DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ0267TVP02 Issue Date: Proposed Permit - February 25, 2014
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, **ConocoPhillips Alaska, Inc.**, for the operation of the **Kuparuk Central Production Facility #1**.

The Kuparuk Central Production Facility #1, defined by this permit as the surface structures and their associated permanent emission units located on the CPF-1 production pad and Kuparuk Drill Sites 1A, 1B, 1C, 1D, 1E, 1F, 1G, 1J, 1L, 1Q, 1R, and 1Y 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 October 6, 2013, Register 208. All Federal regulation citations are from those sections adopted by reference in this version of regulation in 18 AAC 50.040 unless otherwise specified.

All currently applicable stationary source-specific terms and conditions of Permit to Operate No. 9373-AA004 (that have not been revised by permit No. 267CPT01), Air Quality Control Construction Permit Nos. 267CPT01 and 9773-AC016 (Rev. 1), and Minor Source Specific Permit Nos. AQ0267MSS02, AQ0267MSS03, AQ0267MSS04, and AQ0267MSS05 have been incorporated into this Operating Permit.

Upon effective date of this permit, Operating Permit No. AQ0267TVP01 Revision 2 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
BHp .....Boiler Horsepower
bbls .....U.S. Petroleum Barrels (42 gallons)
C.F.R. .....Code of Federal Regulations
CAA, ...The Act...Clean Air Act
CI.....Compression Ignition
CO .....Carbon Monoxide
CO_2.....Carbon Dioxide
CO_2e .....Carbon Dioxide Equivalent Emissions
CPF.....Central Production Facility
DS.....Drill Site
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
GHG .....Greenhouse Gas
H2S.....Hydrogen Sulfide
HAPs .....Hazardous Air Pollutants[HAPs as defined in AS 46.14.990]
hp.....Horsepower
ICE .....Internal Combustion Engine
ID.....Emission Unit Identification Number
ISO .....Operating conditions corresponding to sea level and 59 deg. F.
kPa.....kilopascals
kW .....kilowatts
LAER .....Lowest Achievable Emission Rate
LHV.....Lower Heating Value
MACT .....Maximum Achievable Control Technology as defined in 40 C.F.R. 63.
MMBtu/hr....Million British thermal units per hour
MMSCF.....Million standard cubic feet
MR&R .....Monitoring, Recordkeeping, and Reporting
NESHAPs.....Federal National Emission Standards for Hazardous Air Pollutants[NESHAPs as contained in 40 C.F.R. 61 and 63]
NAICS .....North American Industry Classification System
NOx .....Nitrogen Oxides
NSPS .....Federal New Source Performance Standards[NSPS as contained in 40 C.F.R. 60]
O & M .....Operation and Maintenance
O_2.....Oxygen
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
PS.....Performance Specification
PSI .....Pounds per Square Inch
psia.....Pounds per Square Inch (absolute)
PSD.....Prevention of Significant Deterioration
PTE.....Potential to Emit
RICE.....Reciprocating Internal Combustion Engine
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

Names and Addresses

Permittee:	ConocoPhillips Alaska, Inc. P.O. Box 100360 Anchorage, AK 99510-0360	
Stationary Source Name:	Kuparuk Central Production Facility #1	
Location:	70˚ 19′ 24″ North; 149˚ 36′ 30″ West	
Physical Address:	Section 9, T11N, R10E (Production Pad), Umiat Meridian Sections 16 & 21, T11N, R10E (DS1E) Section 35, T11N, R10E (DS1J) Kuparuk Oil Field	
Owner:	ConocoPhillips Alaska, Inc. 700 G Street (Zip 99501) P.O. Box 100360 Anchorage, AK 99510-0360	BP Exploration (Alaska) Inc. 900 E. Benson Blvd. (Zip 99508) P.O. Box 196612 Anchorage, AK 99519-6612
	Chevron U.S.A. Inc. - P.O. Box 36366 Houston, TX 77236	ExxonMobil Alaska Production Inc. 3301 C Street, Suite 400 (Zip 99503) P.O. Box 196601 Anchorage, AK 99519-6601
Operator:	ConocoPhillips Alaska, Inc 700 G Street (zip 99501) P.O. Box 100360 Anchorage, AK 99510-0360	
Permittee's Responsible Official	Stephen D. Bradley GKA Operations Manager	
Designated Agent:	CT Corporation Systems 9360 Glacier Hwy, Suite 202 Juneau, AK 99801	
Stationary Source and Building Contact:	Mark Chaney/Mike Lyden Section 9, T11N, R10E (Production Pad), Umiat Meridian Kuparuk Oil Field, AK (907) 659-7727 N1132@conocophillips.com	
Fee Contact:	Tom Manson, Senior Environmental Coordinator P.O. Box 100360 Anchorage, AK 99510-0360 (907) 263-4627 Tom.W.Manson@conocophillips.com	
Permit Contact:	Brad Thomas P.O. Box 100360 Anchorage, AK 99510-0360 (907) 263-4741 Brad.C.Thomas@conocophillips.com	
Process Description SIC Code: NAICS Code:	1311 - Petroleum and Natural Gas Production 211111 - Crude Petroleum and Natural Gas Extraction	

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

Section 2. Emission Unit Inventory and Description

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

Table A - Emission Units Inventory

EU ID	Emission Unit Tag No.	Emission Unit Description[2]	Rating/Size	Commence Construction/ Startup/ Modification Date[1]
Group I - Gas Turbines				
1	C-2101-A	GE Frame 3 (MS3002K-HE) Gas Lift Compressor	16,260 hp ISO	5/2004
2	C-2101-B	GE Frame 3 (MS3002K-HE) Gas Lift Compressor	16,260 hp ISO	10/2003
3	C-2101-C	GE Frame 3 (MS3002K-HE) Gas Lift Compressor	16,260 hp ISO	11/2004
4	G-201-A	EGT (Ruston) TB5000 Electric Generator (Dual fired)	4,900 hp ISO	1979
5	G-201-B	EGT (Ruston) TB5000 Electric Generator (Dual fired)	4,900 hp ISO	1979
6	G-201-C	EGT (Ruston) TB5000 Electric Generator (Dual fired)	4,900 hp ISO	1979
7	G-201-D	EGT (Ruston) TB5000 Electric Generator (Dual fired)	4,900 hp ISO	1979
8	G-3201-E	EGT (Ruston) TB5000 Electric Generator (Dual fired)	4,900 hp ISO	10/1981
9	G-3201-F	EGT (Ruston) TB5000 Electric Generator (Dual fired)	4,900 hp ISO	10/1981
10	P-2202-A	EGT (Ruston) TB5400 Water Injection Pump	5,400 hp ISO	5/1993
11	P-2202-B	EGT (Ruston) TB5400 Water Injection Pump	5,400 hp ISO	5/1993
12	P-CL07-A	EGT (Ruston) TB5400 Water Injection Pump (Dual fired)	5,400 hp ISO	5/1993
13	P-CL07-B	EGT (Ruston) TB5400 Water Injection Pump (Dual fired)	5,400 hp ISO	5/1993
14	G-3203	GE Frame 6 (PG6561 B) Gas Turbine Electric Generator	53,500 hp (39,930 kW) ISO	1999

EU ID	Emission Unit Tag No.	Emission Unit Description[2]	Rating/Size	Commence Construction/ Startup/ Modification Date[1]
Group II - Gas-Fired Heaters (Excluding Drill Site Heaters)				
15	H-201	Broach Emergency Heater (Dual fired)	27.8 MMBtu/hr[heat input, LHV]	1979
16	G1-14-01	Born Crude Heater (KUTP)	44.4 MMBtu/hr[heat input, LHV]	12/1984
17	H-3204	Kvaerner Process Systems Fuel Gas Heater	9.7 MMBtu/hr[heat input, LHV]	1999
18	H-102A	ICE Air Heater	4.375 MMBtu/hr[heat input, LHV]	6/2001
Group III – Liquid Fuel-Fired Equipment				
19	G-701-A	Waukesha Emergency Generator	1,086 hp	1980
20	G-701-B	Waukesha Emergency Generator	1,086 hp	1980
22	P-1A02	GM Detroit Allison Freeze Protection Pump (1A) Model 7083-7000	231 hp	1982 [3]
23	P-1F02	GM Detroit Allison Freeze Protection Pump (1F) Model 7083-7000	231 hp	1981 [3]
24	P-1G02	GM Detroit Allison Freeze Protection Pump (1G) Model 7083-7000	231 hp	1981 [3]
25	P-1L02	GM Detroit Allison Freeze Protection Pump (1L) Model 8083-7000	300 hp	1981 [3]
26	P-1Q02	GM Detroit Allison Freeze Protection Pump (IQ) Model 8083-7000	300 hp	1981 [3]
27	P-1R02	GM Detroit Allison Freeze Protection Pump (1R) Model 8083-7000	300 hp	1981 [3]
28	P-1Y02	GM Detroit Allison Freeze Protection Pump (1Y) Model 8083-7000	300 hp	1981 [3]

EU ID	Emission Unit Tag No.	Emission Unit Description[2]	Rating/Size	Commence Construction/ Startup/ Modification Date[1]
Group IV – Flares				
29	H-101B	McGill Emergency Flare	1.6 MMscf/day (Pilot/Purge/Assist) Combined Total for all flares	10/1981
30	H-KF01	Kaldair I-58-VS Emergency Flare/Control Device (LP)		1991
31	H-KF02	Kaldair I-87-FS Emergency Flare (HP)		1991
32	H-CR01A	McGill Emergency Flare		Unknown
33	H-CR01B	McGill Emergency Flare		1/1985
Group V – Incinerators				
35	H-250	Comptro Incinerator w/ supplemental gas-fired burners: Primary Burner #1 Primary Burner #2 Secondary Burner	1,300 lb/hr 0.8 MMBtu/hr 0.8 MMBtu/hr 2.0 MMBtu/hr	1980
36	H-347	Comptro Incinerator with supplemental gas-fired burners: Primary Burner Secondary Burner	900 lb/hr 1.95 MMBtu/hr 1.33 MMBtu/hr	1980
Group VI - Other Equipment (Drill Site Heaters and Drill Site Production Heaters)				
37	H-1A01	Latoka Drill Site Heater (1A)	16.4 MMBtu/hr[heat input, LHV]	12/1981
38	H-1B01	Latoka Drill Site Heater (1B)	16.4 MMBtu/hr[heat input, LHV]	12/1981
39	H-2V01	CE NATCO Drill Site Heater (1C)	14.5 MMBtu/hr[heat input, LHV]	1984
40	H-3F01	CE NATCO Drill Site Heater (1D)	19.6 MMBtu/hr[heat input, LHV]	1985
41	H-1E01	Latoka Drill Site Heater (1E)	16.4 MMBtu/hr[heat input, LHV]	12/1981
42	H-1E02	GTS Energy Production Heater (1E)	30.0 MMBtu/hr[heat input, LHV]	8/15/05
43	H-1F01	BS & B Drill Site Heater (1F)	14.9 MMBtu/hr[heat input, LHV]	10/1982

EU ID	Emission Unit Tag No.	Emission Unit Description[2]	Rating/Size	Commence Construction/ Startup/ Modification Date[1]
44	H-1G01	BS & B Drill Site Heater (1G)	14.9 MMBtu/hr[heat input, LHV]	10/1982
45	H-1F-1901	Latoka Drill Site Heater (1H)	16.4 MMBtu/hr[heat input, LHV]	6/1982
46	H-1J01A	Petrochem Development Production Heater (1J)	36.8 MMBtu/hr[heat input, LHV]	12/1/04
47	H-1J01B	Petrochem Development Production Heater (1J)	36.8 MMBtu/hr[heat input, LHV]	12/1/04
48	H-1Q01	BS&B Drill Site Heater (1Q)	21.0 MMBtu/hr[heat input, LHV]	1985
49	H-1R01	BS&B Drill Site Heater (1R)	17.2 MMBtu/hr[heat input, LHV]	1985
50	H-1Y01	BS&B Drill Site Heater (1Y)	14.9 MMBtu/hr[heat input, LHV]	3/1983
Group VII – NSPS Storage Tanks				
51	T-201	Arctic No. 1 Diesel	2,000 bbls	1979
52	G1-19501	Arctic (No. 1) Diesel (KUTP)	3,000 bbls	1983
53	G1-19502	Arctic (No. 1) Diesel (KUTP)	3,000 bbls	1983
54	G1-19503	Arctic (No. 1) Diesel (KUTP)	3,000 bbls	1983
55	G1-19504	Arctic (No. 1) Diesel (KUTP)	9,900 bbls	1983
Topping Plant				
57		Kuparuk Unit Topping Plant (KUTP)		8/1983

EU ID	Emission Unit Tag No.	Emission Unit Description[2]	Rating/Size	Commence Construction/ Startup/ Modification Date[1]
Group XI – DS1R IC Engines				
64	KS5010A	Detroit Diesel 8083-7300 Well Injection Pump Engine	440 hp	10/2000
65	KS5010B	Detroit Diesel 8083-7300 Well Injection Pump Engine	440 hp	10/2000
66	KS5010-1	Kubota Model V4702-VG1 Standby Generator	70 hp (50 kW)	1999
Gasoline Dispensing Facility				
67	TK-FA-0501-10	Mobile Gasoline Storage/Dispensing Tank	300 gallons	June 2009
Drill Site 1B Cuttings Reinjection Module				
68a[5]		Small Grinding Mill (A6061585)	25 tph	8/2013
68b[5]		Large Mill (A6061585)	50 tph	8/2013
Screening				
68c[5]		Screening Shaker #1	160 tph	8/2013
68d[5]		Screening Shaker #2	160 tph	8/2013

1. Date construction commenced (if known) or the startup date of the unit. If a unit has been modified as defined by AS 46.14.990, then the most recent modification date is provided. Relocation of drill site heaters does not constitute a modification. See the Statement of Basis for information regarding the GE Frame 3 turbine modification history.
2. Units identified as "dual fired" are plumbed to run on liquid fuel in an emergency.
3. The year of manufacture for this unit is from manufacturer's records provided by ADEC to the Permittee.
4. EU ID 21, a 215 hp GM Detroit Allison Water Booster pump driver listed on the AQ0267TVP01 emission inventory has been physically disabled and abandoned in place.
5. Emission Units 68a through 68d are operated using high line power.

[18 AAC 50.040(j)(3) & 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 20, 22 through 33, 37 through 50, 64, 65, 66, and 68a through 68d to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

[18 AAC 50.040(j) & 50.326(j)]
[18 AAC 50.055(a)(1)]
[40 C.F.R. 71.6(a)(1)]
[Minor Permit No. AQ0267MSS05 Condition 3, 08/05/2013]

1.1. For EU IDs 1 through 3, 10, 11, 14, 16, 17, 18, and 37 through 50, burn only gas as fuel. Monitoring for these emission units shall consist of a statement in each operating report under Condition 99 indicating whether each of these emission units fired only gas during the period covered by the report. Report under Condition 98 if any fuel is burned other than gas.

1.2. For each of EU IDs 19, 20, 22 through 28, 64 and 65, as long as the calendar year operating time or fuel consumption of the emission unit does not exceed the respective threshold in Table B, monitoring shall consist of an annual certification under Condition 100 of compliance with the visible emissions standard in accordance with Condition 34.4.a.

1.3. If any of EU IDs 19, 20, 22 through 28, 64 or 65 operates (total emergency and non-emergency hours) for more than the number of hours or consumes more than the number of gallons shown in Table B in one calendar year, monitor, record, and report visible emissions for that emission unit in accordance with Conditions 3 through 5.

1.4. For EU IDs 4 through 9, 12, 13, and 15, use gas as the primary fuel. Monitoring for these emission units shall consist of a statement in each operating report required in Condition 99 indicating whether each of these emission units fired only gas during the period covered by the report. If any unit operated on back-up liquid fuel during the period covered by the report, the Permittee shall monitor, record, and report according to Condition 15 for that unit.

1.5. For EU IDs 66 and 68a through 68d, monitor, record, and report according to Condition 34.4 for the visible emissions standard.

1.6. For EU IDs 29 through 33 (flares), monitor, record, and report in accordance with Condition 6.

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

Table B - Significant Emission Unit Thresholds

EU ID	Number of Hours or Gallons Fuel per Calendar Year
19	150 hours
20	150 hours
22	550 hours
23	550 hours
24	550 hours
25	430 hours
26	430 hours
27	430 hours
28	430 hours
64	8350 gallons fuel
65	8350 gallons fuel

2. Incinerator Visible Emissions. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, through the exhaust of EU IDs 35 and 36, to reduce visibility by more than 20 percent averaged over any six consecutive minutes.

[18 AAC 50.040(j), 50.050(a), & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

2.1. The Permittee shall observe visible emissions from the exhaust stack of EU IDs 35 and 36 for 18 consecutive minutes to obtain a minimum of 72 observations in accordance with Method 9 of 40 C.F.R. 60, Appendix A-4, once per calendar year and upon request by the Department.

2.2. Record and report in accordance with Conditions 4 and 5.

Visible Emissions Monitoring, Recordkeeping and Reporting

Liquid Fuel-Fired Emission Units (EU IDs 19, 20, 22 - 28, 64 and 65)

3. Visible Emissions Monitoring. When required by Condition 1.3, or if any liquid fuel fired unit listed in Condition 1.3 is replaced during the permit term, the Permittee shall observe the exhaust of liquid fuel-fired emission units, EU IDs 19, 20, 22 through 28, 64 and 65 for visible emissions using the Method 9 Plan under Condition 3.1. The Permittee may for each unit elect to continue the visible emission 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)]

3.1. **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 listed in Condition 3 that is 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 applicable operational threshold in Condition 1.3, observe the exhaust for 18 minutes of operations within 30 days after the calendar month during which that threshold has been exceeded, or within 30 days of the unit's next scheduled operations, whichever is later.

b. **Monthly Method 9 Observations**. After the first Method 9 observation required by Condition 3.1.a, 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 3.1.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:

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

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

d. **Annual Method 9 Observations**. After at least two semiannual 18-minute observations under Condition 3.1.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:

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

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

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

e. **Increased Method 9 Frequency**. If a six-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more observations are greater than 20 percent, then increase or maintain the 18-minute observation frequency for that emission unit to at least monthly as stated in Condition 3.1.b, until the criteria in Condition 3.1.c for semiannual monitoring are met.

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

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

4.1. When using the Method 9 Plan of Condition 2.1, 3.1 or 15.3, the observer shall record:

a. 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;

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

c. 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;

d. opacity observations to the nearest five percent at 15-second intervals on the Visible Emissions Observation Record in Section 11; and

e. 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.

4.2. 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.

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

5. Visible Emissions Reporting. When Method 9 monitoring is conducted under Condition 2.1, 3, or 15.3, 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)]

5.1. In each operating report under Condition 99, include for the period covered by the report:

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

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;

(iv) dates when one or more observed six-minute averages were greater than the 10 percent BACT opacity limit under Condition 19 for EU ID 36;

c. a summary of any monitoring or recordkeeping required under Condition 2.1, 2.2, 3, 4, 15.3, or 15.4 that was not done.

5.2. Report under Condition 98:

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

b. For EU ID 36, the results of Method 9 observations that exceed an average of 10 percent opacity for any six-minute period per the BACT opacity limit in Condition 19; and

c. if any monitoring under Condition 2.1, 3, or 15.3 was not performed when required, report within three days of the date the monitoring was required.

Flares, EU IDs 29 - 33

6. Visible Emissions Monitoring, Recordkeeping, and Reporting. The Permittee shall observe one daylight flare event[2] within 12 months after the preceding flare event observation or within 12 months after the permit effective date, whichever is later. If no flare event exceeds one hour within that 12-month period, then the Permittee shall observe the next daylight flare event.

6.1. Monitor flare events using Method 9.

6.2. Record the following information for observed events:

a. the flare(s) EU ID number;

b. results of the Method-9 observations;

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

c. reason(s) for flaring;

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

e. volume of gas flared.

