DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ0923TVP01 Issue Date: Public Comment - May 9, 2013

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, **Eni US Operating Co. Inc.**, for the operation of the **Nikaitchuq Development**.

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.

All currently applicable stationary source-specific terms and conditions of AQ Minor Permit No. AQ0923MSS09, processed concurrently with this permit have been incorporated into this operating permit

Citations listed herein are contained within 18 AAC 50 dated September 14, 2012 Register 203. All Federal regulation citations are from those sections adopted by reference in this version of regulation in 18 AAC 50.040 unless otherwise specified.

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

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
C.F.R. .....Code of Federal Regulations
The Act.....Clean Air Act
CO .....Carbon Monoxide
CISWI.....Commercial and industrial solid waste incineration
dscf .....Dry standard cubic foot
EPA .....US Environmental Protection Agency
EU.....Emission Unit
g/hp-hr .....grams per horsepower-hour
gr./dscf.....grain per dry standard cubic foot (1 pound = 7000 grains)
GPH.....gallons per hour
HAPs .....Hazardous Air Pollutants [HAPs as defined in AS 46.14.990]
ID.....Emission Unit Identification Number
kPa.....kiloPascals
LAER.....Lowest Achievable Emission Rate
MACT .....Maximum Achievable Control Technology [MACT as defined in 40 C.F.R. 63]
MMBtu/hr.....Million British thermal units per hour
MMSCF.....Million standard cubic feet
MR&R.....Monitoring, Recordkeeping, and Reporting
NESHAPs.....Federal National Emission Standards for Hazardous Air Pollutants [NESHAPs as contained in 40 C.F.R. 61 and 63]
NOx.....Nitrogen Oxides
NSPS .....Federal New Source Performance Standards [NSPS as contained in 40 C.F.R. 60]
O & M .....Operation and Maintenance
O_2 .....Oxygen
PAL .....Plantwide Applicability Limitation
PM.....Particulate Matter
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
psia .....Pounds per Square Inch (absolute)
PSD .....Prevention of Significant Deterioration
PTE .....Potential to Emit
SIC. .....Standard Industrial Classification
SO_2 .....Sulfur dioxide
TPH.....Tons per hour
TPY .....Tons per year
USLD .....ultra low sulfur diesel
VOC .....volatile organic compound [VOC as defined in 40 C.F.R. 51.100(s)]
VOL .....volatile organic liquid [VOL as defined in 40 C.F.R. 60.111b, Subpart Kb]
vol% .....volume percent
wt% .....weight percent

Section 1. Stationary Source Information

Identification

Permittee:		**Eni US Operating Co. Inc.** 3800 Centerpoint Drive Anchorage, Alaska 99505
Stationary Source Name:		**Nikaitchuq Development**
Location:		UTM Zone 6; Northing 6,035,548 m; Easting 1,656,839 m (NAD83)
Physical Address:		Oliktok Point 200 feet southeast of Kuparuk River Unit Seawater Treatment Plant
Owner:		**Eni US Operating Co. Inc.** 3800 Centerpoint Drive Anchorage, Alaska 99505
Operator:		**Eni US Operating Co. Inc.** 3800 Centerpoint Drive Anchorage, Alaska 99505
Permittee's Responsible Official:		Steve Massey, Alaska ENI Representative & Operations Manager 3800 Centerpoint Drive Anchorage, Alaska 99505 (907) 865- 3300 steve.massey@enipetroleum.com
Designated Agent:		Capitol Corporate Services Inc. 4318 Conifer Lane. Juneau, AK 99801
Stationary Source and Building Contact:		Larry Burgess, HSE Manager 3800 Centerpoint Drive Anchorage, Alaska 99505 (907 865-3300
Permit Contact:		Larry Burgess, HSE Manager 3800 Centerpoint Drive Anchorage, Alaska 99505 (907) 865- 3300
Process Description:	SIC Code:	1311 – Crude Petroleum and Natural Gas
	NAICS Code:	211111 – Crude Petroleum and Naturals Gas Extraction

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

Section 2. Emission Unit Inventory and Description

1. The Permittee is authorized to install and operate the emission units listed in Table A per the terms and conditions of this permit. Except as noted elsewhere in the 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 with one of the same nominal rating and fuel type. 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.

[AQ0923MSS09, Condition 1]
[18 AAC 50.040(j), 50.326(j)]
[40 C.F.R. 71.5(c)(3)]

Table A - Emission Unit Inventory

EU ID	Emission Unit Name	Emission Unit Description	Rating/Size	Fuel	Installation or Construction Date
On Shore Production					
1	Gas Turbine #1	Solar Taurus 70	7.52 MW	Fuel Gas	2010
2	Gas Turbine #2	Solar Taurus 70	7.52 MW	Fuel Gas	2011
32	Dual Fuel Turbine #3	Solar Taurus 70	7.52 MW	Fuel Gas	2010
		Solar Taurus 70	6.95 MW	Diesel	
33	Gas Turbine #4	Solar Taurus 70	7.52 MW	Fuel Gas	Unknown
3	Standby Generator Engine	MTU 16V 4000 G83	2,500 kW	Diesel	2009
4A	Process Safety Flare (Pilot & Purge Operation)	N/A	0.36 MMscf/day	Fuel Gas	Unknown
4B	Process Safety Flare (Low Pressure Emergency Operation)[5]	N/A	7 MMscf/day	Fuel Gas	Unknown
5	Various Tank #1	Process Tank	750 barrels	N/A	Unknown
6	Various Tank #2	Process Tank	750 barrels	N/A	Unknown
34	Various Tank #3	Process Tank	750 barrels	N/A	Unknown
35	Various Tank #4	Process Tank	750 barrels	N/A	Unknown
36	Various Tank #5	Process Tank	750 barrels	N/A	Unknown
37	Various Tank #6	Process Tank	750 barrels	N/A	Unknown
38	Various Tank #7	Process Tank	750 barrels	N/A	Unknown
39	Various Tank #8	Process Tank	750 barrels	N/A	Unknown
40	Various Tank #9	Process Tank	750 barrels	N/A	Unknown
41	Various Tank #10	Process Tank	750 barrels	N/A	Unknown
7	Diesel Storage Tank #1	Storage Tank	600 barrels	N/A	Unknown
42	Diesel Storage Tank #2	Storage Tank	600 barrels	N/A	Unknown
119	Diesel Storage Tank #3	Storage Tank	600 barrels	N/A	Unknown
8	Base Oil	Storage Tank	400 barrels	N/A	Unknown
43	Corrosion Inhibitor Tank	Storage Tank	600 barrels	N/A	Unknown
44	Antifoam Storage Tank	Storage Tank	200 barrels	N/A	Unknown

