l)-(o) and apply because the Permittee is required to conduct source tests by this permit.

Factual Basis: Standard conditions 18 AAC 50.345(l) - (o) are incorporated through these conditions. These standard conditions supplement specific monitoring requirements stated elsewhere in this permit. The source test itself monitors compliance with these conditions.

Condition 65, Particulate Matter (PM) Calculations

Legal Basis: This condition requires the Permittee to reduce particulate matter data in accordance with 18 AAC 50.220(f). It applies when the Permittee tests for compliance with the PM standard in 18 AAC 50.055.

Factual Basis: This condition supplements specific monitoring requirements stated elsewhere in this permit.

Condition 66, Recordkeeping Requirements

Legal Basis: Applies because the Permittee is required by the permit to keep records.

Factual Basis: The condition restates the regulatory requirements for recordkeeping, and supplements the recordkeeping defined for specific conditions in the permit. The records being kept provide an evidence of compliance with this requirement.

Condition 67, Certification

Legal Basis: This condition requires the Permittee to comply with the certification requirement in 18 AAC 50.205 and applies to all Permittees under EPA's approved operating permit program of November 30, 2001.

Factual Basis: This standard condition is required in all operating permits under 18 AAC 50.345(j). This condition requires the Permittee to certify any permit application, report, affirmation, or compliance certification submitted to the Department. To ease the certification burden on the Permittee, the condition allows the excess emission reports to be certified with the operating report, even though it must still be submitted more frequently than the operating report. This condition supplements the reporting requirements of this permit.

Condition 68, Submittals

Legal Basis: This condition requires the Permittee to comply with standardized reporting requirement in 18 AAC 50.326(j) and applies because the Permittee is required to send reports to the Department.

Factual Basis: This condition lists the Department's appropriate address for reports and written notices. The Permittee is required to submit an original and one copy of reports, compliance certifications, and other submittals required by this permit. Receipt of the submittal at the correct Department office is sufficient monitoring for this condition. This condition supplements the standard reporting and notification requirements of this permit.

Condition 69, Information Requests

Legal Basis: This condition requires the Permittee to submit requested information to the Department. This is a standard condition from 18 AAC 50.345(i) of the state approved operating permit program effective November 30, 2001.

Factual Basis: This condition requires the Permittee to submit information requested by the Department. Monitoring consists of receipt of the requested information.

Condition 70, Excess Emission and Permit Deviation Reports

Legal Basis: This condition requires the Permittee to comply with the applicable requirement in 18 AAC 50.235(a)(2) and 18 AAC 50.240. Also, the Permittee is required to notify the Department when emissions or operations deviate from the requirements of the permit.

Factual Basis: This condition satisfies two state regulations related to excess emissions - the technology-based emission standard regulation and the excess emission regulation. Although there are some differences between the regulations, the condition satisfies the requirements of each regulation.

The Department adopted this condition as Standard Permit Condition III under 18 AAC 50.346(c) pursuant to AS 46.14.010(e). The Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emission unit or stationary source operational or compliance factors indicate the unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard condition meets the requirements of 40 C.F.R. 71.6(a)(3).

Section 14, Notification Form

The notification form contained in Standard Permit Condition IV meets the requirements of Chapter 50, Air Quality Control.

Condition 71, Operating Reports

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.346(b)(6) and applies to all permits.

Factual Basis: The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements elsewhere in the permit. The reports themselves provide monitoring for compliance with this condition.

The Department used the Standard Permit Condition VII as adopted into regulation on August 20, 2008 pursuant to AS 46.14.010(e). The Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emission unit or stationary source operational or compliance factors indicate the unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard condition meets the requirements of 40 C.F.R. 71.6(a)(3).

For renewal permits, the condition specifies that for the transition periods between an expiring permit and a renewal permit the Permittee shall ensure that there is date-to-date continuity between the expired permit and the renewal permit such that the Permittee reports against the permit terms and conditions of the permit that was in effect during those partial date periods of the transition. No format is specified. The Permittee may provide one report accounting for each permit term or condition and the effective permit at that time. Alternatively, the Permittee may choose to provide two reports – one accounting for reporting elements of permit terms and conditions from the end date of the previous operating report until the date of expiration of the old permit, and a second operating report accounting for reporting elements of terms and conditions in effect from the effective date of the renewal permit until the end of the reporting period.

Condition 72, Annual Compliance Certification

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.040(j)(4) and applies to all Permittees.

Factual Basis: This condition specifies the periodic compliance certification requirements, and specifies a due date for the annual compliance certification. Each annual certification provides monitoring records for compliance with this condition.

Condition 72.2 provides clarification of transition periods between an expiring permit and a renewal permit to ensure that the Permittee certifies compliance with the permit terms and conditions of the permit that was in effect during those partial date periods involved in the transition. No format is specified. The Permittee may provide one report certifying compliance with each permit term or condition for each of the effective permits during the certification period, or may choose to provide two reports – one certifying compliance with permit terms and conditions from January 1 until the date of expiration of the old permit, and a second report certifying compliance with terms and conditions in effect from the effective date of the renewal permit until December 31.