6.3. Monitoring of a flare event may be postponed for safety or weather reasons, or because a qualified observer is not available. If more than 12 months have elapsed since the last qualifying flare event was monitored, and monitoring of a flare event is postponed for any of the reasons described in this condition, the Permittee shall include in the next operating report required by Condition 99, an explanation of the reason that the flare event was not monitored. If no flare events meeting this definition occur during a reporting period then no monitoring or reporting is required.

6.4. Attach copies of the records required by Condition 6.2 with the operating report required by Condition 99 for the period covered by that report.

6.5. Report under Condition 98 whenever the visible emissions standard in Condition 1 is exceeded or the monitoring required under Condition 6 is not completed, except as allowed under Condition 6.3.

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

Particulate Matter Emissions Standards

7. Industrial Process and Fuel-Burning Equipment Particulate Matter. The Permittee shall not cause or allow particulate matter emitted from EU IDs 1 through 20, 22 through 33, 37 through 50, 64, 65, 66, and 68a through 68d 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)]
[Minor Permit No. AQ0267MSS05 Condition 4, 08/05/2013]

7.1. For EU IDs 1 through 3, 10, 11, 14, 16, 17, 18, and 37 through 50, burn only gas as fuel. Monitoring for these units shall consist of a statement in each operating report under Condition 99 indicating whether each of these emission units fired only gas during the period covered by the report. Report under Condition 98 if any fuel is burned other than gas.

7.2. For each of EU IDs 19, 20, 22 through 28, 64 and 65, as long as the calendar year operating time or fuel consumption of the emission unit does not exceed the thresholds in Table B, monitoring shall consist of an annual certification of compliance under Condition 100 with the particulate matter standard accordance with Condition 34.4.a.

7.3. If any of EU IDs 19, 20, 22 through 28, 64 or 65 operates (total emergency and non-emergency hours) for more than the number of hours or consumes more than the number of gallons shown in Table B in one calendar year, monitor, record, and report particulate matter emissions for that emission unit in accordance with Conditions 9 through 11.

7.4. For EU IDs 4 through 9, 12, 13, and 15, use gas as the primary fuel. Monitoring for these emission units shall consist of a statement in each operating report required in Condition 99 indicating whether each of these emission units fired only gas during the period covered by the report. If any unit operated on back-up liquid fuel during the period covered by the report, the Permittee shall monitor, record, and report according to Condition 15 for that unit.

7.5. For EU IDs 66 and 68a through 68d monitor, record, and report according to Condition 34.4 for the particulate matter standard.

7.6. For EU IDs 29 through 33 (flares) the Permittee must annually certify compliance under Condition 100 with the particulate matter standard.

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

8. Incinerator Particulate Matter Emissions. Particulate matter emissions from EU ID 35 may not exceed 0.15 grains per cubic foot of exhaust gas corrected to 12 percent CO_2 and standard conditions, averaged over three hours.

[18 AAC 50.050(b), 50.326(j), & 50.346(c)]
[40 C.F.R. 71.6(a)]

8.1. Monitor, record, and report according to Conditions 12, 13, and 14.

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

PM Monitoring, Recordkeeping and Reporting

For Dual Fuel-Fired Turbines (while firing liquid fuel) and Liquid Fuel-Fired Engines (EU IDs 4 through 9, 12, 13, 19, 20, 22 through 28, 64 and 65)

9. Particulate Matter Monitoring for Dual Fuel-Fired Turbines (while firing liquid fuel) and Liquid Fuel-Fired Engines. When required by Condition 7.3 or 15.2, the Permittee shall conduct source tests on liquid fuel-fired turbines and engines, EU IDs 4 through 9, 12, 13, 19, 20, 22 through 28, 64 and 65 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)]

9.1. Except as provided in Condition 9.4, within six months of exceeding the criteria of Condition 9.2.a or 9.2.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 9.2; to show that emissions are below those criteria, observe emissions as described in Condition 3.1 under load conditions comparable to those when the criteria were exceeded.

9.2. Conduct the PM source test or make repairs according to Condition 9.1 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.

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

9.4. The automatic PM source test requirement in Conditions 9.1 and 9.2 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.

10. Particulate Matter Recordkeeping for Dual Fuel-Fired Turbines (while firing liquid fuel) and Liquid Fuel-Fired Engines. The Permittee shall keep records of the results of any PM testing and visible emissions observations conducted under Conditions 9 and 15.

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

11. Particulate Matter Reporting for Dual Fuel-Fired Turbines (while firing liquid fuel) and Liquid Fuel-Fired 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)]

11.1. Report under Condition 98:

a. the results of any PM source test that exceed the PM emissions limit stated in Condition 7; or

b. if one of the criteria of Condition 9.2 was exceeded and the Permittee did not comply with either Condition 9.1.a or 9.1.b. This must be reported by the day following the day compliance with Condition 9.1 was required; or

c. for observations in excess of the thresholds of Condition 9.2.a or 9.2.b, within 30 days of the end of the month in which observations occur.

11.2. In each operating report under Condition 99, 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 9.2;

b. a summary of the results of any PM testing under Condition 9; and

c. copies of any visible emissions observation results (opacity observations) greater than the thresholds of Condition 9.2, if they were not already submitted.

For Dual Fuel-Fired Heaters (while firing liquid fuel) (EU ID 15) and Incinerators (EU IDs 35 and 36)

12. Particulate Matter Monitoring for Dual Fuel-Fired Heaters (while firing liquid fuel) and Incinerators. The Permittee shall conduct source tests on liquid fuel-fired heater EU ID 15 when required by Condition 15.2, and on incinerators EU IDs 35 and 36 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) & (c)(6)]

12.1. Except as allowed under Condition 12.4, within six months of exceeding the criteria of Condition 12.2 either:

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

b. Take corrective action and conduct two 18-minute visible emissions observations in a consecutive six-month period to show that emissions no longer exceed the criteria described in Condition 12.2.

12.2. Conduct the PM source test or make repairs according to Condition 12.1 if 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity greater than 20 percent.

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

12.4. The automatic PM source test requirement in Condition 12.1 is waived for an emission unit if a PM source test on that unit has shown compliance with the PM standard during this permit term.

13. Particulate Matter Recordkeeping for Dual Fuel-Fired Heaters (while firing liquid fuel) and Incinerators. The Permittee shall keep records of the results of any PM testing and visible emissions observations conducted under Conditions 12 and 15.

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

14. Particulate Matter Reporting for Dual Fuel-Fired Heaters (while firing liquid fuel) and Incinerators. The Permittee shall report as follows:

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

14.1. In each operating report required by Condition 99, include for the period covered by the report:

a. the dates, EU ID(s), and results when an 18-minute opacity observation was greater than the applicable threshold criterion in Condition 12.2.

b. a summary of the results of any PM testing and visible emissions observations conducted under Condition 12.

14.2. Report as excess emissions, in accordance with Condition 98, any time the results of a source test for PM exceed the PM emission limit stated in Condition 7 or 8.

VE & PM MR&R for Dual Fuel-Fired Emission Units

(EU IDs 4 - 9, 12, 13, and 15)

15. The Permittee shall monitor, record and report the monthly hours of operation when operating on back-up liquid fuel.

15.1. For any of EU IDs 4 through 9, 12, 13, and 15 that does not exceed 400 hours of operations per calendar year on back-up liquid fuel, monitoring of compliance for visible emissions under Condition 1 and for particulate matter under Condition 7 is not required for that emission unit. Monitoring shall consist of an annual certification of compliance with Conditions 1 and 7 under Condition 100.

15.2. For any of EU IDs 4 through 9, 12, 13, and 15, notify the Department and begin monitoring the affected emission unit according to Condition 15.3 no later than 15 days after the end of a calendar month in which the cumulative hours of operation for the calendar year exceed any multiple of 400 hours on back-up liquid fuel. If the observation exceeds the limit in Condition 1, monitor as described in Condition 9 or 12, as applicable by type of emission unit. If the observation does not exceed the limit in Condition 1, no additional monitoring is required until the cumulative hours of operation exceed each subsequent multiple of 400 hours on back-up liquid fuel during a calendar year.[3]

15.3. When required to do so by Condition 15.2, observe the 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.

15.4. Keep records and report in accordance with Conditions 4, 5, 10, 11, 13, and 14, as applicable, by type of emission unit.

15.5. Report under Condition 98 if the Permittee fails to comply with Condition 15.2, 15.3, or 15.4.

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

Sulfur Compound Emissions Standard and MR&R

16. Sulfur Compound Emissions. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from fuel-burning equipment, EU IDs 1 through 20, 22 through 33, 37 through 50, 64, and 65 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 North Slope Liquid Fuel (EU IDs 4 through 9, 12, 13, 15, and 19 through 28, 64, and 65)

16.1. **Arctic Diesel Fuel**: 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 99 a list of the sulfur content(s) measured for each month covered by the report.

[3] If the requirement to monitor is triggered more than once in a calendar month, only one Method 9 observation is required to be conducted by the stated deadline for that month.

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).

c. If SO_2 emissions calculated under Condition 16.1.b exceed 500 ppm, the Permittee shall report under Condition 98. The report shall document the calculation under Condition 16.1.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 99 the SO_2 emissions in PPM calculated under Condition 16.1.b.

Monitoring and Reporting for Other Fuel Oil (EU IDs 4 through 9, 12, 13, 15, and 19 through 28, 64, and 65)

16.2. **Other Fuel Oil**[4]: For liquid fuel obtained from a third-party supplier, the Permittee shall take one or more of the steps outlined in Conditions 16.2.a and 16.2.b:

a. For each shipment of fuel:

(i) If the fuel grade requires a sulfur content less than 0.5 percent by weight, keep receipts that specify the fuel grade, maximum sulfur content of the fuel grade, and amount received; or

(ii) 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 received and

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

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

b. Analyze at least monthly the sulfur content of the fuel in each storage tank that supplies fuel to the emission units listed in Condition 16 using an appropriate method listed in 18 AAC 50.035(b)-(c) or 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1).

16.3. If a shipment of fuel under Condition 16.2.a contains greater than 0.75 percent sulfur by weight or the results of the sample analyses under Condition 16.2.b indicate that the stored 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).

[4] *Oil* as the term is used in the context of this condition is described generally as 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.

16.4. The Permittee shall report as follows:

a. If SO_2 emissions calculated under Condition 16.3 exceed 500 ppm, the Permittee shall report under Condition 98. The report shall document the calculation under Condition 16.3.

b. The Permittee shall include in the operating report required by Condition 99:

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

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

(iii) the results of all fuel sulfur analyses conducted under Condition 16.2.b during the reporting period and documentation of the method(s) used to complete the analyses; and

(iv) for fuel with a sulfur content greater than 0.75 percent, the SO_2 emissions in PPM calculated under Condition 16.3.

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

Monitoring, Recordkeeping, and Reporting for Fuel Gas[5] (EU IDs 1 through 18, and 35 through 50)

16.5. Fuel Gas:

a. Monitoring.

(i) Monitoring of the fuel gas burned at the stationary source as conducted under Condition 49.1.a satisfies the monitoring requirements necessary to assure compliance with this condition for all fuel gas fired emission units at the source.

(ii) Even if the natural gas demonstration under Condition 49.1.a(i) has been made, the Permittee shall analyze a representative sample of the gas at least semi-annually 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).

(iii) For emission units using the same fuel gas combusted by EU ID 16, compliance monitoring may use records available from the EU ID 16 H_2S CEMS to demonstrate compliance with Condition 16.

b. **Recordkeeping.** Keep records of the fuel gas sulfur analyses conducted under Condition 16.5.a.

[5] *Fuel gas* as the term is used in the context of this condition is described generally by the definition of natural gas found in 40 C.F.R. 60.41b.

c. **Reporting.** The Permittee shall:

(i) Report as excess emissions, in accordance with Condition 98, whenever the fuel combusted causes sulfur compound emissions to exceed the standard of Condition 16.

(ii) Include copies of the records required by Condition 16.5.b with the operating report required by Condition 99 for each month of the reporting period.

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

Pre-Construction[6] Permit Requirements

BACT Emission Limits

17. Turbine Emissions. The Permittee shall limit actual emissions from the Turbines (EU IDs 1 through 3 and 8 through 13) as indicated in Table C below.

[18 AAC 50.040(j), 18 AAC 50.326(j), and 40 C.F.R. 71.6(a)]
[Federal Kuparuk River Unit PSD Permit No. PSD-X82-01, as amended 10/27/03]
[Construction Permit No. 267CPT01, Condition 4 and Exhibit B, 4/8/03]

Table C - Turbine BACT Emissions Limits for EU IDs 1 through 3, and 8 through 13

EU ID	Pollutant	Emission Limit (short-term) per Individual Turbine[5]	Annual Emission Limit Combined (tpy)
EU IDs 1 - 3	NO_X[3]	150 ppmvd[1] corrected to 15% O_2	2,046
EU IDs 8 and 9		150 (14.4/Y)[1] 153 ppmvd[2] corrected to 15% O_2	
EU IDs 10 - 13		115 ppmvd[1]	
EU IDs 1 - 3 and 8 - 13	SO_2	No Limit	109
EU IDs 1 - 3 and 8 - 13	CO	0.17 lb/MMBtu[4]	612
EU IDs 1 - 3 and 8 - 13	PM	No Limit	50
EU IDs 1 - 3 and 8 - 13	Opacity	10%, consecutive 6- minute average	No Limit
EU IDs 1 - 3 and 8 - 13	VOC	No Limit	7.5

Table Notes:

1) PSD Permit No. PSD-X82-01, amended 10/27/03 (Attachment 1, Sheet 1 of 4). Corrected to 15% O_2. Y = manufacturers rated heat rate at manufacturers rated peak load (kJ/W-hr).
2) Construction Permit No. 267CPT01 Exhibit B. NO_x emission limit established at an individual unit rating (i.e., Y value) of 14.1 kJ/W-hr.
3) All short-term NOx emission limits refer to full load, ISO conditions.
4) Other short-term emission limits refer to full load, standard conditions.
5) The requirement to operate using good combustion practices applies at all times.

[6] *"Pre-Construction"* refers to permits issued pursuant to regulations approved or promulgated through rulemaking under Title I of the Act, including State and Federal PSD permits and State-issued Permits-to-Operate (prior to January 18, 1997), construction permits issued effective January 18, 1997 or later, and minor permits issued effective October 1, 2004 or later.

17.1. Calculate the monthly and the 12-month consecutive summation of emissions for NO_X, SO_2, CO, PM, and VOC for EU IDs 1 through 3 and 8 through 13. Use the emission factors found in Section 13 of this permit, along with the hours of operation and/or amount of fuel used, to calculate the monthly emissions for each unit.

17.2. Report the monthly and the consecutive 12-month period summation of emissions, for each month of the reporting period, with each operating report required by Condition 99.

17.3. Notify the Department per Condition 98 should emissions of any air pollutant exceed the limit for that pollutant in Table C.

17.4. For EU IDs 1 through 3 and 8 through 13, monitor, record, and report in accordance with Conditions 48.2 - 48.4 to demonstrate compliance with the short-term BACT NO_X emission limit in Table C.

17.5. For EU IDs 1 through 3 and 8 through 13, monitor, record, and report in accordance with Conditions 1.1 and 1.4 to demonstrate compliance with the short-term BACT opacity emission limit in Table C.

17.6. The Permittee shall perform a CO source test on a representative unit of each of EU IDs 1 through 3, 8 through 9, and 10 through 13, respectively, to demonstrate compliance with the short-term BACT CO emission limit in Table C as follows:

a. Conduct testing at the maximum achievable load that represents full load operation for that unit at the time of the test. To determine the CO emission rate, measure CO and O_2 in accordance with Methods 10 and 3A, respectively. Use Method 19 to convert CO emission concentrations to emission rates. Perform and submit the results of the source test in accordance with Section 6.

b. The test shall be conducted as follows:

(i) EU IDs 1 through 3 are in a “group;” EU IDs 8 and 9 are in a “group;” and EU IDs 10 through 13 are in a “group. If all turbines within a group (have a run time of less than 400 hours in all consecutive 12-month periods for each fuel type in the preceding 5 years, no source testing is required for that group and fuel type.

(A) Report according to Condition 48.4.b if the situation in Condition 17.6.b(i) occurs.

(ii) Test a unit in the same group within 12 months after any turbine in the group exceeds 400 hours of run time on a fuel type in any 12-month period ending after the effective date of this permit if a test has not been completed on any representative unit of the turbine group during the previous 4 years. Substituting test data among turbines operated by the Permittee at stationary sources located at the Kuparuk River Unit is allowed if the Permittee documents the intent to perform substitute testing for multiple turbines and meets all other requirements of Conditions 48.2.b(i) through 48.2.b(iii) as the recurring test thresholds and methods apply to Table C CO emission limits.

c. For each turbine in Condition 17 with test results that are greater than 90 percent of the applicable short-term CO emission limits in Table C or for which emissions are projected to exceed 90 percent of the applicable emission limits at maximum load, the Permittee shall conduct an additional Method 10 and Method 19 test on that turbine within one year of the previous test. The Permittee shall conduct at least one additional test per year until at least two consecutive tests show that emissions from the turbine are less than or equal to 90 percent of the applicable limits at the maximum load.

d. The Permittee shall provide a copy of the CO source test report to the Department, within 60 days after completing the source test.

e. Update the emission factor in Section 13 and use the new emission factor value in subsequent calculations under Condition 17.1.

17.7. Keep records that demonstrate that the units EU ID 1 – 3 and 8 - 13 operated using good combustion practices. Monitoring for these emission units shall also consist of a statement in each operating report required under Condition 99 indicating whether the Permittee operated the units as required during the period covered by the report.

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

18. The Permittee shall limit actual emissions from the Born Crude Heater EU ID 16 and Drill Site Heaters EU IDs 37 through 41, 43 through 45, and 48 through 50, as indicated in Table D below.

[Federal Kuparuk River Unit PSD Permit No. PSD-X82-01, as amended 10/27/03]
[Construction Permit No. 267CPT01 Condition 4 and Exhibit B, 4/28/03]

Table D - Heater BACT Emissions Limits for EU IDs 16, 37 through 41, 43 through 45, and 48 through 50

EU ID	Pollutant	Emission Limit (short-term) per Individual Heater	Annual Emission Limit Combined (tpy)
EU IDs 16, 37 - 41, 43 - 45, and 48 - 50	NO_X	0.10 lb/MMBtu	124
	SO_2	No limit	33
	CO	0.035 lb/MMBtu	44
	PM	No limit	14

Table Notes:

1) All short-term emission limits refer to full load, standard conditions.
2) The requirement to operate using good combustion practices applies at all times.

18.1. Calculate the monthly and the 12-month consecutive summation of emissions of NO_X, SO_2, CO, and PM for EU IDs 16, 37 through 41, 43 through 45, and 48 through 50. Use the emission factors found in Section 13, along with the hours of operation and/or amount of fuel used, to calculate the monthly emissions for each unit.

18.2. Report the monthly and 12-month consecutive summation of emissions, for each month of the reporting period, with each operating report required by Condition 99.

18.3. Notify the Department per Condition 98 should emissions of any air pollutant exceed the limit for that pollutant in Table D.

18.4. The Permittee shall perform a NO_x and CO source test on EU IDs 16, 39, 40, 48, and 49 and a representative unit of EU IDs 37, 38, 41, and 45, and a representative unit of EU IDs 43, 44, and 50 no later than 12 months after the effective date of this permit and every five years thereafter to demonstrate compliance with the short-term BACT NO_x and CO emission limits in Table D.

No testing is required if a heater has a run time of less than 400 hours in all consecutive twelve month periods since the preceding test. Test that heater or representative unit within 12 months after that heater's run time is 400 hours or greater in any subsequent 12-month period.