45	Scale Inhibitor Storage Tank	Storage Tank	200 barrels	N/A	Unknown
46	Emulsion Breaker Storage Tank	Storage Tank	200 barrels	N/A	Unknown
69	Boiler #1	Weil-McLain	0.935 MMBtu/hr	Diesel	Unknown
70	Boiler #2	Weil-McLain	0.935 MMBtu/hr	Diesel	Unknown
71	Boiler #3	Weil-McLain	0.935 MMBtu/hr	Diesel	Unknown
78	Construction Power Generator #1	Caterpillar 3616C Nonroad Engine	2,763 bhp	Diesel	Unknown
106	Standby Heater	Boiler	10.5 MMBtu/hr	Fuel Gas	Unknown
Nikaitchuq Operations Camp					
93	Standby Generator Reciprocating Engine	MTU/16V 2000 G84	1,115 kW	Diesel	2009
94	NOC Boiler #1	Weil –McLain 880	1.082 MMBtu/hr	Propane	Unknown
95	NOC Boiler #2	Weil –McLain 880	1.082 MMBtu/hr	Propane	Unknown
96	Camp Incinerator	Multiple chamber incinerator	300 lb/hr		November 9, 2011
97	Construction Power Generator #2	CAT C-32 Non-Road Engine	1,381 bhp	Diesel	Unknown
111	NOC Warm Storage Boiler #1	N/A	0.935 MMBtu/hr	Propane	Unknown
112	NOC Warm StorageBoiler #2	N/A	0.935 MMBtu/hr	Propane	Unknown
118	Gasoline Storage Tank[6]	Gasoline distribution facility	12,000 gallons	N/A	2013
Off-Shore Production					
47	Standby Generator #1	MTU 16V 4000 G83	3,351 bhp	Diesel	2010
48	Incinerator		300 lb/hr		October 18, 2011
49	Standby Generator #2	Caterpillar 3516C	3,635 bhp	Diesel	August 31, 2006[8]
50	Fire Water Pump	Deere 6068E	183 bhp	Diesel	2011
51	Diesel Storage Tank A	Storage Tank	750 barrels	N/A	Unknown
52	Diesel Storage Tank B	Storage Tank	750 barrels	N/A	Unknown
53	Diesel Storage Tank C	Storage Tank	750 barrels	N/A	Unknown
54	Crude Oil Storage Tank D	319	750 barrels	N/A	Unknown
55	Crude Oil Storage Tank E	Process Tank	750 barrels	N/A	Unknown
56	Corrosion Inhibitor Tank F	Process Tank	750 barrels	N/A	Unknown
57	Scale Inhibitor Tank G	Process Tank	400 barrels	N/A	Unknown
58	Emulsion Breaker Tank H	Process Tank	750 barrels	N/A	Unknown
59	Future Tank I	Process Tank	750 barrels	N/A	Unknown
60	Containment Oil / Base Oil Tank J	Process Tank	200 barrels	N/A	Unknown

61	Emulsion Breaker Tank K	Process Tank	750 barrels	N/A	Unknown
62	Future Tank L	Process Tank	750 barrels	N/A	Unknown
63	Disposal Fluids Tank M	Process Tank	1,000 barrels	N/A	Unknown
107	Drilling Support Boiler #1	N/A	1.9 MMBtu/hr	Diesel	Unknown
108	Drilling Support Boiler #2	N/A	1.9 MMBtu/hr	Diesel	Unknown
109	G&I Boiler #1	N/A	1.5 MMBtu/hr	Diesel	Unknown
110	G&I Boiler #2	N/A	1.5 MMBtu/hr	Diesel	Unknown
114	MI Tank Farm Boiler #1	Burnham FD-14	0.65 MMBtu/hr	Diesel	Unknown
115	MI Tank Farm Boiler #2	Burnham FD-14	0.65 MMBtu/hr	Diesel	Unknown
64	WIF Generator	Deere 6090 HF 485	422 bhp	Diesel	Unknown
68	Cement Pump Engine #1	Detroit Diesel 8V-71N	320 bhp	Diesel	Remanufactured 2008
116	Cement Pump Engine #2		320 bhp	Diesel	1980
117	Mud Pump Engine #3(NRE)	DEUTZ AG	Diesel	63 bhp	Unknown

Notes:

1. All engines are stationary unless noted as non-road engines.
2. The Permittee may install Waste Heat Recovery Units (WHRU) on the Gas Turbines (EUs 1, 2, 32, and 33) to provide process and space heat. The WHRU shall not include supplemental burners.
3. The Permittee shall not use EUs 5 and 6 (*not listed; off-spec crude oil tanks #1 and #2*) for routine flow-through of sales-quality crude oil.

[AQ0923MSS09, Table 1, Table Note b.]

4. N/A means Not Applicable or Not Available
5. The process safety flare (EU 4B, emergency operation) is rated at 50 MMscf/day for high pressure operation
6. EU 118 includes any cargo tank during delivery to the storage tank, and equipment as described in 40 C.F.R. 63.11112(a).
7. EU 49 was manufactured August 31, 2006. Eni installed the unit October 14, 2011 as a previously owned unit, and states that they ordered the unit after June 12, 2006. It therefore qualifies for the exemption of 40 C.F.R. 63.6590(c)(1).

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

2. The Permittee is authorized to operate two drilling rigs in accordance with the terms and conditions of this permit and the minor permit AQ0923MSS09.

[AQ0923MSS09, Condition 2, Date]
[18 AAC 50.040(j), 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

2.1. EUs 9 through 18, 74, and 75 (On-Shore Drilling Rig) presented in Table B are collectively referred to as the "Nabors 245E Drilling Rig"

a. The actual drilling rig operated may be similar or smaller than the Nabors 245E Drilling Rig. In all situations, the cumulative boiler / heater rating shall not exceed 19.3 MMBtu/hr and the cumulative engine rating shall not exceed 5,330 bhp.

Table B - On-Shore Development Drilling Rig

EU ID	Emission Unit Name	Emission Unit Description	Rating/Size	Installation or Construction Date
9	Cleaver Brooks #1	CB100-100	4.2 MMBtu/hr	Unknown
10	Cleaver Brooks #2	CB100-100	4.2 MMBtu/hr	Unknown
11	Tioga Rig Heater #1	1DF-21B0	4.2 MMBtu/hr	Unknown
12	Tioga Rig Heater #2	1DF-21B0	4.2 MMBtu/hr	Unknown
13	Tioga Rig Heater #3	1DF-11C0	2.5 MMBtu/hr	Unknown
14	Rig Engine #1	Caterpillar D399 Nonroad Engine	1,125 bhp	Unknown
15	Rig Engine #2	Caterpillar D399 Nonroad Engine	1,125 bhp	Unknown
16	Rig Engine #3	Caterpillar D399 Nonroad Engine	1,125 bhp	Unknown
17	Rig Engine #4	Caterpillar D399 Nonroad Engine	1,125 bhp	Unknown
18	General Motors	Caterpillar D353 Non-Road Engine	230 bhp	Unknown
74	Cummins Engine #1	Cummins Non-Road Engine	300 bhp	Unknown
75	Cummins Engine #2	Cummins Non-Road Engine	300 bhp	Unknown

Notes:

1. All engines are non-road engines.
2. EU IDs 18, 74, and 75 are listed in the application under Development Drilling Rig (Off-Shore). However, under Minor Permit AQ0923MSS09, they are part of the On-Shore Development Drill Rig. Use with the off shore rig would violate Condition 2.2.a.
3. All of the EUs listed in table are diesel-fired.