The Permittee is required to submit to the Department an original and one copy of an annual compliance certification report. The Permittee may submit one of the required copies electronically at their discretion. This change more adequately meets the requirements of 18 AAC 50 and agency needs, as the Department can more efficiently distribute the electronic copy to staff in other locations.

Condition 73, NSPS and NESHAP Reports

Legal Basis: The Permittee is required to provide to the Department a copy of each report submitted to EPA for units subject to NSPS or NESHAP Federal regulations under 18 AAC 50.326(j)(4). 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

Factual Basis: The condition supplements the specific reporting requirements in 40 C.F.R. 60, 40 C.F.R. 61, and 40 C.F.R. 63. The reports themselves provide monitoring for compliance with this condition.

Condition 74, Emission Inventory Reporting

Legal Basis: This condition requires the Permittee to submit emissions data to the State to satisfy the Federal requirement to submit emission inventory data from point sources as required under 40 C.F.R. 51.321 (6/10/02). It applies to sources defined as point sources in 40 C.F.R. 51.20. The State must report all data elements in Table 2A of Appendix A to Subpart A of 40 C.F.R. 51 to EPA (73 FR 76556).

Factual Basis: The emission inventory data is due to EPA 12 months after the end of the reporting year (40 C.F.R. 51.30(a)(1) and (b)(1), 12/17/08). A due date of March 31 corresponds with sources reporting actual emissions for assessable emissions purposes and provides the Department sufficient time to enter the data into EPA's electronic reporting system.

The air emissions reporting requirements under 40 C.F.R. Part 51 Subpart A apply to States; however, States rely on information provided by point sources to meet the reporting requirements of Part 51 Subpart A. In the past, the Department has made information requests to point sources, to which the point source is obligated to reply under 18 AAC 50.200. The information requests occur on a routine basis as established by Part 51 Subpart A and consume significant staff resources. To increase governmental efficiency and reduce costs associated with information requests that occur on a routine basis, it has been determined that a standard permit condition best fulfills the need to gather the information needed to satisfy the requirements of Subpart A of 40 C.F.R. 51.

To ensure that the Department's electronic system reports complete information to the National Emissions Inventory, Title V stationary sources classified as Type A in Table 1 of Appendix A to Subpart A of 40 C.F.R. 51 are required to submit with each annual report all the data elements required for the Type B source triennial reports (see also Table 2A of Appendix A to Subpart A of 40 C.F.R. Part 51). All Type A sources are also classified as Type B sources. However the Department has streamlined the reporting requirements so Type A sources only need to submit a single type of report every year instead of both an annual report and a separate triennial report every third year.

Condition 75, Permit Applications and Submittals

Legal Basis: The Permittee may need to submit permit applications and related correspondence.

Factual Basis: Standard Permit Condition XIV directs the applicant to send copies of all application materials required to be submitted to the Department directly to the EPA, in electronic format if practicable. This condition shifts the burden of compliance from the Department to ensure that copies of application materials are submitted to EPA by transferring that responsibility to the Permittee as allowed under 40 C.F.R. 71.10(d)(1).

Conditions 76 - 78, Permit Changes and Revisions Requirements

Legal Basis: The Permittee is obligated to notify the Department and EPA of certain off-permit source changes and operational changes under18 AAC 50.326(j)(4). 40 C.F.R. 71.6(a)(8), (12), and (13) incorporated by reference under 18 AAC 50.040(j) require these

provisions within this permit. 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

Factual Basis: These conditions are required in 40 C.F.R. 71.6 for all operating permits to allow changes within a permitted stationary source without requiring a permit revision.

The Permittee did not request trading of emission increases and decreases as described in 40 C.F.R. 71.6(a)(13)(iii); therefore, language addressing these provisions has not been included in this permit as part of Condition 76.

Condition 79, Permit Renewal

Legal Basis: The Permittee must submit a timely and complete operating permit renewal application if the Permittee intends to continue source operations in accord with the operating permit program under18 AAC 50.326(j)(3). The obligations for a timely and complete operating permit application are set out in 40 C.F.R. 71.5 incorporated by reference in 18 AAC 50.040(j)(3). 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

Factual Basis: In accordance with AS 46.14.230(a), this operating permit is issued for a fixed term of five years after the date of issuance, unless a shorter term is requested by the permit applicant. The Permittee is required to submit an application for permit renewal by the specific dates applicable to the stationary source as listed in this condition. As stated in 40 C.F.R. 71.5(a)(1)(iii), submission for a permit renewal application is considered timely if it is submitted at least six months but no more than eighteen months prior to expiration of the operating permit. According to 40 C.F.R. 71.5(a)(2), a complete renewal application is one that provides all information required pursuant to 40 C.F.R. 71.5(c) and must remit payment of fees owed under the fee schedule established pursuant to 18 AAC 50.400. 40 C.F.R. 71.7(b) states that if a source submits a timely and complete application for permit issuance (including renewal), the source's failure to have a permit is not a violation until the permitting authority takes final action on the permit application.