Conduct the tests as follows:

a. Conduct testing at a single load that is representative of normal full load operations for that unit. To determine the NOx and CO emission rate, measure NO_X, CO and O_2 in accordance with Methods 7E, 10 and 3A, respectively. Use Method 19 to convert NO_x and CO emission concentrations to emission rates. Perform and submit the results of the source test in accordance with Section 6.

b. Provide a copy of the NO_X and CO source test report to the Department, within 60 days after completing the source test.

c. Update the emission factor in Section 13 and use the new emission factor value in subsequent calculations under Condition 18.1.

d. For test results that are greater than 90 percent of the applicable short-term NO_x or CO emission limit in Table D; or for which emissions are projected to exceed 90 percent of the applicable emission limit at maximum load, the Permittee shall do one of the following:

(i) Conduct an additional Method 7E or Method 10 and Method 3A test on that emission unit within one year of the previous test. Conduct no less than one additional test each year until at least two consecutive tests show that emissions are less than or equal to 90 percent of the applicable limit at a load that is representative of normal operations for that unit; or

(ii) Develop a program to monitor each emission unit listed in **Table D** using a portable analyzer capable of measuring NO_x, CO, and O_2. Submit a monitoring plan to the Department for approval describing the details of the program such as monitoring frequency, proposed instrumentation, quality assurance procedures, comparison of hand-held analyzer results with those of period emission source testing, and recordkeeping.

e. The Permittee may substitute NO_x and CO emissions data from another representative heater operated by the Permittee at any stationary source located in the Kuparuk River Unit if:

(i) the Permittee demonstrates that test results are less than or equal to 90 percent of the applicable emission limits in Conditions 18 and 20, and are projected to be less than or equal to 90 percent of the applicable limits at maximum achievable load;

(ii) for any source test done after the effective date of this permit, the Permittee identifies in a source test plan under Condition 90:

(A) the heater to be tested;

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

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

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

(2) is the same make and model and has identical burners;

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

f. In each operating report under Condition 99 for each heater for which Condition 18.4 or 20.3 has not been satisfied because the heater normally operates less than 400 hours in any 12 consecutive months, the Permittee shall identify

(i) the heater;

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

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

g. The Permittee shall report under Condition 98 if

(i) a test result exceeds the emission standard; or

(ii) testing required under Condition 18.4 or 20.3 was not performed.

h. For any heater subject to Condition 18 that operates less than 400 hours in any 12 consecutive months, monitor and keep monthly records of the operating hours.

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

19. The Permittee shall limit actual emissions from EU ID 36 as indicated in Table E below.

[Federal Kuparuk River Unit PSD Permit No. PSD-X82-01, as amended 10/27/03]
[Construction Permit No. 267CPT01 Condition 4 and Exhibit B, 4/28/03]

Table E – Incinerator BACT Emission Limits for EU ID 36

Pollutant	Emission Limit (short-term) per Individual Incinerator	Annual Emission Limit (tpy)
NO_X	No limit	8
SO_2	No limit	4
CO	No limit	17
Opacity	10%, consecutive 6-minute average	No limit
PM	0.1 gr/dscf at 12% CO_2	12
VOC	No limit	5.1

Table Note: 1) Short-term PM emission limit refers to full load standard conditions.

19.1. Calculate the monthly and the 12-month consecutive summation of emissions of NO_X, SO_2, CO, PM, and VOC for EU ID 36. Use the emission factors found in Section 13 along with the hours of operation and/or amount of fuel used, to calculate the monthly emissions.

19.2. Report the monthly and 12-month consecutive summation of emissions, for each month of the reporting period, with each operating report required by Condition 99.

19.3. Monitor, record and report visible emissions in accordance with Conditions 2.1 and 2.2 to demonstrate compliance with the opacity limit in Table E.

19.4. Conduct a PM source test at full-load representative of conditions on the date of the test according to the requirements set out in Section 6 within 12-months of the permit's effective date.

19.5. Monitor and record particulate matter emissions in accordance with Conditions 12 and 13.

19.6. In each operating report required by Condition 99, include for the period covered by the report a summary of the results of any PM testing conducted under Condition 19.4.

19.7. Notify the Department per Condition 98 should emissions of any air pollutant exceed the limit for that pollutant in Table E.

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

20. The Permittee shall limit actual emissions from the GE Frame 6 Turbine (EU ID 14) and the Kvaerner Heater (EU ID 17) as indicated in Table F below.

[Construction Permit No. 9773-AC016 rev.1, 6/27/01]
[Construction Permit No. 267CPT01 Condition 4 and Exhibit B, 4/28/03]

Table F – BACT Emissions Limits for EU IDs 14 and 17

EU ID No.	Pollutant	Emission Limit (short-term) per Individual Unit
EU ID 14	NO_X	150 ppmvd @ 15% O_2, ISO
		266 lbs/hr
EU ID 17	NO_X	0.10 lb/MMBtu
EU IDs 14 and 17	SO_2	200 ppmv H_2S in fuel gas (24-hr average)

20.1. Operate EU ID 14 with CZ liner lean-head combustion technology and EU ID 17 with low-NO_X burners as BACT.

20.2. Conduct an emission source test on EU ID 14 following 40 C.F.R. 60, Appendix A-7, Method 20 or Method 7E and either Method 3 or 3A to demonstrate compliance with the applicable short-term BACT NO_X emission limit in Table F no less than once every two years.

a. Record and report in accordance with Conditions 48.3 and 48.4.

20.3. For EU ID 17, monitor, record, and report in accordance with Condition 18.4 to demonstrate compliance with the short-term BACT NOx emission limit in Table F that applies to EU ID 17.

20.4. For EU IDs 14 and 17, monitor, record, and report in accordance with Condition 16.5 to demonstrate compliance with the short-term BACT SO_2 emission limit in Table F.

[Air Quality Control Construction Permit 9773-AC016 rev. 1, 6/27/01]
[18 AAC 50.040(j) and 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)]

Fuel Consumption Monitoring for EU IDs 1 through 50

21. The Permittee shall maintain and operate fuel meters or provide other means of estimating fuel consumption to determine the total volume of fuel consumed by the Turbines (Group I: EU IDs 1 through 14) and Heaters (Group II: EU IDs 15 through 18). For other fuel-burning equipment (EU IDs 19, 20, 22 through 33 and 35 through 50), the fuel consumption may be estimated.

[Permit to Operate No. 9373-AA004 (rev 1), 1/3/97]
[Construction Permit No. 267CPT01 Condition 5 and Exhibit C, 4/28/03]
[Minor Permit No. AQ0267MSS02, Condition 11, 11/13/06]

21.1. Monitor and record monthly fuel consumption for the:

a. turbines (EU IDs 1 through 14 combined),

b. heaters and drill site heaters (EU IDs 15 through 18, 37 through 41, 43 through 45, and 48 through 50 combined),

c. liquid fuel-fired equipment (EU IDs 19, 20, 22 through 28 combined),

d. flares (EU IDs 29 through 33 combined),

e. incinerators (EU IDs 35 and 36 combined), and

f. drill site production heaters (each of EU IDs 42, 46, and 47).

21.2. Report using the operating report under Condition 99, the monthly fuel consumption (MMscf/month for gas-fired emission units, and gallons/month for dual-fired emission units and liquid fuel-fired emission units) for each emission unit group identified in Condition 21.1, and the stationary source total fuel consumption for each month covered by the reporting period.

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

Hours of Operation Monitoring for Fuel-Fired Emission Units

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

[Permit to Operate 9373-AA004 (rev 1), 1/3/97]
[Construction Permit No. 9773-AC016 rev.1, 6/27/01]
[40 C.F.R. 71.6(a)]

22.1. Monitor and record the monthly operating time for each of EU IDs 1 through 20, 22 through 28 and 35 through 50.

22.2. For each of EU IDs 4 through 9, 12, 13, and 15 monitor and record the monthly operating time separately for fuel gas and liquid fuel firing and record the calendar year total liquid fuel operating time.

22.3. For each of EU IDs 19, 20, 22 through 28, monitor and record the calendar year to date total operating time.

22.4. Report using the operating report under Condition 99, the data recorded under Conditions 22.1 through 22.2, for each month of the reporting period.

Fuel Gas H_2S Content Limit

23. The Permittee shall not use fuel gas with a hydrogen sulfide (H_2S) concentration at standard conditions that exceeds:

23.1. 200 ppmv annual average (for EU IDs 1 through 13, 15, 18, 29 through 41, 43 through 45, and 48 through 50);

23.2. 200 ppmv 24-hour average (for EU IDs 14 and 17);

23.3. 162 ppmv three-hour average (for EU IDs 16 and 30); and

23.4. 275 ppmv at any time (for EU IDs 41, 42, 46, and 47).

[Construction Permit No. 267CPT01, Condition 5 and Exhibit C, 4/28/03]
[Minor Permit No. AQ0267MSS02, Condition 15, 11/13/06]

23.5. **Monitoring**. Monitor and record according to Conditions 16.5.a and 16.5.b.

23.6. **Reporting**. Report the monthly and consecutive 12-month average fuel gas H_2S concentration, for each month of the reporting period, with each operating report required by Condition 99.

23.7. Notify the Department per Condition 98 should the fuel gas H_2S concentration exceed any of the limits in Condition 23.

[Minor Permit No. AQ0267MSS02, Condition 15, 11/13/06]
[18 AAC 50.040(j) and 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)]

Installation of Replacement Units at DS1R

24. If the Permittee elects to install a replacement of diesel fuel fired EU ID 64 or 65, provide contemporaneous written notice to the Department of initial startup[7] of a replacement unit. Such notice shall include:

24.1. vendor specification sheets that identify the unit type, make and model (including model number), serial number, and rating/size; and

24.2. the installation date and date of startup.

24.3. Include copies of the notifications and records required by Conditions 24.1 and 24.2 with the next operating report as described in Condition 99.

[Minor Permit No. AQ0267MSS03, Conditions 1.2 and 1.3, 12/14/07]
[18 AAC 50.040(j) and 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)]

ORL Operating Hours for Emergency Liquid Fuel-Fired Engines

25. The Permittee shall operate the emergency equipment, EU IDs 19 through 28[8], for no more than 200 hours each per consecutive twelve-month period. This limit does not include emergency operations.

25.1. Monitor and record the monthly hours of operation and the consecutive twelve-month period summation for each of EU IDs 19, 20, 22 through 28.

25.2. Report the monthly and consecutive twelve-month total of hours (both for emergency and non-emergency modes) operated each month of the reporting period with the operating report required by Condition 99.

25.3. Report per Condition 98 if the consecutive twelve-month total hours of non-emergency operation for any given month exceed the limit in Condition 30.

[18 AAC 50.040(j) and 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)(3), (a)(9) & (c)(6)]

[7] *Initial startup* means when an emission unit is first fired.
[8] EU ID 21 was removed from CPF-1, and is no longer listed in the emission inventory. Therefore, MR&R does not list this EU.

ORL for EU ID 16 to Avoid Exceeding 43 MMBtu/hr Firing Rate

26. The Permittee shall limit the firing rate of the Born Crude Heater, EU ID 16, to no more than 43 MMBtu/hr heat input rate.

26.1. The maximum daily average fuel consumption rate of EU ID 16 shall not exceed 0.039 MMscf/hr based on a fuel low heating value (LHV) of 1,100 MMBtu/MMscf.

26.2. Monitor and record the daily operating time and fuel consumption using the emission unit's fuel monitoring device. Calculate the average fuel consumption rate (MMscf/hr) on a daily basis.

26.3. Report under Condition 99 the maximum daily average fuel consumption rate (MMscf/hr) for each month as determined in Condition 26.2.

26.4. Report under Condition 98 if EU ID 16 exceeds the firing rate limit in Condition 26.

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

ORL Limits to Avoid Project Classification as a PSD Major Modification

27. Limit NO_X emissions from EU IDs 1 through 3, combined, to no greater than 824 tons per 12 consecutive month period.

27.1. Monitor and record NO_X emissions according to Condition 17.1.

27.2. Report the 12 consecutive month period summation of NO_X emissions from EU IDs 1 - 3, for each month of the reporting period, with each operating report required by Condition 99.

27.3. Notify the Department per Condition 98 should any 12 consecutive month summation of NO_X emissions from EU IDs 1 through 3 combined exceed the limit in Condition 27.

[Minor Permit No. AQ0267MSS02 Condition 5, 11/13/06]
[18 AAC 50.040(j) and 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)]

28. The Permittee shall limit the combined total heat input rating of EU IDs 42, 46 and 47 to no more than 184 MMBtu/hr heat input rate.

[Minor Permit No. AQ0267MSS02, Condition 14, 11/13/06]
[18 AAC 50.040(j) and 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)]

29. The Permittee shall limit combined SO_2 emissions from EU IDs 42, 46, and 47 to no greater than 35 tons per 12 consecutive month period.

29.1. For EU IDs 42, 46, and 47, calculate and record the total SO_2 emissions for each calendar month using fuel consumption measured in Condition 21.1 and fuel gas H_2S content measured in Condition 16.5. If the fuel consumption records are missing or incomplete for any emission unit, estimate SO_2 emissions based on operating hours and maximum design fuel consumption rates.

29.2. Calculate and record the 12 consecutive month SO_2 emissions from EU IDs 42, 46, and 47, combined.

29.3. Report the 12 consecutive month SO_2 emissions for EU IDs 42, 46, and 47, combined, for each month of the reporting period, with each operating report required by Condition 99. If operation of an emission unit has not yet approached 12 months, list the cumulative emissions of the unit as a substitute for compliance with the 12-month rolling total emission limit.

[Minor Permit No. AQ0267MSS02, Condition 16, 11/13/06]
[18 AAC 50.040(j) and 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)]

30. The Permittee shall limit the 12 consecutive month total fuel consumption of EU IDs 64 and 65 to no more than 148,000 gallons, combined total, and comply with Conditions 30.1 through 30.5.

30.1. Use a dedicated fuel tank for EU IDs 64 and 65.

30.2. Monitor and record the total gallons delivered to the dedicated fuel tank during each month. Fuel deliveries are equated to fuel consumption for that month.

30.3. By the fifteenth calendar day after the last day of the previous month, add the previous month's total to the preceding 11 month's total to get the 12 consecutive month total.

30.4. Report as described in Condition 98 if any 12 consecutive month total exceeds the limit in Condition 30.

30.5. Include copies of records required under Conditions 30.2 and 30.3 with the operating report under Condition 99 for each month of the reporting period.

[Minor Permit No. AQ0267MSS03, Condition 3, 12/14/07]
[Minor Permit No. AQ0267MSS04, Condition 3, 12/20/09]
[18 AAC 50.040(j) and 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)]

ORL for Incinerators

31. The Permittee shall not allow the combined solid waste throughput of EU IDs 35 and 36 to exceed 5,500 tons per rolling 12-month period.

31.1. **Monitoring and Recordkeeping**. The Permittee shall monitor and record the monthly and consecutive 12-month total summation of the solid waste throughput of EU IDs 35 and 36.

31.2. **Reporting**. Report the monthly and 12-month total summation of the solid waste throughput required in Condition 31.1 for each month of the reporting period with each operating report required by Condition 99.

31.3. Notify the Department per Condition 98 if the consecutive 12-month summation of solid waste throughput exceeds the limit of Condition 31.

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

ORL to Limit Incinerator Charging Rate

32. The Permittee shall limit the charging rate of EU ID 36 to 765 pounds of waste per hour.

32.1. **Monitoring and Recordkeeping**. The Permittee shall keep records of the amount of waste in pounds and the total hours of combustion in EU ID 36 on a daily basis.

32.2. The Permittee shall calculate the hourly average charging rate in lb/hr based on the records required in Condition 32.1.

32.3. **Reporting**. The Permittee shall include in the operating report under Condition 99 a report of the monthly maximum hourly average charging rates (lb/hr) for EU ID 36 for the period covered by the report.

32.4. Report under Condition 98 if the charging rate exceeds the limit in Condition 32.

[18 AAC 50.040(j) and 18 AAC 50.326(j)]
[AQ0267TVP01 rev. 2 8/8/2007]
[40 C.F.R. 71.6(a)]

Cutting Reinjection Module

33. Installation and Operation Authorization. The Permittee is authorized to install and operate Emission Units 68a through 68d as listed in Table A. Except as noted elsewhere in this permit, the information in Table A is for identification purposes only. The specific unit descriptions do not restrict the Permittee from replacing an emission unit identified in Table A. The Permittee shall comply with all applicable provisions of AS 46.14 and 18 AAC 50 when installing a replacement emission unit, including any applicable minor or construction permit requirements.

[Minor Permit No. AQ0267MSS05 Condition 1, 08/05/2013]

Insignificant Emission Units

34. For EU IDs 22 through 28 and 66[9], as long as actual emissions are below the insignificant emission unit thresholds of 18 AAC 50.326(e), and 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:

34.1. **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)]

34.2. **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)]

[9] EU IDs 22 through 28 and 66 do not qualify as insignificant units per 18 AAC 50.326(d)(1) because they are subject to a Federal requirement (NESHAP Subpart ZZZZ), but have potential emissions (based on historical operating hours) below the significant emissions thresholds in 18 AAC 50.326(e). The Department referenced the general requirements for insignificant emission units to satisfy the State VE and PM MR&R requirements for these units.

34.3. **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)]

34.4. General MR&R for Insignificant Emission Units

a. The Permittee shall submit the certification of compliance of Condition 100 based on reasonable inquiry;

b. The Permittee shall comply with the requirements of Condition 81;

c. The Permittee shall report in the operating report required by Condition 99 if an emission unit has historically been classified as insignificant because of actual emissions less than the thresholds of 18 AAC 50.326(e) and current actual emissions become greater than any of those thresholds;

d. No other monitoring, recordkeeping or reporting is required, except as provided in Conditions 1.2, 7.2, 16.1, and 16.2.

[18 AAC 50.346(b)(4)]

Section 4. Federal Requirements

Emission Units Subject to Federal NSPS, Subpart A

35. NSPS Subpart A Notification. For any affected facility[10] or existing facility[11] 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]

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

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

35.2. 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]

35.3. 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]

35.4. any proposed replacement of components at 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 as soon as practicable) before construction of the replacements is commenced, and must include the following information:

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

a. the name and address of owner or operator,

b. the location of the existing facility,

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

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

[10] *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.

[11] *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.

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 NSPS, after the proposed replacements.

36. NSPS Subpart A Startup, Shutdown, & Malfunction Requirements. The Permittee shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of EU IDs 1 through 14, 16, 30, 42, 46, 47, 51 through 55, and 57, any malfunctions of associated air-pollution control equipment, or any periods during which a continuous monitoring system or monitoring device for EU IDs 1 through 14, 16, 30, 42, 46, 47, 51 through 55, and 57, is inoperative.

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

37. NSPS Subpart A Excess Emissions and Monitoring Systems Performance Report. Except as provided for in Condition 38.1, the Permittee shall submit to the Department and to EPA a written "excess emissions and monitoring systems performance report" (EEMSP)[12, 13, 14] as described in this condition for EU IDs 1 through 14, 16, and 30. Except as provided in Condition 49.3.a(iii), submit the EEMSP reports with the summary report form as required in Condition 38.

[18 AAC 50.040(a)(1)]
[40 C.F.R. 60.7(c), Subpart A]
[40 C.F.R. 60.334(j), Subpart GG]
[40 C.F.R. 60.107(f), Subpart J]

37.1. Each written EEMSP report shall include the following information:

a. For EU IDs 12 and 13, include in the report each period during which the emergency fuel exemption provided in §60.332(k) is in effect. For each period, report the type, reasons, and duration of the firing of the emergency fuel.

b. The magnitude of excess emissions computed in accordance with 40 C.F.R. 60.13(h)[i.e., Condition 43 for reports pertaining to the CEMS required under Condition 46.1 for Subpart J], any conversion factors used[15], the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period.

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

c. Specific identification of each period of excess emissions that occurred during startup, shutdown, and malfunction of EU IDs 1 - 14, 16, and 30, the nature and cause of any malfunction (if known), and the corrective action taken or preventive measures adopted.

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

[12] The federal EEMSP report is not the same as the State excess emission report required by Condition 98.

[13] Excess emissions for NSPS Subpart J are defined in 40 C.F.R. 60.105(e)(3)(ii) as all rolling 3-hour periods during which the average concentration of H_2S as measured by the H_2S CMS under §60.105(a)(4)[Condition 46.1] exceeds 230 mg/dscm (0.10 gr/dscf; 162 ppmv at 59°F).