[40 C.F.R. 71.5(c)(3)]

2.2. EUs 98 through 105 (Off-Shore Development Drilling Rig) presented in Table C are collectively referred to as the "Doyon Drilling Rig (DDR)".

a. The actual drilling rig operated may be similar or smaller than the DDR. In all situations, the cumulative boiler/heater rating shall not exceed 15.1 MMBtu/hr and the cumulative engine rating shall not exceed 9,448 bhp.

Table C - Off-Shore Development Drilling Rig

EU ID	Emission Unit Name	Emission Unit Description	Rating/Size	Installation or Construction Date
98	Superior Boiler #1	Boiler	3.3 MMBtu/hr	Unknown
99	Superior Boiler #2	Boiler	3.3 MMBtu/hr	Unknown
100	Dick's Rig Heater #1	Heater	3.5 MMBtu/hr	Unknown
101	Dick's Rig Heater #2	Heater	5.0 MMBtu/hr	Unknown
102	CAT 3516 #1	Non-Road Engine	2,523 bhp	Unknown
103	CAT 3516 #2	Non-Road Engine	2,523 bhp	Unknown
104	CAT 3516 #3	Non-Road Engine	2,523 bhp	Unknown
105	CAT 3512 #1	Non-Road Engine	1,879 bhp	Unknown

1. All of the EUs listed in table are diesel-fired.
2. N/A means Not Applicable or Not Available

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

3. The Permittee is authorized to periodically, operate intermittent well servicing equipment listed in Table D in accordance with the terms and conditions of this permit and the minor permit application for AQ0923MSS09.[1]

3.1. EUs listed in Table D are collectively called "Workover Rig".

3.2. The actual Workover Rigs operated under this permit may be similar or smaller than the Workover Rig presented in Table D. In all situations, the cumulative boiler/heater rating of the EUs in the Workover Rig shall not exceed 15.5 MMBtu/hr, the cumulative engine rating of EUs in the Workover Rig shall not exceed 1,850 bhp, and the rating of portable flare shall not exceed 83 Mscf/hr.

[AQ0923MSS09, Condition 3]

[1] In all cases, intermittent well servicing equipment must be portable and operated on a periodic and temporary basis in a manner consistent with the nonroad engine rule adopted by reference in 18 AAC 50.100.

Table D - Partial List of Intermittent Well Servicing Equipment (Workover Rig)

EU ID	Emission Unit]Name	Emission Unit Description	Rating/Size	Installation or Construction Date
19	Peak Crane	Non-road engine	650 bhp	Unknown
20	Manitowoc Crane	Non-road engine	575 bhp	Unknown
23	Hot Oiler Boiler/Heater #1	N/A	6 MMBtu/hr	Unknown
24	Hot Oiler Boiler/Heater #2	N/A	9.5 MMBtu/hr	Unknown
113	Portable Flare	Flaring Fuel Gas	2 MMscf/day	Unknown

1. All of the EUs listed in table are diesel-fired except the portable flare.

[18 AAC 50.040(j), 50.326(j)]
[40 C.F.R. 71.5(c)(3)]

4. Label each EU listed in Table A with the EU ID within 30 days of installing the emission unit. Place the ID in a conspicuous location on or adjacent to the unit.

[AQ0923MSS09, Condition 4, Date]

5. Submissions of Information after Installation of Equipment: For EUs 61, 62, 63, 114, 115, 116, and 118 listed in Table A, submit to the Department's Fairbanks Office the following information within 30 days of installing the EU:

5.1. actual installation date;

5.2. serial number, model number;

5.3. vendor specification sheet.

[AQ0923MSS09, Condition 5, Date]

6. Emissions and Fuel Control Settings and Stacks of Turbines: For EUs 1, 2, 32, and 33, if the Permittee makes changes to the emission and fuel control settings and stacks, submit to the Department's Fairbank Office the emission and fuel control settings (as provided by the vendor) within 30 days of making the changes. The Permittee shall provide the revised settings and the reason for the revision in the operating report submitted under Condition 98 for that operating period.

[AQ0923MSS09, Condition 6, Date]

7. Emissions and Fuel Control Settings of Engines

7.1. For stationary diesel Internal Combustion Engines EUs 64, 68 and 116, submit as set forth in Condition 95 the emission and fuel control settings (as provided by the vendor) within 30 days of installing the EU, or of the effective date of this permit, whichever is later. Include for Department approval nitrogen oxides (NOx) and carbon monoxide (CO) emission factors representing the maximum capacity of each EU to emit these pollutants in accordance with Condition 25.1.b.

7.2. If the Permittee makes changes to the emission and fuel control settings on any of the EUs 3, 47, 49, 50, 64, 68, 93, and 116, the Permittee shall provide the revised settings, and the reason for the revision in the operating report submitted under Condition 98 for that operating period for Department approval.

[AQ0923MSS09, Condition 7, Date]

8. Prior to the start of production well drilling or upon subsequent revisions to the emission unit inventory of the selected drilling rig, submit as set forth in Condition 95:

8.1. The name of the selected drilling rigs (e.g., Nabors 245E, DDR);

8.2. an emission unit inventory listing each combustion unit in the drilling rig, along with the make/model and rating of each combustion unit;

8.3. the cumulative capacity of the Drilling Rig engines;

8.4. the cumulative capacity of the drilling rig boilers / heaters; and

8.5. a statement as to whether the selected drilling rig complies with Condition 2.1.a and Condition 2.2.a.

[AQ0923MSS09, Condition 8, Date]
[40 C.F.R. 71.6(a)(1)]

9. Submit a written Notice to the Department in the event a rig engine or work-over engine EU loses its non-road engine status (becomes a stationary source engine).

9.1. Label each stationary EU listed in Table B through Table D as a stationary EU within 30 days of EU status change. Place the ID in a conspicuous location on or adjacent to the unit.

[40 C.F.R. 71.6(a)(1)]

Section 3. State Requirements

Visible Emissions Standards

10. Industrial Process and Fuel-Burning Equipment Visible Emissions. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EUs 1, 2, 3, 4A, 4B, 32, 33, 47, 49, 50, 64, 68 through 71, 93 through 95, 106 through 112, and 114 through116 listed in Table A; EUs 9 through 13 listed in Table B; EUs 98 through 101 listed in Table C; and EUs 23, 24, and 113 listed in Table D to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

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

10.1. **Initial Compliance**.

a. Record the date of initial start-up for the EUs listed in Condition 10.1.a(i) - (iii).