Therefore, for as long as an application has been submitted within the timeframe allowed under 40 C.F.R. 71.5(a)(1)(iii), and is complete before the expiration date of the existing permit, then the expiration of the existing permit is extended and the Permittee has the right to operate under that permit until the effective date of the new permit. However, this protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit by the deadline specified in writing by the Department any additional information needed to process the application. Monitoring, recordkeeping, and reporting for this condition consist of the application submittal.

Conditions 80 - 84, General Compliance Requirements and Schedule

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.326(j)(3) and 40 C.F.R. 71.6(c). The Permittee is required to comply with these conditions set out in 18 AAC 50.345 and 40 C.F.R. 71.6(c) included in all operating permits. 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

Factual Basis: These general compliance conditions are required for all operating permits.

Conditions 85 - 86, Permit Shield

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.326(j) and apply because the Permittee has requested that the Department shield the source from the non-applicable requirements listed under this condition under the Federally approved State operating program effective November 30, 2001.

Factual Basis: Table D of Operating Permit No. AQ0167TVP02 shows the permit shield that the Department granted to the Permittee. Should any of the shielded requirements become applicable during the permit term, the Permittee is required to take necessary steps to comply with all applicable requirements in a timely manner. The table below explains the justification for shields requested by the Permittee which were denied during development of the renewal permit.

Table I - Shield Requests Denied

Shield Request Citation	Shield Rationale	Reason for Shield Denial
40 C.F.R. 63, Subpart ZZZZ, Table 2b - Operating Limitations	There are no requirements in Table 2b of Subpart ZZZZ that apply to these engines because they are emergency engines.	Condition 37 provides Operational Flexibility for the possibility of changing classification of EU IDs 15, 16 and 21 – 25 from emergency-use RICE to non-emergency designation. Shielding these requirements would provide an indeterminate compliance circumstance where the EU may be shielded based on an initial classification, which has changed status due to the operational requirements of the permittee. Under Condition 37.4, these shields are not required and introduce compliance uncertainty.
40 C.F.R. 63.6604, Subpart ZZZZ - Fuel Requirements	The requirement to comply with 40 C.F.R. 80.510(b) does not apply to existing emergency engines.	
40 C.F.R. 63.6612, Subpart ZZZZ – Testing and Initial Compliance Requirements	There are no requirements in either Table 4 or Table 5 of Subpart ZZZZ that apply to these engines because there are no applicable emission limitations per 40 C.F.R. 63.6610, §63.6611 and Table 2d of Subpart ZZZZ.	
40 C.F.R. 63.6615, Subpart ZZZZ – Subsequent Testing 40 C.F.R. 63.6620, Subpart ZZZZ – Performance Tests and Procedures	There are no performance testing requirements that apply to these engines because there are no applicable emission limitations per 40 C.F.R. 63.6610, §63.6611 and Table 2d of Subpart ZZZZ.	
40 C.F.R. 63.6625(g), Subpart ZZZZ – Monitoring, Installation, Collection, Operation and Maintenance Requirements	This requirement does not apply to emergency engines.	
40 C.F.R. 63.6630(b) and (c), Subpart ZZZZ – Initial Compliance Demonstration	There are no performance testing requirements that apply to these engines because there are no applicable emission limitations per 40 C.F.R. 63.6610, §63.6611 and Table 2d of Subpart ZZZZ.	

Shield Request Citation	Shield Rationale	Reason for Shield Denial
40 C.F.R. 63.6645, Subpart ZZZZ - Notification Requirements 40 C.F.R. 63.9, Subpart A – Notification Requirements	Per 40 C.F.R. 63.6645(a)(5), initial notification is not required for existing stationary emergency CI RICE or an existing stationary CI RICE that is not subject to any numerical emission standards.	
40 C.F.R. 63.6650, Subpart ZZZZ – Reporting Requirements 40 C.F.R. 63.9, Subpart A – Notification Requirements	Compliance status reporting requirements only apply to CI RICE subject to a numerical emission standard.	
18 AAC 50.201 – Ambient Air Quality Investigation	This requirement is not applicable until such time as the Department requests an ambient air quality investigation.	There is no rationale to shield the permittee from a requirement that the Department may request at any time.

ATTACHMENT A

FIGURE 1. SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE

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

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

Reporting period dates: From _____ to _____

Company: _____

Emission Limitation: _____

Address: _____

Monitor Manufacturer: _____

Model No.: _____

Date of latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total emission unit operating time in reporting period[1]: _____

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

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

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in this condition shall be submitted.

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

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

Name: _____

Signature: _____ *Date:* _____

Title: _____