[14] Periods of excess emissions and monitor downtime for units subject to the NSPS Subpart GG SO_2 limit (EU IDs 1 through 14) are defined in 40 C.F.R. 60.334(j)(2).

[15] For this permit, the requirements to report the magnitude of excess emissions and any conversion factors used apply only to the EEMSP reports submitted in association with NSPS Subpart J CEMS reporting.

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

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

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

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

f. A signed statement certifying the accuracy and completeness of the information contained in the report.

[40 C.F.R. 60.107(g), Subpart J]

38. NSPS Subpart A Summary Report Form. The Permittee shall submit to the Department and to EPA one "summary report form[16]" in the format shown in Figure 1 of 40 C.F.R. 60.7 for each pollutant monitored for EU IDs 1 - 14, 16, and 30. Except as otherwise specified in Conditions 49.3.a(i) and 49.3.a(iii), the report shall be submitted semiannually, postmarked by the 30th day following the end of each 6-month period, except when more frequent reporting is specifically required by an applicable subpart, case-by-case basis, or the EPA, as follows:

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

38.1. 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 37 is requested by the Administrator, or

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

38.2. 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 operating time for the reporting period, then submit a summary report form and the EEMSP described in Condition 37.

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

39. NSPS Subpart A Performance (Source) Tests. The Permittee shall conduct source tests according to the applicable requirements of 40 C.F.R. 60.8 and Section 6 on any affected facility at such times as may be required by EPA, and shall provide the Department and EPA with a written report of the results of the source test.

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

[16] See Summary Report form in Attachment A of the Statement of Basis.

40. NSPS Subpart A Good Air Pollution Control Practice. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate EU IDs 1 through 14, 16, 30, 42, 46, 47, 51 through 55, and 57, 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 1 through 14, 16, 30, 42, 46, 47, 51 through 55, and 57.

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

41. 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 46, 48, and 49, nothing in 40 C.F.R. Part 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether EU IDs 1 through 14, 16, 30, 42, 46, 47, and 57 would have been in compliance with applicable requirements of 40 C.F.R. Part 60 if the appropriate performance or compliance test or procedure had been performed.

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

42. 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 43, 44, 45, 46, 48, 49, and 50. 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 and the piecemeal carrying out of an operation to avoid coverage by a standard that applies only to operations larger than a specified size.

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

43. NSPS Subpart A Monitoring. For a Continuous Monitoring System (CMS) required under Condition 46.1, the Permittee shall:

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

43.1. Install and operate the CMS prior to a performance test conducted under §60.8 [Condition 39], including completion of manufacturer's written requirements or recommendations for installation, operation, and calibration of device.

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

43.2. The Permittee shall conduct a performance evaluation of the continuous emission monitoring system (CEMS) during any performance test required under §60.8 [Condition 39] or within 30 days thereafter in accordance with Performance Specification 7 in Appendix B of 40 C.F.R. 60. The owner or operator of an affected facility shall conduct CEMS performance evaluations at such other times as may be required by the Administrator.

a. The Permittee shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.

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

43.3. Check the zero (or low level value between zero and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of Performance Specification 7 in Appendix B of 40 C.F.R. 60[17]. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

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

43.4. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under Condition 43.3, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

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

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

43.5. The CMS shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of 40 C.F.R. 60 Appendix B shall be used.

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

43.6. CMS 1-hour averages shall be computed as follows:

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

a. Except as provided under Condition 43.6.c for a full operating hour (any clock hour with 60 minutes of unit operation), at least four valid data points are required to calculate the hourly average, i.e. , one data point in each of the 15-minute quadrants of the hour.

b. Except as provided under Condition 43.6.c, for a partial operating hour (any clock hour with less than 60 minutes of unit operation), at least one valid data point in each 15-minute quadrant of the hour in which the unit operates is required to calculate the hourly average.

c. For any operating hour in which required maintenance or quality-assurance activities are performed:

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

[17] The limit of Performance Specification 7 is to have less than ±5 percent span drift or deviation for 6 out of 7 days (i.e., ≥5 percent span drift or deviation is allowed once per week.) The Subpart J span value is 425 mg/dscm (equivalent to 300 ppmv at 59°F) per Condition 46.1.a(i).

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

d. If a daily calibration error check is failed during any operating hour, all data for that hour shall be invalidated, unless a subsequent calibration error test is passed in the same hour and the requirements of Condition 43.6.c are met, based solely on valid data recorded after the successful calibration.

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

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

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

h. All excess emissions shall be converted into units of the fuel gas H_2S standard (mg/dscm or gr/dscf) set out in Condition 46. After conversion into units of the standard, the data may be rounded to the same number of significant digits used to specify the emission limit.

44. NSPS Subpart A General Control Device Requirements. The Permittee shall design, operate, and monitor EU ID 30, a flare used as a control device for EU ID 57, to comply with 40 C.F.R. 60.18(c)(1), (c)(2), (c)(3), (c)(5), and (c)(6); 60.18(d), 60.18(e), 60.18(f)(1), (f)(2), (f)(3), (f)(4), and (f)(6), and 40 C.F.R. 60.485(g) as outlined below.

[18 AAC 50.040(a)(1), 50.040(a)(2)(Z) & (BB)]
[40 C.F.R. 60.18]
[40 C.F.R 60.592(d), Subpart GGG and 40 C.F.R. 60.485(g), Subpart VV]

44.1. EU ID 30 shall be designed for and operated with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours and except for periods of startup, shutdown, or malfunction.

[40 C.F.R. 60.18(c)(1) & (f)(1), Subpart A]

a. At least once in every calendar month that EU ID 30 operates, momentarily observe the exhaust during normal operation for indications of visible emissions (VE). Keep a log of the observations in accordance with Condition 44.1.c. Observations may be made via remote video camera monitoring from the control room if an operator cannot see the exhaust of EU ID 30 through a window or cannot go outside for safety or weather reasons to make observations.

b. If visible emissions are observed at any time during normal flaring operations of EU ID 30 and are present continuously for more than two (2) minutes, the Permittee shall conduct a visible emission (VE) evaluation in accordance with 40 C.F.R. 60 Appendix A, Method 22. The Method 22 VE observation period shall not be less than 2 hours in duration, sufficient to document a violation of Condition 44.1. Observation of the flare may be postponed for safety or weather reasons. If visible emissions are noted for a total of more than 5 minutes during the Method 22 VE observation:

(i) Determine whether the flare is being properly operated and maintained.

(ii) Initiate corrective actions, if necessary, to eliminate visible emissions from the emission unit within 24 hours of the Method 22 VE observation;

(iii) Keep a written record of the starting date, the completion date, and a description of the actions taken to reduce visible emissions; and

(iv) After completing the corrective actions, conduct a follow-up VE evaluation in accordance with 40 C.F.R. 60 Appendix A, Method 22 within 3 days. The Method 22 VE observation period shall not be less than 2 hours in duration. The 3-day time limit to conduct observations may be extended by the Department for sufficient cause.

(v) Visible emissions observed during startup, shutdown or malfunction shall not be considered a violation of Condition 44.1.

[40 C.F.R. 60.485(g)(1), Subpart VV]
[40 C.F.R. 60.11(c), Subpart A]
[40 C.F.R. 71.6(a)(3)(i)]

c. For observations of visible emissions per Condition 44.1.a and for any Method 22 observations per Condition 44.1.b, record the following information in a written log for each observation of EU ID 30:

(i) The EU ID of the emission unit observed;

(ii) The date, time, and duration of the observation;

(iii) For observations conducted per:

(A) Condition 44.1.a, whether visible emissions are present or absent in the exhaust plume, or

(B) Condition 44.1.b, accumulated time visible emissions are present in the exhaust;

(iv) A description of the background to the exhaust during the observation;

(v) Name and location of the person making the observation; and

(vi) Keep records in accordance with Condition 44.1.b(iii).

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

44.2. EU ID 30 shall be operated with a flame present at all times. The Permittee shall monitor the presence of the flare pilot using a thermocouple or other equivalent device.

a. The Permittee shall maintain records of all periods of operation during which the flare pilot flame is absent.

[40 C.F.R. 60.18(c)(2) & (f)(2), Subpart A]
[40 C.F.R. 60.485(g)(2), Subpart VV]
[40 C.F.R. 71.6(a)(3)]

44.3. The net heating value of the gas combusted by EU ID 30 shall be 300 Btu/scf or greater.

a. The heating value (LHV) shall be determined using ASTM D-1826, D-4891 or from a calculation method based on a semiannual gas composition analysis. The Permittee may propose to the Department alternative monitoring procedures. The alternative monitoring procedures must satisfy the underlying purpose for this monitoring.

b. The Permittee shall keep records of the initial performance test and any subsequent test(s) requested by the Department or by EPA showing the heating value of any gas or vapor vented to the flare.

[40 C.F.R. 60.18(c)(3) and (f)(3), Subpart A]
[40 C.F.R. 60.485(g)(4), (5), & (6), Subpart VV]
[40 C.F.R. 71.6(a)(3)]

44.4. EU ID 30 shall be steam-assisted, air-assisted, or nonassisted.

[40 C.F.R. 60.18(c)(6)]

44.5. Since EU ID 30 is air-assisted, it shall be designed and operated with an exit velocity less than the maximum velocity (Vmax), determined by the following equation:

$$Vmax = 8.706 + 0.7084 (H_T)$$

Where:

Vmax = maximum permitted velocity, m/sec, and

H_T = net heating value (MJ/scm)

a. The actual exit velocity of EU ID 30 shall be determined by dividing the volumetric flow-rate (in units of standard temperature and pressure), as determined by EPA, 40 C.F.R. 60, Appendix A, Reference Methods 2, 2A, 2C, or 2D as appropriate, by the unobstructed (free) cross sectional area of the flare tip.

[40 C.F.R. 60.18(c)(5), (f)(4), and (f)(6)]
[40 C.F.R. 60.485(g)(7), Subpart VV]

b. The Permittee shall keep records of the initial performance test and any subsequent test(s) requested by the Department or by EPA which show the actual velocity of EU ID 30.

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

44.6. The Permittee shall operate and maintain EU ID 30 in conformance with its design.

[40 C.F.R. 60.18(d)]

44.7. EU ID 30 shall be operated at all times when emissions may be vented to it.

[40 C.F.R. 60.18(e)]

44.8. The Permittee shall report excess emissions or permit deviations, in accordance with Condition 98, as follows:

a. For failure to conduct monitoring or recordkeeping per Conditions 44.1 through 44.5.

b. When the exhaust of EU ID 30 is visible for more than a total of five (5) minutes during any two (2) consecutive hours, except if the emissions are observed during startup, shutdown or malfunction.

c. When the pilot flame is absent from EU ID 30.

d. When the heating value of flared gas obtained as a result of tests conducted per Condition 44.3.a is less than 300 Btu/scf.

e. When the actual exit velocity of EU ID 30 obtained as a result of tests conducted per Condition 44.5.a exceeds the maximum permitted exit velocity determined in accordance with Condition 44.5.

[18 AAC 50.040(a)(1) & (j); 18 AAC 50.326(j)]
[40 C.F.R. 60.11(c), Subpart A]
[40 C.F.R. 71.6(a)(3)(iii)]

44.9. Submit with the operating report required under Condition 99:

a. The dates that VE observations per Condition 44.1.a were made, and the dates, if any, that a Method 22 VE per Condition 44.1.b was observed during the period covered by the report; and

b. Copies of records required under Conditions 44.2.a, 44.3.b, and 44.5.b for the period covered by the report. (Records of the initial performance tests required under Conditions 44.3.b and 44.5.b need not be included with each operating report, only the records of any subsequent performance tests conducted at the request of the Department or EPA during the reporting period.)

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

Steam Generating Units Subject to NSPS Subpart Dc

45. NSPS Subpart Dc Fuel Consumption. For each of EU IDs 42, 46, and 47, the Permittee shall record the amount of fuel combusted during each operating day or monitor according to an EPA approved custom fuel-monitoring schedule.

45.1. As an alternative to meeting the requirements of Condition 45, the Permittee may elect to record and maintain records of the amount of fuel combusted during each calendar month.

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

Petroleum Refineries (Kuparuk Unit Topping Plant (KUTP)) Subject to NSPS Subpart J

46. NSPS Subpart J SO_2 Emission Standards. The Permittee shall not cause or allow any fuel gas[18] burned in EU IDs 16 (Born crude heater at the KUTP) and 30 (Kaldair I-58-VS Emergency Flare) to contain hydrogen sulfide (H_2S) in excess of 230 milligrams H_2S per dscm (0.10 gr/dscf; 162 ppmv at 59ºF) averaged over three consecutive hours. The combustion in a flare of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions is exempt from this condition.

[18 AAC 50.040(a)(2)(J)]
[40 C.F.R. 60.104(a)(1) and 40 C.F.R. 60.105(e)(3)(ii), Subpart J]
[Construction Permit No.267CPT01, 4/28/03]

46.1. **Monitoring**. The Permittee shall monitor compliance with the fuel gas H_2S standards in Condition 46 as follows:

a. Maintain and operate in good working order two CEMS for continuously monitoring and recording the concentration (dry basis) of H_2S in fuel gases being burned in EU IDs 16 and 30, which contain a component of the process gas generated by KUTP.

(i) The span value for this instrument is 425 mg/dscm H_2S (equivalent to 300 ppmv at 59ºF). The Permittee shall monitor the combination of process gas and fuel gas burned in EU IDs 16 and 30 to determine the hydrogen sulfide content of the gas.

(ii) Fuel gas combustion devices[19] having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H_2S in the fuel gas being burned.

(iii) The performance evaluations under Condition 43.2 for the H_2S monitors shall use Performance Specification 7, Method 11, 15, 15A, or 16 to conduct the relative accuracy evaluations. Conduct the relative accuracy evaluations as set forth in Section 6.

b. Install and operate the fuel gas H_2S CMS in accordance with Condition 43.

[40 C.F.R. 60.105(a)(4), Subpart J]

46.2. Test Methods - Method 11, 15, 15A, or 16 and the specific provisions of §60.106(e)(1) shall be used to determine compliance with the limit in Condition 46 when conducting source tests under §60.8(a) (Condition 39).

[40 C.F.R. 60.106(e)(1), Subpart J]

[18] *Fuel gas* means any gas which is generated at a petroleum refinery and which is combusted, including natural gas when the natural gas is combined and combusted in any proportion with a gas generated at a petroleum refinery, as defined in 40 C.F.R. 60.101(d).

[19] *Fuel gas combustion device* means any equipment, such as process heaters, boilers and flares used to combust fuel gas (as defined by this condition), except facilities in which gases are combusted to produce sulfur or sulfuric acid.

46.3. **Reporting.** The Permittee shall report excess emissions according to Conditions 37 and 98.

[40 C.F.R. 60.105(e) and §60.107(f), Subpart J]
[18 AAC 50.040(j), and 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)(3) & (c)(6)]

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

47. NSPS Subpart Ka Requirements: The Permittee shall only store in EU IDs 51 through 55, petroleum liquids with a Reid vapor pressure less than 6.9 kPa (1.0 psia) and maximum true vapor pressure less than or equal to 6.9 kPa (1.0 psia).

47.1. **Recordkeeping**. The Permittee shall keep records demonstrating the Reid vapor pressure and true vapor pressure of stored liquids in each tank subject to Subpart Ka.

[18 AAC 50.040(a)(2)(L)]
[40 C.F.R. 60.115a(d)(1), Subpart Ka]

Turbines Subject to NSPS Subpart GG, EU IDs 1 through 3 and 10 through 13

48. NSPS Subpart GG NO_X Standard.

48.1. The Permittee shall not allow the exhaust gas concentration of NO_X from:

a. EU IDs 1 through 3 to exceed 161 ppmvd, ISO corrected, at 15 percent O_2 and

b. EU IDs 10 through 13 to exceed 162 ppmvd[20], ISO corrected, at 15 percent O_2.

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

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

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

a. **Periodic Testing.** For each turbine subject to Conditions 17 and/or 48, the Permittee shall satisfy either Condition 48.2.a(i) or 48.2.a(ii).

(i) For existing turbines whose latest emissions source testing was certified as operating at less than or equal to 90% of the most stringent of the applicable limits shown in Conditions 17 and/or 48, 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:

(A) Within 1 year of the effective date of this permit if the last source test for each fuel type[21] occurred greater than four years prior to the effective date of this permit and the turbine operated 400 hours or more with a given fuel[21] in any 12-month period ending during any of the 6 months that precede the permit effective date, or

[20] EU IDs 12 and 13 are exempt from this standard when firing on emergency liquid fuel in accordance with 40 C.F.R. 60.332(k).

[21] Since each dual fuel fired combustion turbine is also subject to BACT limits in Table C and capable of burning both fuel gas and liquid fuels irrespective of NSPS emergency fuel exemptions, then testing is required for BACT when liquid fuel operations exceed 400 hours in a 12-month period.

(B) Within 1 year after operating 400 hours or more in a 12-month period with a given fuel type[12] if the last source test occurred greater than 4 years prior to operation over the 400-hour threshold at any time during the permit term.

(ii) For existing turbines whose latest emissions source testing was certified as operating at greater than 90% of any of the applicable limits shown in Conditions 17 and/or 48, the Permittee shall conduct a NOx and O_2 source test under 40 C.F.R. 60, Appendix A, Method 20, or Method 7E and either Method 3 or 3A, annually until two consecutive tests show performance results certified at less than or equal to 90% of the applicable limits of Conditions 17 and/or 48.

b. **Substituting Test Data.** The Permittee may use a source test under Condition 48.2.a or 48.2.c 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 17 and/or 48, and are projected under Condition 48.2.c to be less than or equal to 90 percent of the applicable limits 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 90

(A) the turbine to be tested;

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

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

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

(2) is operated under close to identical ambient conditions as the tested unit;

(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% of the applicable emission limits of Conditions 17 and/or 48.

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

(i) Conduct all tests under Condition 48.2 in accordance with 40 C.F.R. 60.335, except as otherwise approved in writing by the Department, or as otherwise approved 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 issue date of this permit whether the test is scheduled when maximum NOx emissions are expected.

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

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

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

(2) a demonstration based on the additional test information that projects the test results from Condition 48.2 to predict the highest load at which emissions will comply with the applicable limits in Conditions 17 and/or 48;

(A) the Permittee shall not operate any turbine represented by the test data at loads for which the Permittee's demonstration predicts that emissions will exceed the applicable limits of Conditions 17 and/or 48;

(B) 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

(A) 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 48.2.c(iii)(A); the new limit is subject to any new Department finding under Condition 48.2.c(iii)(B).

(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 48.2.c(iii).

(v) For the purposes of Conditions 48.2 through 48.4, 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.

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

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

a. Comply with the following for each turbine for which a demonstration under Condition 48.2.c(iii) does not show compliance with the applicable limits of Conditions 17 and/or 48.1 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 48.3.a shall be hourly or otherwise as approved by the Department.

(iii) Within one month after submitting a demonstration under Condition 48.2.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 48.2.c(iii)(B), 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 17 and/or 48, that will operate less than 400 hours in any 12 consecutive months, keep monthly records of the hours of operation

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

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

a. In each operating report under Condition 99 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 48.2.c(iii)

(i) the load limit;

(ii) the turbine identification; and

(iii) the highest load recorded under Condition 48.3.a during the period covered by the operating report.

b. In each operating report under Condition 99 for each turbine for which Condition 48.2, 17.4, or 17.6 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 98 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 48.2.a(i) or 48.2.a(ii) but not performed, or

(iii) the turbine was operated at a load exceeding that allowed by Conditions 48.2.c(iii)(A) and 48.2.c(iii)(B); 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) and 18 AAC 50.040(a)(1)]
[40 C.F.R. 60.8(b), Subpart A]

49. NSPS Subpart GG Sulfur Standard. The Permittee shall not allow the sulfur content of the fuel burned in EU IDs 1 through 14 to exceed 0.8 percent by weight.