(i) Diesel-fired EUs 9 - 12 listed in Table B, and 23 and 24 listed in Table D;

(ii) EU 32 while burning diesel; and

(iii) For diesel-fired EUs 64, 68, and 116 listed in Table A, the date they initially operate as stationary emission units.

b. No later than 90 days after initial start-up after the effective date of AQ0923MSS09, for EUs 9-12, 23, 24, 64, 68, 116, and, while burning diesel fuel, 32, verify initial VE compliance of the EU by conducting a Method 9 VE source test. If a Method 9 VE source test has been performed for the EU at this stationary source before the effective date of this permit, the Permittee may satisfy this condition by providing a copy of the surveillance records.

c. For each stationary EU listed in Condition 10.1.a, attach a copy of the surveillance records developed under Condition 10.1.b , as applicable, to the operating report required under Condition 98 for the period covered by the report.

d. Conduct all VE source tests in a manner consistent with Condition 86.

[AQ0923MSS09, Condition 9.1 - 9.3, Date]
[18 AAC 50.040(j), 50.326(j)]
[40 C.F.R. 71.6(a)(3)]

10.2. For EU IDs 3, 9 - 13, 23, 24, 47, 49, 50, 64, 68 - 71, 93, 98 - 101, 107 - 110,and 114 - 116, monitor, record and report in accordance with Conditions 12 - 14.

10.3. For EU IDs 1, 2, 33, 94, 95, 106, 111, and 112, burn only propane or fuel gas as fuel. Monitoring for these emission units shall consist of a statement in each operating report under Condition 98 indicating whether each of these emission units fired only gas. Report under Condition 97 if any fuel is burned other than gas.

10.4. For EU ID 32, monitor, record and report in accordance with Condition 15 and 34.

10.5. For EU IDs 4A, 4B, and 113, monitor, record and report in accordance with Condition 16.

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

11. Incinerator Visible Emissions. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, through the exhaust of EU IDs 48 and 96, 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)]

11.1. Observe incinerator emissions for 18 consecutive minutes to obtain a minimum of 72 observations in accordance with Method 9 of 40 C.F.R. 60, Appendix A, at least once every 3 calendar months after the effective date of this permit during which that incinerator operates. After two years, subsequent observations may be reduced to an annual observation while operating if no monthly observation exceeded the visible emission limit in Condition 11.

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

11.2. Record and report in accordance with Conditions 13.1 through 14.2.

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

Visible Emissions Monitoring, Recordkeeping and Reporting

Liquid Fuel-Fired Emission Units (EU IDs 3, 9, 10, 11, 12, 13, 23, 24, 32, 47, 49, 50, 64, 68 - 71, 93, 98 - 101, 107 - 110 and 114 through 116)

12. Visible Emissions Monitoring. The Permittee shall observe the exhaust of EU IDs 3, 9 - 13, 23, 24, 47, 49, 50, 64, 68 - 71, 93, 98 - 101, 107 - 110, 114 - 116 and, if required under Condition 15.2, EU ID 32 for visible emissions using the Method 9 Plan under Condition 12.1. The Permittee may for each unit elect to continue the visible emissions monitoring schedule in effect from the previous permit at the time a renewed permit is issued, if applicable.

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

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

a. **First Method 9 Observation.** For EU IDs 3, 9 - 13, 23, 24, 47, 49, 50, 64, 68 - 71, 93, 98 - 101, 107 - 110, and 114 - 116 observe exhaust for 18 minutes within six months after the issue date of this permit, or according to the schedule of Condition 10.1.b if that condition is used for compliance with Condition 10, whichever is later.

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

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

c. **Semiannual Method 9 Observations.** After observing emissions for three consecutive operating months under Condition 12.1.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.[2]

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

(i) Within 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.[2]

e. **Increased Method 9 Frequency.** If a six-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more observations are greater than 20 percent, then increase or maintain the 18-minute observation frequency for that emission unit to at least monthly intervals as described in Condition 12.1.b, until the criteria in Condition 12.1.c for semiannual monitoring are met.

13. Visible Emissions Recordkeeping. When required to monitor by any of Conditions 10.1, 10.2, 10.4, 11.1, or 15.2, 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)]

13.1. When using the Method 9 Plan of Condition 12.1,

a. the observer shall record

(i) the name of the stationary source, emission unit and location, emission unit type, observer's name and affiliation, and the date on the Visible Emissions Field Data Sheet in Section 11;

[2] For intermittent operations, emergency operations are exempt from the visible emissions observation deadlines associated with emission unit "operation" under this condition.

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

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

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

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

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

c. Calculate and record the highest 6-minute and, for diesel engines subject to Condition 18, 18-consecutive-minute averages observed.

14. Visible Emissions Reporting. When required to monitor by any of Conditions 10.1, 10.2, 10.4, 11.1, or 15.2, 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)]

14.1. Include in each stationary source operating report under Condition 98, include for the period covered by the report:

a. that the Method 9 visible-emissions plan of Condition 12 was used for each emission unit;

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

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

(ii) a summary to include:

(A) number of days observations were made;

(B) highest six-minute average observed; and

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

c. a summary of any monitoring or recordkeeping required under Condition 12 that was not done;

14.2. Report under Condition 97:

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

b. if any monitoring under Conditions 11 or 12 was not performed when required, report within three days of the date the monitoring was required.

15. VE & PM MR&R for Dual Fuel-Fired Emission Units. The Permittee shall monitor, record, and report the monthly hours of operation when operating on a back-up liquid fuel.

15.1. If EU ID 32 does not exceed 600 hours of operations per calendar year on a back-up liquid fuel, monitoring of compliance for visible emissions and particulate matter is not required for that emission unit and monitoring shall consist of an annual certification under Condition 99.

15.2. For EU ID 32, notify the Department and begin monitoring the affected emission unit according to Condition 12 no later than 45 days after the end of a calendar month in which the cumulative hours of operation for the calendar year exceed any multiple of 600 hours on a liquid fuel. If the observation exceeds the limit in Condition 12, monitor as described in Condition 18, as applicable by the type of emission unit. If the observation does not exceed the limit in Condition 10, no additional monitoring is required until the cumulative hours of operation exceed each subsequent multiple of 600 hours on liquid fuel during a calendar year[3].

15.3. When required to do so by Condition 10, 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 13, 14, 19 and/or 20 as applicable.

15.5. Report under Condition 97 if the Permittee fails to comply with Conditions 10 or 17

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

[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.

Flares (EU IDs 4A, 4B, and 113)

16. Visible Emissions Monitoring, Recordkeeping, and Reporting. For each of EU IDs 4A, 4B, and 113, the Permittee shall observe one daylight flare event[4] within 12 months of the preceding flare event observation. If no event exceeds 1 hour within that 12-month period, then the Permittee shall observe the next daylight flare event.

16.1. Monitor flare events using Method-9.

16.2. Record the following information for observed events:

a. the flare(s) EU ID number;

b. results of the Method-9 observations;

c. reason(s) for flaring;

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

e. volume of gas flared.

16.3. Monitoring of a flare event may be postponed for safety or weather reasons, or because a qualified observer is not available. If monitoring of a flare event is postponed for any of the reasons described in this condition, the Permittee shall include in the next operating report required by Condition 98, an explanation of the reason the event was not monitored.

16.4. Attach copies of the records required by Condition 16.2 with the operating report required by Condition 98 for the period covered by that report.

16.5. Report under Condition 97 whenever the opacity standard in Condition 10 is exceeded.

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

Particulate Matter Emissions Standards

17. Industrial Process and Fuel-Burning Equipment Particulate Matter. The Permittee shall not cause or allow particulate matter (PM) emitted from stationary EUs 1, 2, 3, 4A, 4B, 32, 33, 47, 49, 50, 64, 68 through 71, 93 through 95, 106 through 112, and114 through116 listed in Table A, EUs through 13 listed in Table B, EUs 98 through 101 listed in Table C, and EUs 23, 24, and 113 listed in Table D 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)]

17.1. Comply with Condition 10.1.

[Condition 11.1, Minor Permit No. AQ0923MMS09, Date]

[4] For purposes of this permit, a "flare event" is flaring of gas at a rate that exceeds the source's de-minimis pilot, purge, and assists gas rates for a minimum of 18 consecutive minutes. It does not include non-scheduled release operations, i.e. process upsets, emergency flaring, or de-minimis venting of gas incidental to normal operations.

17.2. For EU IDs 3, 9, 10, 11, 12, 13, 23, 24, 32, 47, 49, 50, 64, 68 - 71, 93, 98 - 101, 107 - 110, and 114 - 116, monitor, record and report in accordance with Conditions 18 - 23.

17.3. For EU IDs 1, 2, 33, 83 - 88, 94, 95, 106, 111, and 112, burn only gas as fuel. Monitoring for these emission units shall consist of a certification in each operating report under Condition 98 that each of these emission units fired only gas. Report under Condition 97 if any fuel other than gas is burned.

17.4. For EU IDs 4A, 4B, and 113, the Permittee must annually certify compliance under Condition 99 with the particulate matter standard.

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

PM Monitoring, Recordkeeping and Reporting

Liquid Fuel-Fired Engines and dual fuel Turbine (EU IDs 3, 32, 47, 49, 50, 64, 68, 93, and 116)

18. Particulate Matter Monitoring for Diesel Engines and Turbines. The Permittee shall conduct source tests on diesel engines and the dual fuel turbine, EU IDs 3, 32, 47, 49, 50, 64, 68, 93 and 116, to determine the concentration of particulate matter (PM) in the exhaust of an emission unit in accordance with this Condition 18.

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

18.1. Except as provided in Condition 18.4 within six months of exceeding the criteria of Condition 18.2.a or 18.2.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 18.2; to show that emissions are below those criteria, observe emissions as described in Condition 12.1 under load conditions comparable to those when the criteria were exceeded.

18.2. Conduct the test according to Condition 18.1 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.

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

18.4. The automatic PM source test requirement in Condition 18.1 and 18.2 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.

19. Particulate Matter Recordkeeping for Diesel Engines and Turbines. Within 180 calendar days after the effective date of this permit, the Permittee shall record the exhaust stack diameters of EU IDs 3, 32, 47, 49, 50, 64, 68, 93 and 116. Report the stack diameters in the next operating report under Condition 98.

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

20. Particulate Matter Reporting for Diesel Engines and Turbines. 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)]

20.1. Report under Condition 97

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

b. if one of the criteria of Condition 18.2 was exceeded and the Permittee did not comply with either Condition 18.1.a or 18.1.b, this must be reported by the day following the day compliance with Condition 18.1 was required;

20.2. Report observations in excess of the threshold of Condition 18.2.b within 30 days of the end of the month in which the observations occur, or as otherwise provided by Condition 97;

20.3. In each operating report under Condition 98, 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 18.2;

b. a summary of the results of any PM testing under Condition 18; and

c. copies of any visible emissions observation results (opacity observations) greater than the thresholds of Condition 18.2, if they were not already submitted.

For Liquid Fuel-Fired Boilers and Heaters (EU IDs 9 - 12, 13, 23, 24, 69, 70, 71, 98 - 101, 107 - 110, 114, 115)

21. Particulate Matter Monitoring for Liquid Fuel-Fired Boilers and Heaters. The Permittee shall conduct source tests on EU IDs 9 - 12, 13, 23, 24, 69, 70, 71, 98 - 101, 107 - 110, 114, 115 to determine the concentration of PM in the exhaust as follows:

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

21.1. Except as required under Condition 21.3, conduct a PM source test according to the requirements set out in Section 6 within 6 months after any time corrective maintenance fails to eliminate visible emissions greater than the 20 percent opacity threshold for two or more 18-minute observations in a consecutive six-month period.

21.2. 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.

21.3. The PM source test requirement in Condition 21 is waived for an emission unit if:

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

b. the Permittee takes corrective action and conducts two 18-minute visible emissions observations in a consecutive six-month period which show that the excess visible emissions described in Condition 21.1 no longer occur.

22. Particulate Matter Recordkeeping for Liquid Fuel-Fired Boilers and Heaters. The Permittee shall keep records of the results of any PM testing and visible emissions observations conducted under Condition 21.

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

23. Particulate Matter Reporting for Liquid Fuel-Fired Boilers and Heaters. The Permittee shall report as follows:

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

23.1. In each operating report required by Condition 98, 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 12.1.e.

b. a summary of the results of any PM testing and visible emissions observations conducted under Condition 21.

23.2. Report as excess emissions, in accordance with Condition 97, any time the results of a source test for PM exceeds the PM emission limit stated in Condition 17.