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

49.1. **Monitoring** - 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. For gaseous fuels:

(i) The Permittee may elect not to monitor the total sulfur content of a gaseous fuel combusted by an affected emission unit if the fuel is demonstrated to meet the definition of natural gas stated in 40 C.F.R. 60.331(u), as provided by 40 C.F.R. 60.334(h)(3); or

(ii) monitor the total sulfur content of the fuel(s) as required under 40 C.F.R. 60.334(h)(1), 40 C.F.R. 60.334(i)(2), and 40 C.F.R. 60.335(b)(10)(ii). If the total sulfur content of the fuel during the most recent performance test was less than 0.4 weight % (4000 ppmw), then the fuel gas sulfur content may be determined according to ASTM D4084-82, 94, D5504-01, D6228-98, or Gas Producers Association Standard 2377-86; or

(iii) if the demonstration under Condition 49.1.a(i) is not made, the Permittee may follow the provisions of the EPA-approved Custom Fuel Monitoring Schedule and Alternate H_2S Sampling Method, which allow the Permittee to determine the sulfur content of the fuel at least monthly using ASTM D 4810-88, D 4913-89, or Gas Producers Association 2377-86; or

(iv) use readings from the KUTP continuous emissions monitoring system (CEMS) which monitors CPF-1 plant fuel gas under Condition 46.1; or

(v) monitor in accordance with a new Custom Fuel Monitoring Schedule and/or plan approved by the Administrator.

[40 C.F.R. 60.334(h), (i)(3); 60.335(b)(10) (ii), Subpart GG]
[EPA letter dated 10/2/1997 Re: Alternate H2S Sampling Method]
[EPA letter, 4/5/00 Re: Custom fuel monitoring schedule (for fuel gas)]

b. For liquid fuels:

(i) monitor the total sulfur content of the fuel as required under 40 C.F.R. 60.334(h)(1), 40 C.F.R. 60.334(i)(1), and 40 C.F.R. 60.335(b)(10)(i); or

(ii) monitor in accordance with a Custom Fuel Monitoring Schedule and/or Plan approved by the Administrator for affected turbines at the stationary source, as follows:

(A) Record the amount of fuel oil combusted daily in each of EU IDs 4 through 9, 12, and 13;

(B) For each calendar month during which EU IDs 4 through 9, 12, or 13 was fired on fuel oil, obtain the results of the fuel oil sulfur analysis conducted in accordance with test methods referenced in 40 C.F.R. 60.335(b)(10)(i) from the fuel supplier[22].

[40 C.F.R. 60.334(i)(3), & 40 C.F.R. 60.335(b)(10)(i), Subpart GG]
[EPA letter, 12/7/07 Re: Custom fuel monitoring schedule (for liquid fuel)]

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

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

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

a. Keep records of the analyses conducted under Condition 49.1.

[22] ASTM Method D4294-03 may be used if approved in writing from EPA's Emission Measurement Center in the Office of Air Quality Planning and Standards (OAQPS).

b. Maintain records documenting a constant fuel supplier or source of fuel. Fuel for purposes of this condition is natural gas and liquid fuel. A substantial change in fuel quality shall be considered a change in fuel supply.

c. Maintain records of all affected turbine operation on fuels other than natural gas.

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(ii)]
[EPA letter, 4/5/00 Re: Custom fuel monitoring schedule (for fuel gas)]
[EPA letter, 12/7/07 Re: Custom fuel monitoring schedule (for liquid fuel)]

49.3. **Reporting**. The Permittee shall:

a. for each affected unit for which the Permittee periodically determines the fuel sulfur content under Condition 49.1,

(i) annually report the results of all fuel gas and liquid fuel sulfur monitoring to EPA and send a copy to the Department by the 30th day following the end of each calendar year in accordance with the Custom Fuel Monitoring Schedules approved by the Administrator;

[EPA Letter: Custom Fuel Monitoring Schedule (Fuel Gas), 4/5/00]
[EPA Letter: Custom Fuel Monitoring Schedule (Liquid Fuel), 12/7/07]

(ii) include with the report submitted under Condition 49.3.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 37.1 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 49.1.a(i) has been made, reporting under Conditions 37, 38, and this condition is not required.

b. include a copy of the records required by Condition 49.2 with the operating report required by Condition 99 for the period covered by the report;

c. Notify EPA Region 10 of the use of any fuel other than natural gas within 60 days of such use;

[EPA Letter: Custom Fuel Monitoring Schedule (Fuel Gas), 4/5/00]

d. Notify EPA Region 10 of any changes in supplier or source of fuel within 60 days of such change. Fuel for purposes of this condition is gaseous fuel and liquid fuel; and

[EPA Letter: Custom Fuel Monitoring Schedule (Fuel Gas), 4/5/00]
[EPA Letter: Custom Fuel Monitoring Schedule (Liquid Fuel), 12/7/07]

e. Report under Condition 98 if

(i) a test result exceeds the limit in Condition 49;

(ii) monitoring is required under Condition 49.1 but not performed; or

(iii) reporting required under Condition 49.3 is not completed.

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

Emission Units Subject to NSPS Subpart GGG/VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Chemicals Manufacturing Industry

50. *Closed Vent Systems and Control Devices* - The closed vent systems installed at KUTP (EU ID 57) and control device (EU ID 30) used to comply with 40 C.F.R. 60.482-10 shall be operated at all times when emissions may be vented to it. Flare (EU ID 30) used to comply with this condition shall comply with 40 C.F.R. 60.18, as stated in Condition 43.

[18 AAC 50.040(a)(2)(Z) & (BB)]
[40 C.F.R. 60.592(a), and 40 C.F.R. 60.482-10(d) & (m)]

50.1. *Sampling Connection Systems* - Sampling connection systems for the KUTP (EU ID 57) shall be designed and operated to meet the standards and requirements of 40 C.F.R. 60.482-5.

[40 C.F.R. 60.592(a) and 40 C.F.R. 60.482-5]

50.2. *Open-ended Valves or Lines* - Open-ended valves or lines for the KUTP (EU ID 57) shall be equipped with a cap, blind flange, plug or a second valve (except for lines and valves in an emergency shutdown system or those lines and valves that present a safety hazard if equipped with a cap, blind flange, plug, or second valve) and shall be operated in accordance with provisions of 40 C.F.R. 60.482-6.

[40 C.F.R. 60.482-6]

50.3. Monitoring and Repairs.

a. Closed Vent Systems and Control Devices.

(i) The Permittee shall monitor the control devices to ensure that they are operated and maintained in conformance with their designs.

[40 C.F.R. 60.18, 40 C.F.R. 60.592(a), 40 C.F.R. 60.482-10(e), and 40 C.F.R. 60.482-10(f)(1)(ii)]

b. For each closed vent system, conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

[40 C.F.R. 60.482-10(f)(1)(ii)]

(i) When a leak is detected[23], perform leak repair procedures as soon as practicable, but not later than 15 calendar days after it is detected. If the repair is technically infeasible without a process unit shutdown or if the Permittee determines that emissions from immediate repair would be greater than the fugitive emissions likely to result from delay of repair, then repair of the equipment shall occur before the end of the next process unit shutdown.

[40 C.F.R. 60.482-10(g)(2)]

(ii) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

[40 C.F.R. 60.482-10(g)(1)]

50.4. Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors.

[23] A leak is defined as any Method 21 reading of 500 ppm or greater above background [ref. 40 C.F.R. 60.482-10(g)], or any evidence of a leak that the Permittee considers a leak.

a. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method, the Permittee shall monitor within 5 days the pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service, and flanges and other connectors using Method 21 (40 C.F.R. 60, Appendix A-7) to determine presence of leaking sources. Method 21 monitoring is not required if the Permittee assumes that a leak would be detected by such monitoring and proceeds with leak repairs per Conditions 50.3.b(i) and 50.3.b(ii).

[40 C.F.R. 60.592(a) & (d), 40 C.F.R. 60.482-8(a), and 40 C.F.R. 60.485(b)(1)]

(i) When a leak[24] is detected, leak repairs shall be completed as soon as practicable, but not later than 15 calendar days after it is detected. If the repair is technically infeasible without a process unit shutdown, repair of the equipment shall occur before the end of the next process unit shutdown.

[40 C.F.R. 60.482-8(b), 40 C.F.R. 60.482-8(c)(1) and 40 C.F.R. 60.482-9]

(ii) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. This shall include, but is not limited to, the best practices described under 40 C.F.R. 60.482-7(e).

[40 C.F.R. 60.482-8(c)(2) & (d), and 40 C.F.R. 60.482-7(e)]

50.5. Recordkeeping.

a. The Permittee shall comply with the following recordkeeping requirements:

[40 C.F.R. 60.592(e) and 40 C.F.R. 60.486]

(i) When a leak is detected as specified by Condition 50.4.a(i), a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment until after it has been repaired.)

(ii) For each leak detected as specified by Condition 50.4.a(i), the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location:

[40 C.F.R. 60.40.486(b) & (c)]

(A) The instrument and operator identification numbers and the equipment identification numbers;

(B) The date the leak was detected and the dates of each attempt to repair the leak;

(C) Repair methods applied in each attempt to repair the leak;

(D) “Above 10,000” if the maximum instrument reading measured by Method 21 after each repair attempt is equal to or greater than 10,000 ppm;

[24] A leak is defined as any Method 21 reading of 10,000 ppm or greater [ref. 40 C.F.R. 60.482-8], or any evidence of a leak that the Permittee considers a leak.

(E) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;

(F) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown;

(G) The expected date of successful repair of the leak if a leak is not repaired within 15 days;

(H) Dates of process unit shutdowns that occur while the equipment is unrepaired; and

(I) The date of successful repair of the leak.

50.6. The following information pertaining to the design requirements for closed vent systems and control devices described in Condition 50 shall be recorded and kept in a readily accessible location:

[40 C.F.R. 60.486(d)]

a. Detailed schematics, design specifications, and piping and instrumentation diagrams;

b. The dates and descriptions of any changes in the design specifications;

c. A description of the parameter(s) monitored, as required in Condition 50.3.a(i) to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter(s) was selected for the monitoring;

d. Periods when the closed vent systems and control devices required in Condition 50 are not operated as designed, including periods when a flare pilot light in EU ID 30 does not have a flame; and

e. Dates of startups and shutdowns of the closed vent systems and control devices required in Condition 50.

50.7. The following information shall be recorded in a log that is kept in a readily accessible location:

[40 C.F.R. 60.486(e)]

a. A list of identification numbers for KUTP equipment subject to the applicable requirements of NSPS Subpart GGG (40 C.F.R. 60.482-5, 60.482-6, 60.482-8, and 60.482-10); and

b. A list of identification numbers for equipment in vacuum service.

50.8. Reporting.

a. The Permittee shall submit to EPA and the Department semiannual reports that shall include the following:

[40 C.F.R. 60.487(c)]

(i) Process unit identification;

(ii) For each month during the semiannual reporting period, an explanation of each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible;

(iii) Dates of process unit shutdowns which occurred within the semiannual reporting period; and

(iv) Revisions to items reported in the initial semi-annual report if changes have occurred since the initial report or subsequent revisions to the initial report.

ORL for Incinerator for Exemption from the Requirements of 40 C.F.R. 60, Subpart O

51. The Permittee shall limit each of the incinerators, EU IDs 35 and 36, to burn 10 percent or less sewage sludge on a dry basis for each incinerator that charges 1000 kg (2205 lb) or less per day sewage sludge (dry basis).

51.1. Maintain daily records of estimated dry percent sewage sludge charging rates incinerated in EU IDs 35 and 36. Take sludge samples biennially and determine the dry weight as a percentage. Use this percentage in calculating the incinerator charging rate.

51.2. Upon request, submit the records required by Condition 51.1 to EPA or the Department.

51.3. Report under Condition 98 if the incinerator(s) exceed the limit of Condition 51.

[18 AAC 50.040(a)(2)(Q), 18 AAC 50.040(j) and 18 AAC 50.326(j)]
[40 C.F.R. 60.150(a), Subpart O and 40 C.F.R. 71.6(a)(3) & (c)(6)]

ORL for Incinerators for Exemption from the Requirements of 40 C.F.R. 62, Subpart HHH

52. The Permittee shall limit each of the incinerators, EU IDs 35 and 36, to combust a fuel feed stream, ten percent or less of the weight of which is comprised, in aggregate, of hospital waste and medical/infectious waste as measured on a calendar quarter basis.

52.1. Estimate the relative weight of hospital/medical/infectious waste, and other fuels and wastes combusted in each incinerator.

52.2. Keep records of the information required in Condition 52.1 on a calendar quarter basis.

52.3. Upon request, submit the records to EPA or the Department.

52.4. Report under Condition 98 if the incinerator(s) exceed the limit of Condition 52.

[18 AAC 50.040(j) and 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)(3), (a)(9) & (c)(6)]
[18 AAC 50.040(g)(3)]
[40 C.F.R. 62.14400(b)(2) and 40 C.F.R. 62.14490, Subpart HHH]

ORL for Incinerators for Exemption from the Requirements of 40 C.F.R. 62, Subpart III

53. The Permittee shall burn greater than 30 percent municipal solid waste or refuse-derived fuel as a percentage of all fuels and wastes burned in each of EU IDs 35 and 36.

53.1. The Permittee shall keep records on a calendar quarter basis of the weight of municipal solid waste burned, and the weight of all other fuels and wastes burned in

EU IDs 35 and 36. Use the totals from Conditions 31, 51, and 52 to calculate the total wastes burned.

53.2. Upon request, submit the records required by Condition 53.1 to EPA or the Department.

53.3. Report under Condition 98 if the incinerator(s) do not meet the limit of Condition 53.

[18 AAC 50.040(j) and 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)(3), (a)(9) & (c)(6)]
[40 C.F.R. 62.14525(c)(2)(ii), Subpart III]

Emission Units Subject to NESHAP (40 C.F.R. 61) Subpart E National Emission Standard for Mercury: EU IDs 35 and 36

54. NESHAP Part 61, Subpart A Prohibited Activities. The Permittee shall not operate EU IDs 35 and 36, (subject to 40 C.F.R. 61, Subpart E, as stated in Condition 57) in violation of the standard, except under an exemption granted by the President under section 112(c)(2) of the Act.

[18 AAC 50.040(b)(1)]
[40 C.F.R. 61.05(b), Subpart A]

55. NESHAP Part 61, 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 35 and 36, 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 35 and 36.

[18 AAC 50.040(a)(1)]
[40 C.F.R. 61.12(c), Subpart A]

56. NESHAP Part 61 Subpart A Concealment of Emissions. The Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of a standard set forth in Condition 57. 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 and the piecemeal carrying out of an operation to avoid coverage by a standard that applies only to operations larger than a specified size.

[18 AAC 50.040(a)(1)]
[40 C.F.R. 61.19, Subpart A]

NESHAPs Subpart E National Emission Standard for Mercury: EU IDs 35 and 36

57. The Permittee shall not cause or allow emissions to the atmosphere from sludge incineration plants (incinerators), EU IDs 35 and 36, to exceed 3.2 kg (7.1 lb) of mercury per 24-hour period.

57.1. **Monitoring.** No changes shall be made in the operation of EU IDs 35 or 36 which would potentially increase emissions above the estimated levels used to support the waiver granted by EPA under 40 C.F.R. 61.13 without first providing new estimates to EPA per 40 C.F.R. 61.53(d)(4) and 61.54(e).

a. Monitoring shall consist of an annual statement of compliance with Condition 57.1. Submit the certification in accordance with Condition 100.

[18 AAC 50.040(a)(2)(A)]
[40 C.F.R. 61.52(b), Subpart E]
[EPA letter dated 10/16/97 Waiving Mercury (Sludge) Emission Testing]

National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 C.F.R. 63), Subpart A

58. NESHAPs Subpart A General Requirements.

[18 AAC 50.040(c)(1); 18 AAC 50.040(j); 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.1-63.15, Subpart A]

58.1. For EU IDs 19, 20, 22 through 28, and 64 through 66, the Permittee shall comply with the applicable requirements of 40 C.F.R. 63 Subpart A in accordance with the provisions for applicability of Subpart A in Table 8 to Subpart ZZZZ.

[40 C.F.R. 63.6665 & Table 8, Subpart ZZZZ]

Benzene Waste Operations NESHAP (40 CFR 61, Subpart FF)

59. The Permittee shall maintain records of each waste stream not controlled for benzene emissions as prescribed by 40 CFR 61.356(b)(1), and shall, in accordance with 40 CFR 61.357(b), submit to the Administrator a report that updates the information listed under 40 CFR 61.357(a)(1) through (3) in the event a change in the process generating the waste has occurred that could cause the total annual benzene quantity from EU ID 57 to increase to 1 Mg/yr or more.

[18 AAC 50.040(b)(2)(E)]
[40 C.F.R. 61.356(b)(1) and §61.357(b), Subpart FF]

Existing Stationary Reciprocating Internal Combustion Engines (RICE) Subject to NESHAPs Subpart ZZZZ, EU IDs 19, 20, 22 through 28, and 64 through 66

60. NESHAP Subpart ZZZZ Compliance Deadline. For EU IDs 19, 20, 22 through 28, and 64 through 66, the Permittee shall comply with the applicable requirements of Conditions 61 and 62 beginning no later than May 3, 2013, with other deadlines as noted in Condition 62.6.

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

61. NESHAP Subpart A Requirements for Non-Emergency Engines (EU IDs 64 & 65).

61.1. Test Notifications.

a. Notify EPA Region 10 and the Department in writing of the intent to conduct a performance test (e.g., the test required under Condition 62.6 and any subsequent performance tests) at least 60 days before the performance test is scheduled to begin as required in 40 C.F.R. 63.7(b)(1). Notification under this condition satisfies the 10-day notification requirement of Condition 91.

b. If after providing the notice required under Condition 61.1.a there is a delay in conducting the scheduled performance test due to unforeseeable circumstances beyond the Permittee's control, the Permittee must notify EPA Region 10 and the Department as soon as practicable prior to the scheduled performance test

date and specify the date when the performance test is rescheduled as required in 40 C.F.R. 63.7(b)(2).

[40 C.F.R. 63.6645(a)(2) & (g), §63.6665 & Table 8, Subpart ZZZZ]
[40 C.F.R. 63.7(b)(1) and (2), Subpart A]

61.2. **Test Plans.** When conducting a performance test, develop a site-specific test plan for submittal to the Department as required under Condition 90. Upon request, also submit the plan to the Administrator for approval, in accordance with the requirements of 40 C.F.R. 63.7(c)(1) – (4).

[40 C.F.R. 63.6645(a)(2), §63.6665 & Table 8, Subpart ZZZZ]
[40 C.F.R. 63.7(c), Subpart A]

61.3. **Alternative Methods.** Performance testing may be conducted using an alternative method approved by the Administrator in accordance with 40 C.F.R. 63.8(f)(4)(i) – (iv).

[40 C.F.R. 63.6645(a)(2), §63.6665 & Table 8, Subpart ZZZZ]
[40 C.F.R. 63.8(f)(4), Subpart A]

61.4. **Performance Test Reports.** Submit to EPA Region 10 and the Department the results of the performance test required under Condition 62.6 and any subsequent performance tests, before the close of business on the 60th day following completion of the performance test according to 40 C.F.R. 63.9(h)(2) and 40 C.F.R. 63.10(d)(2).

[40 C.F.R. 63.6645(a)(2) & (h)(2), §63.6665 & Table 8, Subpart ZZZZ]
[40 C.F.R. 63.9(h)(2), §63.10(d)(2), Subpart A]

NESHAP Subpart ZZZZ General Monitoring, Operation, and Maintenance Requirements

62. NESHAP Subpart ZZZZ Requirements. For EU IDs 19, 20, 22 through 28, and 64 through 66, comply with the following requirements:

62.1. At all times, operate and maintain EU IDs 19, 20, 22 through 28, and 64 through 66, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of EU IDs 19, 20, 22 through 28, and 64 through 66.

a. For EU IDs 19, 20, 22 through 28, and 66 comply with either:

(i) the manufacturer's emission-related written operation and maintenance instructions; or

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

[40 C.F.R. 63.6605(b), §63.6625(e), and Table 6(9) of Subpart ZZZZ]

62.2. For EU IDs 19, 20, 22 through 28, and 64 through 66, minimize the time spent at idle during startup and minimize the startup time to a period needed for appropriate and safe loading, not to exceed 30 minutes.