Sulfur Compound Emission Standards Requirements

24. Sulfur Compound Emissions. In accordance with 18 AAC 50.055(c), the Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EU IDs 1 - 3, 4A, 4B, 9 - 13, 23, 24, 32, 33, 47, 49, 50, 64, 68 - 71, 93 - 95, 98 - 101, and 106 - 116, 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)]

24.1. The Permittee shall comply with Condition 24 by complying with Condition 33.

[Condition 12.1, Minor Permit No. AQ0923MMS09, Date]

Pre-Construction[5] Permit Requirements

Requirements to Avoid PSD Classification

25. Carbon Monoxide (CO) and Nitrogen Oxide (NO_X) Limits:

[Condition 13, Minor Permit No. AQ0923MMS09, Date]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

25.1. CO and NOx emissions from stationary EUs 1, 2, 3, 4, 32, 33, 47, 48, 49, 50, 64, 68, 69, 70, 71, 93 through 96, 106 through 112, and 114 through116 listed in Table A; EUs 9 through 13 listed in Table B; EUs 98 through 101 listed in Table C; and EUs 23, 24, and 113 listed in Table D shall not exceed 225 tons per 12-month rolling period for each pollutant[6,7]. Monitor and record as follows:

a. Group A (Fuel Gas-fired Solar Taurus 70 Gas Turbines - EUs 1, 2, 32 (when firing fuel gas)), and 33. For Group A,

(i) Capture the *60-second average load* in percent of full load and the *60-second average inlet air temperature* in degrees Fahrenheit (ºF) for each EU during all periods of operation. Record for each calendar day, the minimum *60-second average load* and the minimum *60-second average inlet air temperature*. Data capture and recording may be electronic.

(ii) Except as noted below, round the *60-second average load* up to the next higher load and round the *60-second air inlet temperature* down to the next lower inlet air temperature presented in Table I and Table J of Appendix A. Consider all *60-second average loads* between 40 percent (inclusive) and 45 percent (exclusive), as 40 percent loads. Data rounding may be electronic.

(iii) Using the method described in Condition 25.1a(iv), determine the pounds (lb) of CO and NOx emitted during the 60-second period for the given *60-second average load* and *60-second average inlet air temperature*, as rounded under Condition 25.1a(ii). For each hour, sum the 60-second emissions to determine the hourly CO and NOx emissions in lb. Record the hourly CO and NOx emissions. Data selection and recording may be electronic.

[5] Pre-Construction refers to Minor Permits and Construction Permits.

[6] During the initial 12-months of operation, the Permittee shall treat the cumulative operation to date as a substitute for the 12-month rolling period.

[7] The emission unit groups in this condition also include any stationary emission units of the group type that is added to the stationary source during the permit term.

(iv) When calculating the CO and NOx emissions under Condition 25.1a(iii), the Permittee must use either the pounds per minute (lb/min) CO and NOx emission values listed in Table I and Table J of Appendix A or Department-approved substitute lb/min values. Use one of the following approaches if a parameter measured under Condition 25.1a is missing or suspect. Note which approach is used (if applicable) in the operating report submitted under Condition 98.

(A) If the *60-second average load* is unknown or suspect, use the largest lb/min CO and NOx emissions value in Table I and Table J of Appendix A (or the substitute worst-case lb/min value) for the given inlet air temperature; or

(B) If the 60-second average inlet temperature is unknown or suspect:

(1) use the largest lb/min CO and NOx emissions value in Table I and Table J of Appendix A (or the worst-case lb/min value) for the given load; or

(2) obtain the ambient temperature measured by the National Weather Service (NWS) at the Deadhorse Airport for each hour of missing inlet air temperature and use the NWS temperature in lieu of the inlet air temperature when calculating the pounds of CO and NOx under Condition 25.1a(iii).

(C) If the *60-second average load* and the *60-second average inlet air* temperature are both unknown or suspect, use 17.03 lb/min for CO emissions calculations and 0.78 lb/min for NOx emissions calculations or Department-approved substitute maximum lb/min values.

(v) By the end of each calendar month, calculate and record the *monthly CO and NOx emissions* (in lb) for the previous month for each EU by summing the CO and NOx emissions calculated in Condition 25.1a(iii) during the previous month. Calculation and recording may be electronic.

(vi) By the end of each calendar month, calculate and record the *cumulative monthly CO and NOx emissions* (in lb) for the previous month by summing all *monthly CO and NOx emissions* calculated in Condition 25.1a(v) for the previous calendar month. Calculation and recording may be electronic.

(vii) By the end of each calendar month, calculate and record the *12-month rolling CO and NOx emissions* in tons by summing the *cumulative monthly CO and NOx emissions* during the previous 12 months and dividing by 2,000 pounds per ton (lb/ton). Calculation and recording may be electronic.

b. Group B (Diesel Internal Combustion Engines - EUs 3, 47, 49, 50, 64, 68, 93, 116)[8]. For Group B,

(i) Before initial start-up of each EU, install a dedicated engine hour meter[9].

(ii) Calculate and record the *monthly CO and NOx emissions* in pounds (lb) of each EU, using one of the following methods. The Permittee does not need to use the same method for all EUs. Identify the method selected for each EU in the operating report submitted under Condition 98.

(A) Full Load Assumption Method

(1) For each calendar month, monitor and record the *total monthly hours of operation* of the EU.

(2) By the end of each month, calculate the *monthly CO and NOx emissions* (in lb) for the previous month by multiplying the *total monthly hours of operation* of each EU by a Department approved emission factor[10] in pounds per hour (lb/hr). If the *total monthly hours of operatio*n is unknown or suspect, use the total hours for that month.

(B) Hourly Load Tracking Method

(1) Install a dedicated electrical load meter on each EU.

(2) Monitor the *average electrical power* produced in kilowatts (kW) for each hour of operation of each EU. Record the number of hours each unit operated at that level, along with the *average electrical power*. The hours may be rounded up to the nearest whole integer and recorded in sequential ranges of produced power. Data capture and recording may be electronic.

(3) By the end of each calendar month, determine the *monthly CO and NOx emissions* in pounds (lb) for each EU for the previous month by summing the CO and NOx emissions associated with each recorded level of power production. Calculate the CO and NOx emissions associated with each level by multiplying the *average electrical power*, the hours operated at that level during the previous month, and Department approved CO and NOx emission factors in pounds per kilowatt-hr (lb/kWh).

[8] Group B also includes any additional nonroad engines that become stationary during the life of the permit

[9] EUs 64, 68, and 116 were previously nonroad engines. For these units, initial startup means the first startup after the effective date of this permit.

[10] Emission Factor determined from performance tests, provided by equipment manufacturer, listed in Table A-3, or derived from emission factors listed in Table A-3.

(iii) By the end of each calendar month, calculate and record the *cumulative monthly CO and NOx emissions* (in lb) by summing the *monthly CO and NOx emissions* during the previous calendar month.

(iv) By the end of each calendar month, calculate and record the *12-month rolling CO and NOx emissions* (in tons) by summing the cumulative monthly CO and NOx emissions calculated in Condition 25.1b(iii) during the previous 12 months and dividing by 2,000 lb/ton.

c. Group C (Flares – EUs 4A, 4B, and 113). For Group C,

(i) Monitor and record the volume of flared gas in standard million cubic feet (MMscf) on a monthly basis.

(ii) By the end of each month, calculate, and record the *monthly CO and NOx emissions* (in lb) by multiplying standard *million cubic feet (MMscf) of flared gas* by 472 pounds per million standard cubic foot (lb/MMscf) to calculate the CO emissions and by 86.7 lb/MMscf to calculate the monthly NOx emissions.

(iii) By the end of each calendar month, calculate and record the *12-month rolling CO and NOx emissions (in tons)* by summing the cumulative monthly CO and NOx emissions during the previous 12 months and dividing by 2,000 lb/ton.

d. Group D (Heaters and Boilers - EUs 9 through 13, 23, 24, 69, 70, 71, 94, 95, 98 through 101, 106 through 112, 114, and 115): For Group D,

(i) Determine and record the *monthly hours of operation* for each EU using one of the following two methods. The Permittee does not need to use the same method for all EUs. Identify the method selected for each EU in the operating report under Condition 98.

(A) Daily Operation Method

(1) For each calendar day, monitor and record whether the EU was operated.

(2) By the end of each calendar month, calculate the *monthly hours of operation* during the previous month by multiplying the days operated by 24 hours.

(B) Hourly Operation Method

(1) Monitor and record each start-up and shutdown time.

(2) By the end of each calendar month, review the start-up and shutdown times during the previous month and determine the *monthly hours of operation*. Round portions of an hour up to the next quarter hour fraction.

(ii) By the end of each calendar month, calculate, and record the *monthly CO and NOx emissions* (in lb) of each

(A) diesel-fired EU during the previous month by multiplying the EU's rating in million British thermal units per hour (MMBtu/hr) by 0.0417 lb/MMBtu and the *monthly hours of operation* determined under Condition 25.1d(i) for that month for monthly CO emissions and by 0.1667 lb/MMBtu for monthly NOx emissions .

(B) propane-fired EU during the previous month by multiplying the EU's rating in MMBtu/hr by 0.0829 lb/MMBtu and the *monthly hours of operation* determined under Condition 25.1d(i) for that month for monthly CO emissions and by 0.1436 lb/MMBtu for monthly NOx emissions calculations.

(C) fuel-gas fired EU during the previous month by multiplying the EU's rating in MMBtu/hr by 0.0834 lb/MMBtu and the hours of operation determined under Condition 25.1d(i) for that month and for the monthly CO emissions and by 0.0980 lb/MMBtu for the monthly NOx emissions.

(iii) By the end of each calendar month, calculate, and record the *cumulative monthly CO and NOx emissions* (in pounds) by summing the *monthly CO and NOx emissions* during the previous calendar month.

(iv) By the end of each calendar month, calculate, and record the *12-month rolling CO and NOx emissions* (in tons) by summing the *cumulative monthly CO and NOx emissions* calculated in Condition 25.1d(iii) during the previous 12-month and dividing the sum by 2,000 lb/ton.

e. Group E (Incinerators - EUs 48 and 96): For Group E,

(i) Determine and record the *monthly hours of operation* for each incinerator using one of the following two methods. The Permittee does not need to use same method for both incinerators. Identify the method selected for each incinerator in the operating report under Condition 98.

(A) Daily Operation Method

(1) For each calendar day, monitor and record whether the incinerator was operated.

(2) By the end of each calendar month, calculate the *monthly hours of operation* during the previous month by multiplying the days operated by 24 hours.

(B) Hourly Operation Method

(1) Monitor and record each start-up and shutdown time;

(2) By the end of each calendar month, review the start-up and shutdown times during the previous month and determine the *monthly hours of operation*. Round portions of an hour up to the next quarter hour fraction.

(ii) By the end of each calendar month, calculate, and record the *monthly CO and NOx emissions* (in lb) of each incinerator by multiplying the *monthly hours of operation* of each incinerator determined in Condition 25.1e(i) by 1.5 lb/hr for CO emissions and 0.45 lb/hr for NOx emissions.

(iii) By the end of each calendar month, calculate, and record the *cumulative monthly CO and NOx emissions* (in pounds) for by summing the *monthly CO and NOx emissions* during the previous calendar month.

(iv) By the end of each calendar month, calculate, and record the *12-month rolling CO and NOx emissions* (in tons) by summing the *cumulative monthly CO and NOx emissions* calculated in Condition 25.1e(iii) during the previous 12 months and dividing the sum by 2,000 lb/ton.

f. Group F (EU 32 when firing Liquid Fuel): For EU 32 when firing liquid fuel,

(i) *By the end of* each calendar month, calculate, and record the *monthly CO and NOx emissions* (in lb) by multiplying the *monthly hours of operation* determined in Condition 34.2.b by 10 *lb/hr for CO emissions and by 31.5 lb/hr for NOx emissions*.

(ii) *By the end of* each calendar month, calculate, and record the *cumulative monthly CO and NOx emissions* (in lb) by summing the *monthly CO and NOx emissions* during the previous calendar month.

(iii) By the end of each calendar month, calculate, and record the *12-month rolling CO and NOx emissions* (in tons) by summing the *cumulative monthly CO and NOx emissions* calculated in Condition 25.1f(ii) during the previous 12 months and dividing the sum by 2,000 lb/ton.

g. By the end of each calendar month, calculate and record the *Total 12-Month Rolling CO and NOx Emissions* (in tons) by adding the respective *12-month rolling CO and NOx emissions for Groups A through F* together.

25.2. Report the *Total 12-Month Rolling CO and NOx Emissions* calculated under Condition 25.1.g for each 12-month period as follows:

a. In the operating report described in Condition 98 and

b. As specified in Condition 97, if the emissions exceed 225 tons.

25.3. In each operating report submitted under Condition 98, report

a. For each month of the reporting period:

(i) The range of inlet air temperatures recorded for EUs 1, 2, 32 (when burning fuel gas and when burning liquid fuel) and 33 during the month: and

(ii) Any periods where the monitoring equipment or electronic algorithm required under Condition 25.1, was malfunctioning or inoperable. Specify the malfunctioning or inoperable item with each period.

[Condition 13, Minor Permit No. AQ0923MSS09, 8/11/2011]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

26. Verification of Turbine Emission Factors: Conduct a winter performance test on one of EUs 1, 2, 32 or 33 to verify the CO and NOx emission factors in Table J and Table I of Appendix A. Use the performance test procedures described in Condition 86.4. Winter is defined as the period between December 1st and April 1st.

26.1. Conduct the winter performance test no less than once every five years from the date of the previous test.

26.2. Except as noted in Condition 26.3, conduct the tests at the following turbine load[11] and inlet temperature conditions:

a. Inlet temperature greater than 0ºF and 80 percent to 90 percent load;

b. Inlet temperature greater than 0ºF and load less than 50 percent load;

c. Inlet temperature less than 0ºF and 80 percent to 90 percent load; and

d. Inlet temperature less than 0ºF and load less than 50 percent.

26.3. If the weather conditions do not allow for an inlet temperature of less than 0^{o}F, substitute the following for Condition 26.2.c and 26.2.d: Inlet temperature greater than 0^{o}F, and 60 to 70% load.