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

62.3. Comply with the following operating time limits for EU IDs 19, 20, and 22 through 28:

a. Any operation of EU IDs 19, 20, and/or 22 through 28 for purposes other than emergency operation, maintenance and testing, and operation in non-emergency situations for up to 50 hours per calendar year, as permitted in Condition 62.3.d, is prohibited.

b. There is no time limit under this condition on the use of EU IDs 19, 20 and/or 22 through 28 in emergency situations.

c. EU IDs 19, 20 and/or 22 through 28 may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of these units is limited to 100 hours per calendar year per engine. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

d. Each of EU IDs 19, 20, and 22 through 28 may be operated up to 50 hours per calendar year in non-emergency situations, but those hours shall be counted towards the 100 hours per calendar year provided for maintenance and testing under Condition 62.3.c. The 50 hours per calendar year for maintenance and testing under 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.

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

62.4. Monitor the operating time of EU IDs 19, 20, and 22 through 28 using a non-resettable hour meter.

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

NESHAP Subpart ZZZZ Emissions Limitations and Associated Monitoring (EU IDs 64 and 65)

62.5. Except during periods of startup, the emissions for EU IDs 64 and 65 shall be limited as follows:

a. Do not exceed 49 ppmvd carbon monoxide (corrected to 15% oxygen) in the exhaust; or

b. Reduce CO emissions by 70 percent or more.

[40 C.F.R. 63.6603(a) and Table 2d(2) of Subpart ZZZZ]

62.6. For EU IDs 64 and 65, except as allowed by 40 C.F.R. 63.7(a)(2), conduct an initial performance test no later than 180 days after May 3, 2013 (i.e., by October 30, 2013) as follows[25]:

a. Conduct performance tests in accordance with Subpart ZZZZ, Table 4, Item 1 or 3 and 40 C.F.R. 63.6620.

b. Initial compliance with Condition 62.5 shall be determined according to 40 C.F.R. 63, Subpart ZZZZ, Table 5, Item 11 or 12.

c. Submit the results of the initial performance test according to Condition 61.4.

d. Initial performance testing is waived if a performance test has previously been conducted as follows:

(i) The test was conducted using the same methods specified in 40 C.F.R. 63.6620, and these methods have been followed correctly;

(ii) The test must not be older than 2 years;

(iii) The test must be reviewed and accepted by the Administrator; and

(iv) Either no process or equipment changes must have been made since the test was performed, or the Permittee must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

[40 C.F.R. 63.6595(a), §63.6612, §63.6620, §63.6630(a) & (c), Tables 4 and 5 of Subpart ZZZZ]

NESHAP Subpart ZZZZ Emissions Management Practices

62.7. For EU IDs 19, 20, and 22 through 28, comply with the following, except as allowed by Condition 62.8:

a. Change the oil and filter every 500 hours of operation or annually, whichever comes first[26];

b. Inspect the 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) and Table 2d(4) of Subpart ZZZZ]

[25] Per 40 C.F.R. 63.6620(b), the Permittee is not required to start up a non-operational stationary RICE subject to performance testing solely to conduct the performance test. The performance test can be conducted when the engine is next started up.

[26] The Permittee may use an oil analysis program as described in 40 C.F.R. 63.6625(i) to extend the specified oil change requirement in Conditions 62.7.a and 62.9.a.[ref. 40 C.F.R. 63, Subpart ZZZZ, Table 2d, footnote 1]

62.8. If any of EU IDs 19, 20, and/or 22 through 28 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 62.7, 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 required under Condition 62.7 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 of Subpart ZZZZ]

62.9. For EU ID 66 comply with the following:

a. Change the oil and filter every 1,000 hours of operation or annually, whichever comes first[22];

b. Inspect the 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) and Table 2d(1) of Subpart ZZZZ]

62.10. For EU IDs 64 and 65, comply with the following:

a. The Permittee shall either:

(i) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or

(ii) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.

b. Follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation system(s) and replacing the crankcase filters, or request approval to use different maintenance requirements that are as protective as manufacturer requirements.

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

62.11. Fuel Requirements

a. All diesel fuel burned in EU IDs 64 and 65 must meet the requirements of 40 C.F.R 80.510(b) for nonroad diesel fuel[27] (maximum 15 ppm fuel sulfur content and a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent).

b. Monitor, record, and report as required by Conditions 16.2 through 16.4.

[18 AAC 50.040(c)(23) & 18 AAC 50.040(j) & 50.326(j)(4)]
[40 C.F.R. 80.510; 40 C.F.R. 63.6604, Subpart ZZZZ]

NESHAP Subpart ZZZZ Recordkeeping

[27] The compliance date under 40 C.F.R. 80.510(b) of June 1, 2010 applies to non-road engines. EU IDs 64 and 65 are not required to comply until the Subpart ZZZZ compliance date of May 3, 2013.

63. For each of EU IDs 19, 20, and 22 through 28, keep records of the hours of operation, including:

63.1. the total number of hours spent during the calendar year for emergency operation and what classified the operation as an emergency; and

63.2. the total number of hours spent during the calendar year for non-emergency operation.

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

64. For each of EU IDs 19, 20, 22 through 28, and 66, keep records of maintenance conducted on each engine to demonstrate that the engine and after-treatment control device (if any) are operated and maintained according to Condition 62.1.a and Condition 62.7 or 62.9. 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.

[40 C.F.R. 63.6655(e), 75 FR 9654, Subpart ZZZZ]

65. For each of EU IDs 64 and 65, keep the following records:

65.1. each notification and report submitted to comply with 40 C.F.R. 63, Subpart ZZZZ, including all documentation supporting notifications of compliance status (Condition 67) according to the requirement in 40 C.F.R. 63.10(b)(2)(xiv);

65.2. the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment;

65.3. performance tests and performance evaluations as required in 40 C.F.R. 63.10(b)(2)(vii) – (ix);

65.4. all required maintenance performed on air pollution control and monitoring equipment;

65.5. actions taken during periods of malfunction to minimize emissions in accordance with Condition 62.1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[40 C.F.R. 63.6655(a), Subpart ZZZZ]
[40 C.F.R. 63.10(b)(2)(vii) – (ix) & (xiv), Subpart A]

66. Keep records in a form suitable and readily available for expeditious inspection and review, readily accessible in hard copy or electronic form, for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record pertaining to 40 C.F.R Part 63 applicable requirements. All data may be retained off site.

[40 C.F.R. 63.6660, §63.6665 & Table 8, Subpart ZZZZ]
[40 C.F.R. 63.10(b)(1), Subpart A]

NESHAP Subpart ZZZZ Reporting

67. The Permittee shall report as follows:

67.1. For EU IDs 19, 20, and 22 through 28, include in the operating report required by Condition 99 a notification of any failure to perform the management practice on the schedule required by Condition 62.7 as a result of operating under the emergency exception allowed by Condition 62.8. Include in the report the emergency and/or the Federal, State or local law under which the risk of performing the management practice on the required schedule was deemed unacceptable.

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

67.2. For EU IDs 64 and 65:

a. Submit Compliance Reports to EPA Region 10 and the Department as follows:

(i) If EU IDs 64 and 65 are limited use engines as defined in 40 C.F.R. 63.6675 and no deviations have occurred during the reporting period, the Permittee may elect to submit the reports annually per Condition 67.2.b; or

(ii) Semiannually per Condition 67.2.c if the engines operate 100 hours or more in any calendar year.

b. Annual Compliance Reports

(i) The first annual Compliance Report must cover the period from May 3, 2013 through December 31, 2013, and shall be postmarked or delivered no later than January 31, 2014.

(ii) Subsequent Compliance Reports must cover the annual reporting period from January 1 through December 31 and shall be postmarked or delivered no later than January 31.

(iii) If a deviation from an emission or operating limitation has occurred during the reporting period, the Compliance Report shall be submitted semi-annually according to Condition 67.2.c and shall also contain the information required by Condition 67.2.d(vi).

c. Semi-annual Compliance Reports

(i) The first semi-annual Compliance Report must cover the period May 3, 2013 through June 30, 2013, and shall be postmarked or delivered no later than January 31, 2013.

(ii) Subsequent Compliance Reports must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31 and shall be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(iii) The Permittee may submit the first and subsequent semi-annual Compliance Reports according to the dates established in Condition 99 instead of the dates in Conditions 67.2.c(i) and 67.2.c(ii).

d. **All Compliance Reports** shall contain the following information:

(i) Company name and address.

(ii) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(iii) Date of report and beginning and ending dates of the reporting period.

(iv) If a malfunction occurred during the reporting period, the compliance report shall include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report shall also include a description of actions taken by the Permittee during a malfunction of an affected source (EU IDs 64 and 65) to minimize emissions in accordance with Condition 62.1, including actions taken to correct a malfunction.

(v) If no deviations from any applicable emission or operating limitations occurred during the reporting period, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(vi) If a deviation occurred during the reporting period, the Compliance Report shall also contain the following information:

(A) the total operating time of EU IDs 64 and 65 during the reporting period; and

(B) the number, duration, and cause of the deviation(s) (including unknown cause, if applicable), and the corrective action taken.

[40 C.F.R. 63.6640(b), §63.6650(a), (b), (c), (d), (f) & Table 7 (Item 1) of Subpart ZZZZ]
[40 C.F.R. 63.6645(a)(2), Subpart ZZZZ]
[40 C.F.R. 63.9(h)(3), Subpart A]

67.3. Include in the operating report required by Condition 99 a report of Subpart ZZZZ deviations as defined in 40 C.F.R. 63.6675 and of each instance in which an applicable requirement in 40 C.F.R. 63, Subpart A (Table 8 of Subpart ZZZZ) was not met.

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

67.4. Notify the Department per Condition 98 if any of the requirements in Conditions 60 through 67 were not met.

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

General Federal Requirements

National Emission Standard for Asbestos, 40 C.F.R. 61

68. **Asbestos NESHAP.** The Permittee shall comply with the applicable 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]

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

69. Protection of Stratospheric Ozone Requirements

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

69.1. **Subpart F: 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.

[40 C.F.R. 82, Subpart F]

69.2. **Subpart G – Significant New Alternatives Policy**. The Permittee shall comply with the applicable prohibitions for acceptability of substitutes for ozone-depleting compounds set out in 40 C.F.R. 82.174(b) through (d), Subpart G.

[40 C.F.R. 82.174(b) - (d), Subpart G]

69.3. **Subpart H – Halon Emissions Reduction**. The Permittee shall comply with the applicable prohibitions to reduce the emissions of halon set out in 40 C.F.R. 82.270(b) through (f), Subpart H.

[40 C.F.R. 82.270(b)-(f), Subpart H]

70. **NESHAPs Applicability Determinations.** The Permittee shall determine rule applicability and designation of affected sources under National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories (40 C.F.R. 63) in accordance with the procedures described in 40 C.F.R. 63.1(b). 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)]

Section 5. General Conditions

Standard Terms and Conditions

71. 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)]

72. 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)]

73. 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)]

74. 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]

75. 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:

75.1. the stationary source's assessable potential to emit of 5,309 TPY; or

75.2. 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), 50.326(j)(1), 50.035, 50.346(b)(1), 50.410, & 50.420]
[40 C.F.R. 71.5(c)(3)(ii)]

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

76.1. 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

76.2. 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 75.1.

[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)]

77. Good Air Pollution Control Practice. Except as noted in Condition 77.4, the Permittee shall do the following for EU IDs 15, 17, 18, 19, 20, and 22 through 28 (if actual emissions from these emission units are not insignificant as defined by 18 AAC 50.326(e)), 29, 31, 32, 33, 37 through 41, 43 through 45, 48 through 50, 64, 65, and 68a through 68d:

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

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

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

77.4. EU ID(s) 19, 20, 22 through 28, 64, and 65 are subject to this condition only until the applicable compliance date as set forth in Condition 60.

[18 AAC 50.030, 50.326(j)(3), & 50.346(b)(5)]
[Minor Permit No. AQ0267MSS05 Condition 2, 08/05/2013]

78. 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)]

79. 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.

79.1. The Permittee shall keep records of:

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

b. Any additional precautions that are taken

(i) To address complaints described in Condition 79.1a or to address the results of Department inspections that found potential problems; and

(ii) To prevent future dust problems

79.2. The Permittee shall report according to Condition 81.5.

79.3. For EU IDs 68a through 68d, the Permittee shall perform all material processing under wet, saturated conditions in an enclosed space without exhaust ports.

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

[18 AAC 50.045(d), 50.040(e), 50.326(j)(3) & 50.346(c)]
[Minor Permit No. AQ0267MSS05 Condition 5, 08/05/2013]

80. 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. Monitoring shall consist of an annual certification that the Permittee does not conduct stack injection at the stationary source.

[18 AAC 50.055(g)]

81. 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), and 50.346(a)]
[40 C.F.R. 71.6(a)(3)]

Monitoring, Record Keeping, and Reporting for Condition 81

81.1. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 98.

81.2. 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 81.

81.3. 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 81; or

b. the Department notifies the Permittee that it has found a violation of Condition 81.

81.4. **Recordkeeping.** The Permittee shall keep records of

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

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

c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 81; and

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

81.5. **Reporting.** With each operating report under Condition 99 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.

81.6. 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.

82. 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[28] listed in Conditions 17, 18, 19, 21, 44, 46, 48, 49, 50, 62.5, and 69, the Permittee shall take all reasonable steps to minimize levels of emissions that exceed the standard. Excess emissions reporting under Condition 98 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 98.

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

Open Burning Requirements

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

83.1. 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.

83.2. Compliance with this condition shall be assessed based on the statement of compliance under Condition 100 for the period covered by the certification.

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

[28] *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.

Section 6. General Source Testing and Monitoring Requirements

84. 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)]

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

[18 AAC 50.220(b)]

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

85.2. 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.

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

86.1. 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]

86.2. 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]

86.3. 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]

86.4. 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)]

86.5. 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]

86.6. 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]

86.7. 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]

87. 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)]

88. Test Exemption. The Permittee is not required to comply with Conditions 90, 91, and 92 when the exhaust is observed for visible emissions using the Method 9 Plan (Condition 3.1).

[18 AAC 50.345(a)]

89. 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)]

90. Test Plans. Except as provided in Condition 88, 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 84 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)]

91. Test Notification. Except as provided in Condition 88, 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)]

92. Test Reports. Except as provided in Condition 88, 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 95. 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)]

93. Particulate Matter Calculations. In source testing for compliance with the particulate matter standards in Conditions 7, 12, and 34.2, 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

94. 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)]
[40 C.F.R 60.7(f), Subpart A and 71.6(a)(3)(ii)(B)]
[40 C.F.R. 60.48c(i), Subpart Dc]

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

94.2. 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

95. 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.

95.1. 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 95.1.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)]

96. 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, emission source test reports, or other records under a cover letter certified in accordance with Condition 95.

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

97. 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)]

98. Excess Emissions and Permit Deviation Reports.

98.1. Except as provided in Condition 81, 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 after the end of the month during which the excess emissions or other permit deviation occurred, except as provided in Conditions 98.1.c(ii) and 98.1.c(iii);

(ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the Department provides written permission to report under Condition 98.1.c(i); and

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

98.2. 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.

98.3. 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)]

99. Operating Reports. During the life of this permit[29], 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.

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

99.2. When excess emissions or permit deviations that occurred during the reporting period are not reported under Condition 99.1, the Permittee shall identify:

a. the date of the deviation;

b. the equipment involved;

c. the permit condition affected;

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

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

99.3. When excess emissions or permit deviations have already been reported under Condition 98, the Permittee shall cite the date or dates of those reports.

99.4. The operating report must include, for the period covered by the report, a listing of emissions monitored under Conditions 3.1.e, 9.2, 12.2, and 48.2.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;

c. the permit condition affected; and

d. the monitoring result which triggered the additional monitoring.

[29] "*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.

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

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

100. Annual Compliance Certification. Each year by March 31, the Permittee shall compile and submit to the Department one original[30] and one copy of an annual compliance certification report.

100.1. 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.

100.2. **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.

100.3. 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); and 50.326(j)]
[40 C.F.R. 71.6(c)(5)]

101. NSPS and NESHAP Reports. The Permittee shall:

101.1. **Reports**: Attach to the operating report required by Condition 99 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 operating report; and

101.2. **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, record keeping, monitoring, performance testing, or reporting requirements. The Permittee shall keep a copy of each U.S. EPA issued monitoring waiver or custom monitoring schedule with the permit.

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

[30] See Conditions 100.2 and 100.3 for clarification on the number of copies required.

102. Emission Inventory Reporting. Each year by March 31, the Permittee shall submit to the Department reports of actual emissions, by emission unit[31], of CO, NH_3, NO_X, PM_{10}, $PM_{2.5}$, SO_2, VOCs and Lead (Pb) (and lead compounds) for the previous calendar year using the form in Section 15 of this permit.

102.1. The Permittee shall commence reporting in 2014 for calendar year 2013, 2015 for the calendar year of 2014, etc.

102.2. 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)]

[31] Nonroad engines are not required to be included in the emissions inventory reports.

Section 8. Permit Changes and Renewal

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

103.1. 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[32];

103.2. The information shall be submitted to the same address as in Condition 100.3.

103.3. 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

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

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

104. 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)]

105. 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. Parts 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:

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

105.2. 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;

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

105.4. 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)]

[32] The documents required in Condition 103 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.

106. 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):

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

106.2. For each such change, the written notification required by Condition 106.1 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.

106.3. The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made pursuant to Condition 106.

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

107. 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) and 71.7(b) & (c)(1)(ii)]

Section 9.Compliance Requirements

General Compliance Requirements

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

108.1. included and specifically identified in the permit; or

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

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

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

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

109.2. 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)]

110. 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)]

111. 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

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

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

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

111.4. 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)]

112. 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 Kuparuk Central Production Facility #1.

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

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

113.2. 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)) and (ii)]

114. Table G 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 G becomes 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 modification and/or permit amendment, as necessary.

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

Table G - Permit Shields Granted.

Non-Applicable Requirements	Reason for Non-Applicability
Flares: EU IDs 29, 31, 32, and 33 (H-101B, H-KF02, H-CR01A, and H-CR01B)	
40 C.F.R. 60.18 – General Control Device Requirements	These flares are not pollution control devices and are not necessary for compliance with the 95% efficiency standard. These flares are used as good air pollution control practice to minimize emissions during periods of process malfunction, startup and shutdown.
Flares: EU IDs 30 (H-KF01) – KUTP	
40 C.F.R. 60, Subpart A – General Provisions; 40 C.F.R. 60.18(c)(4) and (f)(5) – General Control Device Requirements: Exit velocity requirements for Steam-Assisted and Non-Assisted Flares	This flare is not steam-assisted or non-assisted but is air-assisted.
Gas-Fired Heaters & Drill Site Heaters: EU IDs 15, 16, 17, 18, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, and 50 (H-201, G1-14-01, H-3204, H-102A, H-1A01, H-1B01, H-2V01, H-3F01, H-1E01, H-1E02, H-1F01, H-1G01, H-1F-1901, H-1J01A, H-1J01B, H-1Q01, H-1R01, and H-1Y01)	
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 the units are not classified as *Fossil-Fuel-Fired Steam Generators*, as defined in the 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 the units are not classified as *Electric Utility Steam Generating Units*, as defined in the 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).
40 C.F.R. 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.	H-3204 and H-102A: Heat input capacities are below threshold (10 MMBtu/hr). All others listed above commenced construction prior to rule applicability date of subpart (6/9/89).

Non-Applicable Requirements	Reason for Non-Applicability
Drill Site Heaters: EU IDs 42, 46, and 47 (H-1E02, H-1J01A, and H-1J01B)	
40 C.F.R. 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units; 40 C.F.R. 60.42c - Standard for Sulfur Dioxide (SO2)	Standards for SO_2 and PM and related performance test, monitoring and reporting requirements are not applicable for affected units fired only on fuel gas.
40 C.F.R. 60.43c - Standard for Particulate Matter (PM)	
40 C.F.R. 60.44c - Compliance and Performance Test Methods and Procedures for SO2; 40 C.F.R. 60, Subpart A - General Provisions; 40 C.F.R. 60.8 - Performance Test	
40 C.F.R. 60.45c - Compliance and Performance Test Methods and Procedures for PM; 40 C.F.R. 60.8 - Performance Test	
40 C.F.R. 60.46c - Emission Monitoring for SO2	
40 C.F.R. 60.47c - Emission Monitoring for PM	
40 C.F.R. 60.48c(a)(4)-(f) & (h) - Reporting and Recordkeeping Requirements	
40 C.F.R. 60.48c(a)(2)-(3) - Reporting and Recordkeeping Requirements	Units fire only fuel gas. Therefore, they are not subject to any requirements that limit the annual capacity factor for any fuel or mixture of fuels.
40 C.F.R. 60, Subpart A - General Provisions; 40 C.F.R. 60.7(a)(1) & (3) - Notification and Recordkeeping (Initial Notification); 40 C.F.R. 60, Subpart Dc; 40 C.F.R. 60.48c(a)(1) – Notifications	Obsolete requirements - completed as required.
40 C.F.R. 60.7(a)(4) – Notification and Recordkeeping	This requirement only applies to "existing facilities", as defined in 40 C.F.R. 60.2.
40 C.F.R. 60.7(c) & (d) – Excess Emissions Reporting; 40 C.F.R. 60, Subpart Dc	The provisions of 40 C.F.R. 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 40 C.F.R. 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 install a CMS or monitoring device nor are there any applicable emission limits for the fuel gas-fired heater to which "excess emissions" could apply.
Storage Tanks: T1-101, T1-P101A, T1-P101B, T-175, T-177, T-178, T-201, T-1002A, T-1002B, T-1009, T-2201, T-2202, T-CL03, G1-19501, G1-19502, G1-19503, G1-19504, T-1A01, T-1E01, T-1F-1901, T-1G01, T-1L01, T-1Q01, T-1R01, T-1Y01, and T-1005	
40 C.F.R. 60, Subpart K- Standards of Performance for Storage Vessels for Petroleum Liquids	Vessel commenced construction after the rule applicability date of subpart (5/19/78).
Storage Tanks: T-176 and T-CW01	
40 C.F.R. 60, Subpart K - Standards of Performance for Storage Vessels for Petroleum Liquids	Vessel capacity less than threshold (40,000 gallons).
Storage Tanks: T1-P101A, T1-P101B, and T-1009	
40 C.F.R. 60, Subpart Ka – Standards of Performance for Storage Vessels for Petroleum Liquids	Vessel commenced construction prior to or after the rule applicability dates of subpart (5/18/78-7/23/84).
Storage Tanks: T-1A01, T-1E01, T-1L01, T-1F1901, T-1G01, T-1Q01, T-1R01, and T-1Y01	
40 C.F.R. 60, Subpart Ka – Standards of Performance for Storage Vessels for Petroleum Liquids	Vessels do not store a *petroleum liquid,* as defined in subpart.
Storage Tanks: T-201, G1-19501, G1-19502, G1-19503, and G1-19504	
40 C.F.R. 60, Subpart Ka – Standards of Performance for Storage Vessels for Petroleum Liquids	Maximum TVP of petroleum liquid stored below 40 C.F.R. 60.112a thresholds for equipment standards (1.5 psia) and 40 C.F.R. 60.115a thresholds for monitoring of operations (1.0 psia).

Non-Applicable Requirements	Reason for Non-Applicability
Storage Tanks: T-175, T-176, T-CL03, T-177, T-178, T-1002A, T-1002B, T-CW01	
40 C.F.R. 60, Subpart Ka – Standards of Performance for Storage Vessels for Petroleum Liquids	Vessel capacity less than threshold (40,000 gallons).
Storage Tanks: T1-101, T-2201, T-2202, T-1005	
40 C.F.R. 60, Subpart Ka - Standards of Performance for Storage Vessels for Petroleum Liquids	Each petroleum liquid storage vessel with a capacity of less than 1,589,873 liters (420,000 gallons) used for petroleum or condensate stored, processed, or treated prior to custody transfer is not an affected facility and, therefore, is exempt from the requirements of this subpart.[40 C.F.R. 60.111a(b)]
Storage Tanks: T-1Q01, T-1R01, T-1Y01, T-1005, T-1A01, T-1E01, T-1F1901, T-1G01, T-1L01, T1-101, T-175, T-177, T-201 (EU ID 51) , T-1002A, T-1002B, T-2201, T-2202, G1-19501, G1-19502, G1-19503, and G1-19504 (EU IDs 52 - 55)	
40 C.F.R. 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels)	Vessels commenced construction prior to the rule applicability date of subpart (July 23, 1984)
Storage Tanks: T-178 and T-CW01	
40 C.F.R. 60, Subpart Kb- Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels)	Vessel capacity less than threshold (20,000 gallons)
Storage Tanks: T1-P101A and T1-P101B	
40 C.F.R. 60, Subpart Kb- Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels)	In a letter to CPAI dated August 18, 2006, EPA determined that these tanks fall within the definition of process tanks in 40 C.F.R. 60.111b (as amended 10/15/03), which are exempt from Subpart Kb.
Storage Tanks: T-176, T-1009, and T-CL03	
40 C.F.R. 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels)	Subpart Kb does not apply to vessels with a capacity ≥ 75 $_m$3 but <151 m^3 storing a liquid with a maximum true vapor pressure <15 kPA (2.18 psia).
Process Storage Tanks: V1-103, V1-EL05, V1-101, V-122, V1-117, V1-104, V-GC09	
40 C.F.R. 60 Subparts K, Ka, and Kb	These are process vessels that operate under pressure. Pressure vessels designed to operate in excess of 204.9 kPa (15 psig) without emissions to the atmosphere except under emergency conditions are exempt from Subparts K, Ka, and Kb (ref. 40 C.F.R. 60.111(a)(1), 60.111a(a)(1), and 60.110b(d)(2))
Storage Tank: TK-FA-0501-10 (Portable Gasoline Storage Tank)	
40 C.F.R. 63 Subpart BBBBBB - National Emission Standards for Hazardous Air Pollutants for Source Categories: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities	The emission unit is not a gasoline distribution bulk terminal, bulk plant or pipeline facility as defined in 40 C.F.R. 63.11100.
40 C.F.R. 63 Subpart R - National Emission Standards for Hazardous Air Pollutants for Source Categories: Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)	The emission unit is not a “bulk gasoline terminal” or “pipeline breakout station”, as defined at 40 C.F.R. 63.421.[40 C.F.R. §63.420(a) and (b)]
Portable Gasoline Storage Tank: TK-FA-0501-10 (EU ID 67)	
40 C.F.R. 63 Subpart CCCCCC – National Emission Standards for Hazardous Air Pollutants for SourceCategory: Gasoline Dispensing Facilities	This rule applies to gasoline dispensing facilities located at an area source of HAP emissions. Using the definition in 40 CFR 63, Subpart A, CPF-1 is HAP major.
40 C.F.R. 63.11124(a), Subpart CCCCCC - Notifications, Records and Reports	Applies only to tanks subject to the control requirements of §63.11117.
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.

Non-Applicable Requirements	Reason for Non-Applicability
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.
Gas Turbines: EU IDs 4 - 9 (G-201-A, G-201-B, G-201-C, G-201-D, G-201-E, G-201-F)	
40 C.F.R. 60, Subpart GG –Standards of Performance for Stationary Gas Turbines; 40 C.F.R. 60.332(a) - Standards for NO_X 40 C.F.R. 60, Subpart A – General Provisions; 40 C.F.R. 60.8 – Performance Test (NO_X)	Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 MMBtu/hr) but less than or equal to 107.2 gigajoules per hour (100 MMBtu/hr) based on the lower heating value of the fuel fired and that have commenced construction prior to October 3, 1982 are exempt from 40 C.F.R. 60.332(a)[40 C.F.R. 60.332(e)].
Gas Turbine: EU ID 14 (G-3203)	
40 C.F.R. 60, Subpart GG; 40 C.F.R. 60.332(a)(2) – Standards for NO_X; 40 C.F.R. 60, Subpart A – General Provisions; 40 C.F.R. 60.8 – Performance Test (NO_X)	Stationary gas turbines with a manufacturer's rated base load at ISO conditions of greater than 30 MW are exempt from 40 C.F.R. 60.332(a)(2).[40 C.F.R. 60.332(d)].
Gas Turbines: EU IDs 1 14 (C-2101-A, C-2101-B, C-2101-C, G-201-A, G-201-B, G-201-C, G-201-D, G-3201-E, G-3201-F, P-2202-A, P-2202-B, P-CL07-A, P-CL07-B, and G-3203)	
40 C.F.R. 60, Subpart GG; 40 C.F.R. 60.332(a)(1) - Standards for NO_X	Standard applies to *Electric Utility Stationary Gas Turbines*, as defined in subpart. Emission unit is not an Electric Utility Stationary Gas Turbine as defined in Subpart GG.
40 C.F.R. 60.334(a), (b) & (d) – Monitoring of Operations; 40 C.F.R. 60.335(b)(4) – Test Methods and Procedures	Applies only to affected turbines equipped with water injection to control emissions of NO_X. Emission unit is not equipped with water injection to control emissions of NOx.
40 C.F.R. 60.334(e), (f) – Monitoring of Operations	Applies only to affected turbines that commence construction after July 8, 2004. These emission units commenced construction prior to this date.
40 C.F.R. 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).
40 C.F.R. 60.334(h)(2) – Monitoring of Operations	CPAI has not claimed an allowance for fuel bound nitrogen to calculate the applicable NO_X emission limit under 40 C.F.R. 60.332.
40 C.F.R. 60, Subpart A – General Provisions; 40 C.F.R. 60.7(a)(1) & (3) –Notification and Recordkeeping (Initial Notification); 40 C.F.R. 60.8 – Performance Test (Initial Performance Test Only); 40 C.F.R. 60.335(b) – Test Methods and Procedures	Obsolete requirements - completed as required.
40 C.F.R. 60.7(a)(4) - Notification and Recordkeeping	This requirement only applies to "existing facilities", as defined in 40 C.F.R. 60.2.
Gas Turbines: EU IDs 12 and 13 (when fired on emergency fuel) (P-CL07-A, P-CL07-B)	
40 C.F.R. 60, Subpart GG; 40 C.F.R. 60.332(a)(2) - Standards for NO_X; 40 C.F.R. 60, Subpart A – General Provisions; 40 C.F.R. 60.8 – Performance Tests (NO_X)	NSPS Subpart, GG NO_X standard 40 C.F.R. 60.332(a)(2) does not apply to natural gas-fired stationary gas turbines with a heat input greater than or equal to 10.7 gigajoules per hour (10 MMBtu/hr) when being fired with an emergency fuel.[40 C.F.R. 60.332(k)].
Incinerator: EU ID 36 (H-347)	
18 AAC 50.050(b) – Incinerator Emission Standards: Particulate Matter	There is no particulate grain loading standard for incinerators with a rated capacity less than 1,000 lbs/hr.

Non-Applicable Requirements	Reason for Non-Applicability
Incinerators: EU IDs 35 and 36 (H-250, H-347)	
18 AAC 50.055(c) – Sulfur Compounds Emitted from an Industrial Process or Fuel-burning Equipment	The incinerators are not industrial processes or fuel-burning equipment as defined in 18 AAC 50.990.
40 C.F.R. 60, Subpart Cb – Emissions Guidelines and Compliance Times for Existing Large Municipal Waste Combustors	The capacity of each incinerator is below the subpart threshold of 250 tons per day.
40 C.F.R. 60, Subpart Ce – Emission Guidelines and Compliance Times for (Existing) Hospital/Medical/Infectious (H/M/I) Waste Incinerators.	This subpart does not directly apply to operators of incinerators. Potential applicable requirements pertaining to H/M/I waste incinerators are implemented under the Federal plan requirements of 40 C.F.R. 62, Subpart HHH.
40 C.F.R. 60, Subpart Ea – Standards of Performance for Existing Municipal Waste Combustors.	The capacity of each incinerator is below the subpart threshold of 250 tons per day and construction of each incinerator did not occur during the subpart applicability dates of December 20, 1989 through September 20, 1994.
40 C.F.R. 60, Subpart Eb – Standards of Performance for New Large Municipal Waste Combustors.	The capacity of each incinerator is below the subpart threshold of 250 tons per day and construction of each incinerator commenced prior to the subpart applicability date of September 20, 1994.
40 C.F.R. 60, Subpart Ec – Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for which Construction is Commenced after June 20, 1996	Commenced construction prior to rule applicability date (6/20/96)
40 C.F.R. 60, Subpart O – Standards of Performance for Sewage Treatment Plants;	These incinerators combust waste containing less than 10% sewage sludge (dry basis) and charge less than 1000 kg/day sewage sludge (dry basis).
40 C.F.R. 60, Subpart AAAA – New Source Performance Standards for New Small Municipal Waste Combustors.	The capacity of each incinerator is less than the applicability threshold (35 tons per day) and construction of each unit commenced prior to the applicability date of August 30, 1999.
40 C.F.R. 60, Subpart CCCC – Standards of Performance for New Commercial and Industrial Solid Waste Incineration Units.	Construction of each incinerator commenced prior to the applicability date of November 30, 1999.
40 C.F.R 60, Subpart EEEE – Standards of Performance for New Other Solid Waste Incineration Units	Construction of each incinerator commenced prior to the applicability date of December 9, 2004 and neither unit has been modified or reconstructed on or after June 16, 2006.
40 C.F.R. 61, Subpart E – National Emission Standards for Mercury 40 C.F.R. 61.52(a) – Standards 40 C.F.R. 61.53(a) – Stack Sampling	Applies to mercury ore processing facilities and/or chlor- alkali plants.
40 C.F.R. 61.53(d) – Stack Sampling 40 C.F.R. 61.54 – Sludge Sampling	EPA granted a waiver of mercury (sludge) emission testing. [EPA letter dated 10/16/97].
40 C.F.R. 61.55(a) – Monitoring of Emissions and Operations	Mercury emissions do not exceed 1,600 grams/24-hr period.
40 C.F.R. 61.55(b) – (d) – Monitoring of Emissions and Operations	Applies to mercury ore processing facilities and/or chlor- alkali plants.
40 C.F.R. 61, Subpart A – General Prohibitions; 40 C.F.R. 61.09 – Notification of Startup	Obsolete requirements - completed as required.
40 C.F.R. 61.05(c) – Prohibited Activities	Emission unit was not an existing facility prior to the rule applicability date of the subpart (10/14/75).
40 C.F.R. 61.05(d) – Prohibited Activities 40 C.F.R. 61.12(a) – Compliance with Standards and Maintenance Requirements 40 C.F.R. 61.13 – Emission Tests and Waiver of Emission Tests	EPA granted a waiver of mercury (sludge) emission testing. [EPA letter dated 10/16/97].

Non-Applicable Requirements	Reason for Non-Applicability
40 C.F.R. 61.14 – Monitoring Requirements	Mercury emissions do not exceed 1,600 grams/24-hr period.
40 C.F.R. 62, Subpart FFF – Federal Plan Requirements for Existing Large Municipal Waste Combustors.	The capacity of each incinerator is below the subpart threshold of 250 tons per day.
40 C.F.R. 62, Subpart HHH – Federal Plan Requirements for (H/M/I) Waste Incinerators Constructed on or before June 20, 1996	The incinerators meet the exemption criteria specified in 40 C.F.R. 62.14400(b)(2) because they are "co-fired combustors" as defined in 40 C.F.R. 62.14490. Monitoring and recordkeeping required to maintain this exemption are included as applicable requirements for these incinerators.
40 C.F.R. 62, Subpart III – Federal Plan Requirements for Existing Commercial and Industrial Solid Waste Incinerators, except 40 C.F.R. 62.14525(c)(2)(ii).	Each incinerator burns greater than 30 percent municipal solid waste or refuse-derived fuel, is subject to a Federally enforceable requirement, and has a capacity to burn less than 35 tons per day of municipal solid waste or refuse-derived fuel. In addition, the Administrator was notified on May 6, 2004 that each incinerator meets these criteria. Therefore, each incinerator is exempt from 40 C.F.R. 62, Subpart III, except for the recordkeeping requirements found in 40 C.F.R. 62.14525(c)(2)(ii)[ref. 40 C.F.R. 62.14525(c)(2)].
40 C.F.R. 62, Subpart JJJ - Federal Plan Requirements for Existing Small Municipal Waste Combustors.	The capacity of each incinerator is less than the applicability threshold (35 tons per day).
Born Crude Heater: EU ID 16 (G1-14-01) and Flare: EU ID 30 (H-KF01)	
40 C.F.R. 60, Subpart A – General Provisions; 40 C.F.R. 60.7(a)(1) and (3) - Notification and Recordkeeping (Initial Notification); 40 C.F.R. 60.8 – Performance Test (Initial Performance Test Only); 40 C.F.R. 60.13(c) – Monitoring Requirements (Initial Performance Test Only); 40 C.F.R. 60, Subpart J – Standards of Performance for Petroleum Refineries; 40 C.F.R. 60.105(a)(4)(iii) – Monitoring of Emissions and Operations (Initial Performance Test Only); 40 C.F.R. 60.106 – Test Methods and Procedures	Obsolete requirements - completed as required.
40 C.F.R. 60.105(a)(3), (e)(3)(i) - Monitoring of Emissions and Operations	In place of the SO_2 monitor in 40 C.F.R. 60.105(a)(3), fuel gas H_2S content is monitored continuously, as provided in 40 C.F.R. 60.105(a)(4).
Kuparuk Unit Topping Plant (KUTP)	
40 C.F.R. 60, Subpart A – General Provisions; 40 C.F.R. 60.7(a)(1) and (3) - Notification and Recordkeeping (Initial Notification); 40 C.F.R. 60.8 – Performance Test (Initial Performance Test Only); 40 C.F.R. 60, Subpart J – Standards of Performance for Petroleum Refineries; 40 C.F.R. 60.106 – Test Methods and Procedures	Obsolete requirements - completed as required.
40 C.F.R. 60.7(a)(4) - Notification and Recordkeeping	This requirement only applies to "existing facilities", as defined in 40 C.F.R. 60.2.
40 C.F.R. 60.7(b) – (d) - Notification and Recordkeeping	40 C.F.R. 60.7(b) – (d) do not apply to affected facilities subject to 40 C.F.R. 60, Subpart VV [40 C.F.R. 60.486(k), incorporated by reference in 40 C.F.R. 60, Subpart GGG].

Non-Applicable Requirements	Reason for Non-Applicability
40 C.F.R. 60.7(c) – (d) – Excess Emissions Reporting (40 C.F.R. 60, Subpart GGG)	40 C.F.R. 60.7(c) & (d) apply only to New Source Performance Standards which require the installation of a continuous monitoring system (CMS) or monitoring device per Subpart GGG. CPAI is not required to install a CMS or monitoring device per Subpart GGG.
40 C.F.R. 60, Subpart J – Standards of Performance for Petroleum Refineries; 40 C.F.R. 60.102 – Standard for Particulate Matter; 40 C.F.R. 60.103 – Standard for Carbon Monoxide; 40 C.F.R. 60.104(a)(2), (b)-(d) – Standards for Sulfur Oxides; 40 C.F.R. 60.105(a)(1)-(2), (a)(5)-(13), (b)-(d), (e)(1)-(2),(4) – Monitoring of Emissions and Operations; 40 C.F.R. 60.107(a)-(d) – Reporting and Recordkeeping Requirements; 40 C.F.R. 60.108 – Performance Tests and Compliance Provisions	Standards and requirements apply to fluid catalytic cracking (FCC) unit catalyst regenerators or Claus sulfur recovery plants. Topping unit does not operate FCC unit catalyst regenerators or Claus sulfur recovery plants.
40 C.F.R. 60, Subpart GGG – Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries[Subpart VV – Standards of Performance for Equipment Leaks of VOC in SOCMI Industry Incorporated by Reference]; 40 C.F.R. 60.482-2 – Standards: Pumps in Light Liquid Service; 40 C.F.R. 60.482-7 – Standards: Valves in Gas/Vapor Service and Light Liquid Service	Pumps in light liquid service and valves in gas/vapor and light liquid service within a process unit that is located on the Alaskan North Slope are exempt from the requirements of 40 C.F.R. 60.482-2 & -7.[40 C.F.R. 60.593(e)]
40 C.F.R. 60.482-3 – Standards: Compressors	Topping unit does not operate compressors.
40 C.F.R. 60.482-4(a)-(b) – Standards: Pressure Relief Devices in Gas/Vapor Service.	All pressure devices in gas/vapor service at this stationary source are connected to a closed vent system capable of capturing and transporting leakage from the pressure relief device either back to the process or to a control device (flare system). Pressure relief devices in gas/vapor service so equipped are exempt from 40 C.F.R. 60.482-4(a) & (b).[40 C.F.R. 60.482-4(c)]
40 C.F.R. 60.482-10(f)(1)(i) – Standards: Closed Vent Systems and Control Devices (Initial Inspection)	Obsolete requirements - completed as required.
40 C.F.R. 60 Subpart A, Appendix F – Quality Assurance Procedures (Procedure 1) - Quality Assurance Requirements For Gas Continuous Emission Monitoring Systems Used For Compliance Determination	Randy Poteet of CPAI confirmed the non-applicability of 40 C.F.R 60, Subpart A, Appendix F in a conversation with Olga Loera of EPA Region 10 on February 5, 1992. CPAI (then Arco Alaska, Inc.) was certifying the continuous monitoring system that was installed to monitor H2S in fuel gas going to EU ID 16. AAI's consultant at that time, Entropy, had advised that Appendix F did not apply to the H_2S continuous monitoring system at CPF-1. AAI confirmed Entropy's advice by contacting Region 10. In that conversation, Ms. Loera stated that the continuous monitoring system at CPF-1 was being used only to determine excess emissions and was not being used to determine compliance on a continuous basis.
40 C.F.R. 61, Subpart FF – National Emission Standard for Benzene Waste Operations (40 C.F.R. 61.342 - 61.355)	The total annual benzene quantity from facility waste is less than 10 megagrams per year (Mg/yr) as stated in CPAI letter to EPA dated 6/20/01. Only the reporting and recordkeeping requirements of 40 C.F.R. 61.356 and 61.357 apply.
40 C.F.R. 61.357(a) – Initial Report	Obsolete requirement – completed as required. (6/20/01 letter to EPA)

Non-Applicable Requirements	Reason for Non-Applicability
40 C.F.R. 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries	Stationary source does not include any petroleum refinery process units because all process units at the stationary source have a SIC code of 1311.
40 C.F.R. 64 – Compliance Assurance Monitoring	This emission unit does not have potential pre-control device emissions of an applicable regulated air pollutant equal to or greater than 100 tpy of criteria pollutants, 10 tpy of any hazardous air pollutant (HAP), or 25 tpy of all HAPs combined.
NGL Plant (Miscible Injection)	
40 C.F.R. 60, Subpart KKK – Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants	Commenced construction prior to rule applicability date of subpart (1/20/84).
Sweetening Plant	
40 C.F.R. 60, Subpart LLL - Standards of Performance for Onshore Natural Gas Processing: SO_2 Emissions	Sweetening Plant is out of service. If brought back into service, provisions of this subpart will not apply to the plant because produced gas is not released to the atmosphere.[40 C.F.R. 60.640(e)]
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 to 40 C.F.R. 63, Subpart RR.
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 to 40 C.F.R. 63, Subpart VV.
Stationary Source-Wide (Except KUTP)	
40 C.F.R. 61, Subpart FF – National Emission Standard for Benzene Waste Operations	Stationary source does not contain a chemical manufacturing plant, coke by-product recovery plant, or petroleum refinery.
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	Stationary source does not meet the definition of a petroleum refinery because other than KUTP the stationary source does not engage in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of petroleum or through redistillation, cracking or reforming of unfinished petroleum derivatives.
40 C.F.R. 64 – Compliance Assurance Monitoring	These units do not use a control device to achieve compliance with any emission limitation or standard
Stationary Source-Wide	
40 C.F.R. 60, Subpart QQQ – Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems	Commenced construction prior to rule applicability date of Subpart QQQ (5/4/87).
40 C.F.R. 61, Subpart A – General Provisions (except for incinerators tag nos. H-250 and H-347)	Requirements only apply to emission units 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% benzene by weight).
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.

Non-Applicable Requirements	Reason for Non-Applicability
40 C.F.R. 61, Subpart M – National Emission Standard for Asbestos; 40 C.F.R. 61.142 - Standard for Asbestos Mills	Stationary source is not an Asbestos Mill.
40 C.F.R. 61.143 - Standards for Roadways	Stationary source roadways not exposed to asbestos tailings or asbestos containing waste.
40 C.F.R. 61.144 - Standard for Manufacturing	Stationary source does not engage in any manufacturing operations using commercial asbestos.
40 C.F.R. 61.146 - Standard for Spraying	Stationary source does not spray apply asbestos containing materials
40 C.F.R. 61.147 - Standard for Fabricating	Stationary source does not engage in any fabricating operations using commercial asbestos.
40 C.F.R. 61.148 - Standard for Insulating Materials	Stationary source does not install or reinstall, on any stationary source component, insulation material containing commercial asbestos.
40 C.F.R. 61.149 - Standard for Waste Disposal for Asbestos Mills	Applies only to those stationary sources subject to 40 C.F.R. 61.142 (Asbestos Mills).
40 C.F.R. 61.151 - Standard for Inactive Waste Disposal Sites for Asbestos Mills and Manufacturing and Fabricating Operations	Applies only to those stationary sources subject to 40 C.F.R. 61.142, 40 C.F.R. 61.144, or 40 C.F.R. 61.147 (Asbestos Mills, manufacturing or fabricating).
40 C.F.R. 61.152 - Standard for Air-Cleaning	Stationary source does not use air cleaning equipment.
40 C.F.R. 61.153 - Standard for Reporting	No reporting requirements apply for emission units subject to 40 C.F.R. 61.145 (demolition and renovation) [ref. 40 C.F.R. 61.153(a)].
40 C.F.R. 61.154 - Standards for Active Waste Disposal Sites	Stationary source not an active waste disposal site and does not receive asbestos containing waste material.
40 C.F.R. 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).
40 C.F.R. 61, Subpart BB –National Emission Standard For Benzene Emissions from Benzene Transfer Operations	Stationary source does not conduct benzene transfer 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 subject to any control technology determinations under 40 C.F.R. 63 because it is not subject to the MACT provisions of any rules found in 40 C.F.R. 63.
40 C.F.R. 63, Subpart EEEE – National Emission Standards for Organic Liquid Distribution	CPF-1 is an oil and natural gas production field facility as the term “facility” is defined in 40 C.F.R. 63.761 of 40 C.F.R. 63, Subpart HH. Organic liquid distribution (OLD) operations do not include the activities and equipment used to process, store, or transfer organic liquids at oil and natural gas production field facilities.[40 C.F.R. 63.2334(c)(1)]
40 C.F.R. 63, Subpart HH – National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities	This stationary source exclusively processes, stores, or transfers “black oil” (defined in the final promulgated rule as a petroleum liquid with an initial producing gas-to-oil ratio (GOR) less than 1,750 scf/bbl and an API gravity less than 40 degrees). Therefore, the black oil exemption under 40 C.F.R. 63.760(e)(1) of the Subpart HH applies.
40 C.F.R. 63, Subpart HHH – National Emission Standards for Hazardous Air Pollutants From 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.

Non-Applicable Requirements	Reason for Non-Applicability
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. 68 - Accidental Release Prevention Requirements: Risk Management Programs [40 C.F.R. 68.112(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, CPF-1, a crude petroleum and natural gas extraction 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.
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.
Activities subject to 40 C.F.R. 61, Subpart M – Standard for Demolition and Renovation (40 C.F.R. 61.145)	
40 C.F.R. 61, Subpart A – General Provisions; 40 C.F.R. 61.05(a) - Prohibited Activities; 40 C.F.R. 61.07 - Application for Approval of Construction or Modification; 40 C.F.R. 61.09 -Notification of Startup	Owners or operators of demolition and renovation operations are exempt from the requirements of 40 C.F.R. 61.05(a), 61.07, and 61.09.[ref. 40 C.F.R. 61.145(a)(5)]
40 C.F.R. 61.10 - Source Reporting and Waiver Request	Demolition and renovation operations are exempt from 40 C.F.R. 61.10(a).[ref. 40 C.F.R. 61.153(b)]
40 C.F.R. 61.13 -Emission Tests; 40 C.F.R. 61.14 - Monitoring Requirements	Emission tests or monitoring is not required under the standards for demolition and renovation.[40 C.F.R. 61.145]

Non-Applicable Requirements	Reason for Non-Applicability
All Combustion Turbines	
40 C.F.R. 60, Subpart KKKK – Standards of Performance for Stationary Combustion Turbines	Construction, modification, or reconstruction of each turbine commenced prior to the applicability date of February 18, 2005. 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	The oil and natural gas field production facility portion of CPF-1 includes the stationary combustion turbines and is not a major source of HAPs as defined under 40 C.F.R. 63.6175 of Subpart YYYY. In addition, turbines located on the North Slope of Alaska are categorically exempt from 40 C.F.R. 63, Subpart YYYY.
All Reciprocating IC Engines	
40 C.F.R. 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	Each IC engine was manufactured prior to the April 1, 2006 rule applicability date (see 40 CFR 60.4200(a)(2)(i)) and has not been modified or reconstructed after July 11, 2005 (see 40 CFR 60.4200(a)(3). The Subpart IIII permit shield only applies to currently installed units until modified, reconstructed or replaced.
All Heaters and Boilers	
40 C.F.R. 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial/ Commercial/Institutional Boilers and Process Heaters	Under Subpart DDDDD, the heaters and boilers are components of the oil and natural gas production field facilities. These facilities are area sources of HAPs as defined under 40 C.F.R. 63.7575 of Subpart DDDDD.
All Heaters	
40 C.F.R. 63, Subpart JJJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers at Area Sources	These units are not "boilers" as defined in 40 C.F.R. 63.11237. The stationary source does not have any affected equipment (boilers).
Stationary Engines Subject to NESHAP Subpart ZZZZ Existing Engines - EU ID(s) 19, 20, 22 - 28, 64, 65, and 66 (G-701-A, G-701-B, P-1A02, P-1F02, P-1G02, P-1L02, P-1Q02, P-1R02, P-1Y02, KS5010A, KS5010B, KS5010-1)	
40 C.F.R. 63.6600, 40 C.F.R. 63.6601, and 40 C.F.R. 63.6602, Subpart ZZZZ - Emission Limitations	The stationary source is not a major source of HAP emissions as defined under 40 C.F.R. 63.6675 of Subpart ZZZZ.
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 and/or rated at ≤500 bhp.
40 C.F.R. 63.6610 and 40 C.F.R. 63.6611, Subpart ZZZZ – Testing and Initial Compliance Requirements	The stationary source is not a major source of HAP emissions as defined under Subpart ZZZZ.
40 C.F.R. 63.6650(g), Subpart ZZZZ – Reporting Requirements	Reporting requirement only applies to "new" or reconstructed stationary RICE which fire landfill or digester gas. These engines are liquid fuel fired.
40 C.F.R. 63.6655(b), (c), Subpart ZZZZ - Recordkeeping Requirements	These engines do not fire landfill or digester gas and a CEMS or CPMS is not required.
Stationary Engines Subject to NESHAP Subpart ZZZZ All Existing Non-Emergency Engines - EU IDs 64 - 66 KS5010A, KS5010B, KS5010-1)	
40 C.F.R. 63.6625(f), Subpart ZZZZ – Monitoring, Installation, Collection, Operation and Maintenance Requirements	These are not emergency engines.
40 C.F.R. 63.6640(f), Subpart ZZZZ – Continuous Compliance Demonstration	These are not emergency engines.
40 C.F.R. 63.6655(f), Subpart ZZZZ - Recordkeeping Requirements	These engines are not emergency engines and are not required to limit hours of operation per 40 C.F.R. 63.6640(f).

Non-Applicable Requirements	Reason for Non-Applicability
Stationary Engines Subject to NESHAP Subpart ZZZZ Existing Emergency Engines - EU IDs 19, 20, and 22 – 28 (G-701-A, G-701-B, P-1A02, P-1F02, P-1G02, P-1L02, P-1Q02, P-1R02, P-1Y02) Existing Non-Emergency Engine (hp≤300) - EU ID66 (KS5010-1)	
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 or non-emergency engines with a site rating of ≤300 bhp.
40 C.F.R. 63.6605(a), Subpart ZZZZ – General Compliance Requirements	Existing emergency engines and non-emergency engines rated at ≤300 bhp are not subject to any emissions limitations or operating limitations under Subpart ZZZZ.
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 or non-emergency engines rated at ≤300 bhp.
40 C.F.R. 63.6630, 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.
40 C.F.R. 63.6635, Subpart ZZZZ – Monitoring to Demonstrate Continuous Compliance	These requirements apply only to CI RICE subject to emissions or operational limits. There are no emissions or operational limits that apply to these engines.
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. 63.6640(a) & (b) and §63.6650(a) – (e), 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 or operational limit. There are no such limits that apply to these engines.
40 C.F.R. 63.6655(a), (d), Subpart ZZZZ - Recordkeeping Requirements	There are no emission standards or operational limits that apply to the 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).
Stationary Engines Subject to NESHAP Subpart ZZZZ Non-Emergency Engines (300<hp≤500) – EU IDs 64 and 65 (KS5010A, KS5010B)	
40 C.F.R. 63.6615 & Table 3, Subpart ZZZZ – Subsequent Testing	There are no subsequent performance testing requirements that apply to these engines because the engines are rated ≤500 bhp and are not located at a major stationary source of HAP emissions as defined under Subpart ZZZZ.

Non-Applicable Requirements	Reason for Non-Applicability
40 C.F.R. 63.6625(e), Subpart ZZZZ – Monitoring, Installation, Collection, Operation and Maintenance Requirements	These are not emergency engines and these engines are subject to a numerical emission limit.
40 C.F.R. 63.6630(b), Subpart ZZZZ – Initial Compliance Demonstration	There are no operating limitations that apply to these engines per Table 2b of 40 C.F.R. 63, Subpart ZZZZ.
40 C.F.R. 63.6635 and 63.6640(a), Subpart ZZZZ – Continuous Compliance Demonstration 40 C.F.R. 63, Subpart ZZZZ, Table 6	These engines are rated ≤500 bhp and are subject to a numerical emission limit. There are no methods specified in Table 6 of Subpart ZZZZ for this type of engine.
40 C.F.R. 63.6655(d) & (e), Subpart ZZZZ - Recordkeeping Requirements	There are no applicable requirements in Table 6 of Subpart ZZZZ for this type of engine. These are not emergency engines and they are not subject to any management practices (i.e., oil change, filter change, etc.) in Table 2d of Subpart ZZZZ.
40 CFR 63.9(b)(2), Subpart A – Initial Notification	Obsolete requirement – completed as required. (6/24/10 and 10/28/10 letters to EPA)
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 Emission Standards: Particulate Matter; 18 AAC 50.055(c) – Fuel-Burning Equipment Emission Standards: Sulfur Compound Emissions	Nonroad (mobile) internal combustion engines are not included in the definition of fuel-burning equipment (18 AAC 50.990).

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."

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

  Wet Bulb Temperature: can be measured using a sling psychrometer

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

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

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

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

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

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

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

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

Page No._____

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

Data Reduction:

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

Average Opacity Summary:

Set Number	Time			Opacity		
	Start	End		Sum	Average	Comments

Section 12. Material Balance Calculation

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

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

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

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

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

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

F. = 20.9 –[**vol%$_{dry}$O2, $_{exhaust}$**] = 20.9 - _____ = _____

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

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

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

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

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

The fuel weight percent (wt%) of sulfur is obtained pursuant to Conditions 16.1 and/or 16.2. The fuel weight percents of carbon and hydrogen are obtained from the fuel refiner.

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

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

[18 AAC 50.346(c)]

Section 13. Emission Factors

Table H – Emission Factors[33]

Type of Equipment	NO_X	SO_2	CO	PM	VOC
Gas Turbines EU IDs 1 - 3 and 8 - 13	The Permittee may use either the allowable short-term concentration if greater than the source test results, or the most recent representative source test data.	Actual monthly fuel gas H_2S concentration	The Permittee may use either the allowable short-term emission limit or 0.082 lb/MMBtu (Table 3.1-1, AP-42) if greater than the source test results, or most recent representative source test data	14.0 lb/MMscf	0.0021 lb/MMBtu (Table 3.1-2a, AP-42)
Gas Heaters EU IDs 16, 37 - 41, 43 - 45, and 48 - 50	The Permittee may use either the allowable short-term emission limit or AP-42 emission factor if greater than the source test results, or the most recent representative source test data.	Actual monthly fuel gas H_2S concentration	The Permittee may use either the allowable short-term emission limit or AP-42 emission factor if greater than the source test results, or the most recent representative source test data	2.5 lb/MMscf	None Applicable
Incinerator EU ID 36	100 lb/MMscf and 3 lb/ton refuse (Tables 1.4-1 and 2.1-12, AP-42)	Actual monthly fuel gas H_2S concentration and 2.5 lb/ton refuse (Table 2.1-12, AP-42)	84 lb/MMscf and 10 lb/ton refuse (Tables 1.4-1 and 2.1- 12, AP-42)	7.6 lb/MMscf and 7 lb/ton refuse (Tables 1.4-2, and 2.1-12, AP-42)	5.5 lb/MMscf and 3 lb/ton refuse (Tables 1.4-2 and 2.1-12, AP- 42)

[33] In circumstances where source test results are not yet determined, use of the short-term limit or AP-42 factors to estimate long-term emissions is acceptable.

Section 14. ADEC Notification Form[34]

Kuparuk Central Production Facility #1	**AQ0267TVP02**
Stationary Source Name	**Air Quality Permit No.**
ConocoPhillips 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

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

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

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

☐ Control Equipment Failure ☐ Schedule Maintenance/Equipment Adjustment

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

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

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

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

[34] Revised as of August 20, 2008.

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

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

☐ Fugitive Emissions ☐ Emission Limit Exceeded ☐ Other _____

☐ Marine Vessel Opacity ☐ Flaring _____

(f) Unavoidable Emissions:

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

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

Certify Report (Go to end of form.)

Section 2. Permit Deviations

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

☐ Emission Unit-Specific

☐ Failure to Monitor/Report

☐ General Source Test/Monitoring Requirements

☐ Recordkeeping/Reporting/Compliance Certification

☐ Standard Conditions Not Included in the Permit

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

☐ Generally Applicable Requirements

☐ Reporting/Monitoring for Diesel Engines

☐ 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 96.
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 %):
	H2S Sulfur Content (ppmv):
	Heat Content (MMBtu/1000 gal or MMBtu/MMscf):
	Heat Input (MMBtu/hr):
	Heat Output (MMBtu/hr):
	THROUGHPUT
	Total Amount:
	Summer %:
	Fall %:
	Winter %:
	Spring %:
	Days/Week of Operation:
	Weeks/Year of Operation:
	Hours/Day of Operation:
	Hours/Year of Operation:

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

Stack Description:	
	Stack Detail:
	ID:
	Type:
	Measurement Units:
	Base Elevation:
	Stack Height:
	Stack Diameter:
	Exit Gas Temp:
	Exit Gas Velocity:
	Actual Exit Gas Flow Rate:
	Data Source:
	Description:
	Latitude:
	Longitude:
	Location Description:
	Method Accuracy Description (MAD) Codes (as defined in 40 C.F.R. 51.50):
	Horizontal Reference Datum Code:
	Horizontal Accuracy (m):
	Horizontal Collection Method Code:

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)]