26.4. In the source test report submitted under Condition 92, compare the average CO emission factors in lb CO/min to the lb CO/min values listed Table J and the average NOx emission factors in lb NOx/min to the lb NOx/min values listed in Table I, for each load and inlet temperature condition tested under Condition 26.2. Propose for Department approval under Condition 27, revised lb/min emission factors if source test results exceed the lb/min values listed in Table I and Table J. All testing and reporting must be consistent with the following requirements.

a. Use Method 19 of 40 CFR 60, or an alternative approach approved by the Department, for converting all parts per million by volume (ppmv) values into lb/min values. Describe all assumptions (including the assumed standard conditions) and provide example calculations.

b. Express all NOx concentrations as NO_2

[11] Percent load is defined as the actual output divided by the maximum output that could be produced by the turbine under the given operation conditions (e.g., inlet air temperature), times 100 (to convert from a fractional to percent format).

c. For each individual test and test condition average, report the

(i) turbine inlet temperature,

(ii) the concurrent NWS temperature recorded at Deadhorse Airport,

(iii) the produced electrical power and percent load,

(iv) the NOx and CO concentration in ppmv,

(v) the percent excess oxygen in the exhaust,

(vi) the exhaust volume flow rate and exhaust temperature

(vii) the gas producer speed

(viii) the equivalent NOx and CO mass emission rate (in lb/min),

(ix) whether inlet preheating was used, and

(x) whether the turbine was operated in or out of SoLoNO$_x$ mode.

d. Measure and report the heat content from a representative fuel sample.

e. Note in the source test report whether the turbine was operating under the same emission and fuel control settings provided in Condition 6 or under a minor permit. If not, provide the emission and fuel control settings used during the performance tests.

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

27. Verification of Group B internal combustion engine emission factors: Verify the CO and NO$_x$ emission factors in Table K for EU 49 by either:

27.1. providing a copy of a manufacturer's certification that the EU 49 emission factors in Table K are certified for the life of the engine; or

27.2. conducting CO and NO$_x$ emission source tests, at three loads representative of EU operations under Section 6. Monitor fuel consumption and use 40 CFR 60 Method 19 or use Methods 1 through 4 to express measured emissions as an emission rate. Measure the operating parameter consistent with the emission factor given in Table I or J. Report the emission source test emission rate results for each load in units consistent with Table I and J respectively.

a. Conduct the initial test within one year of this permit's effective date.

b. Conduct subsequent testing no less than once every five years thereafter.

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

28. Procedure for Revised Emission Factors: The Permittee must submit all requests for revised emission factors in writing, and will be considered as a permit modification under AS 46.14. 285(a)(3).

28.1. The Department will treat all requests under Condition 26.4 to *increase* emission factors as a permit amendment. If approved, the Department will issue a written amendment, but will not reopen the permit for public comment.

28.2. The Department will treat all requests to *decrease* emission factors as an application to revise or rescind the terms and conditions of a Title I permit under 18 AAC 50.508(6).

[Condition 31, Minor Permit No. AQ0923MSS09, 10/01/2012]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

Ambient Air Quality Protection Requirements

29. General Ambient Air Quality Provisions. Comply with the following provisions to protect the NO_2, SO_2, and PM-10 air quality standards:

29.1. **Air Quality Boundary**: Establish and maintain the ambient boundaries using the procedures described in Condition 30.

29.2. Stack Configuration:

a. For all stationary fuel EUs listed in Table A, Table B, Table C, or Table D construct and maintain each exhaust stack with uncapped, vertical outlets – flapper valves, or similar, are allowed for these EUs as long as they do not hinder the vertical momentum of the exhaust plume.

(i) Eni may use capped stacks for the following units: EUs 69-71, 94, 95, and 106-112, and 114 - 116.

(ii) Intermittent well service equipment rated at less than 400 bhp or 2.8 MMBtu/hr (as applicable) are exempt from Condition 29.2.a.

b. Construct and maintain the exhaust stack for each EU listed in Table E with a release height (above ground) that meets or exceeds the indicated height.

Table E - Minimum Stack Height Requirements

Emission Unit ID	Emission Unit Description	Minimum Release Height Above Ground (m)
1, 2, 32, and 33	Fuel Gas Solar 70 Gas Turbines	28.0
3	MTU 16V 4000, 2,500 kW Standby Generator Engine - Reciprocating Engine	7.0
47	3,351 bhp Diesel Standby Generator	8.2
9-12,	Rig heaters, boilers - 4.2 MMBtu/hr	12.8
49	3,635 bhp Standby Generator No. 2	12.8
50	Fire Water Pump	11.7
14-17	Drilling Rig engines rated ≥ 400 hp	14.8
64	422 bhp Diesel WIF Generator Engine (NRE)	11.3
68	320 bhp Diesel Cement Pump Engine #1	6.4
78	Construction Camp Generator Engines #1 (NRE)	6.1
93	MTU 16V 2000 Standby Generator	6.0
94 and 95	1.086 MMBtu/hr Propane-Fired NOC Boilers	7.7
98 and 99	3.3 MMBtu/hr Diesel Superior Boilers	11.6
100	Diesel-fired Dick's Rig Heater #1	12.6
101	Diesel-fired Dick's Rig Heater #2	12.1
102, 103, and 104	2,523 bhp Diesel-fired Caterpillar 3516 Engines	13.0
105	1,879 bhp Diesel-fired Caterpillar 3512 Engine	12.2
106	10.5 MMBtu/hr Fuel Gas Standby Heater	8.0
116	WIF Cement Pump Engine No. 2 (NRE); 320	6.4

Table Notes:
Stack heights determined in air quality modeling performed for AQ0923MSS06.

c. Provide as-built drawings and/or photographs of each stack subject to Condition 29.2.b in the first operating report submitted under Condition 98.

29.3. **On-Site Housing**: If providing on-site housing, follow the procedures described in Condition 31.

[Condition 14, Minor Permit No. AQ0923MMS09, Date]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

30. Public Access Control Plan[12]. Establish and maintain the ambient air boundaries as follows:

30.1. Comply with the provisions contained in the November 26, 2012 "Nikaitchuq Project Public Access Control Plan" (as provided in Appendix B), or a subsequent written version approved by the Department that contains at least the following elements:

a. a scaled map that clearly shows the ambient air boundaries, coast line, spill response boat ramp, Kuparuk Seawater Treatment Plant, Oliktok Road, and warning sign locations;

b. ambient boundaries that are consistent with the land owner's authorization to preclude public access from the area within the boundaries;

[12] Public Access Control Plan as provided by Eni and presented in Appendix B. Eni revised the original plan.

c. defined methods of establishing and maintaining the boundary, such as surveillance and posting of strategically located warning signs (provide size, wording, and inspection/repair schedule);

d. the date of the Public Access Control Plan; and

e. the procedure for approaching unauthorized people who have crossed the ambient air boundary.

30.2. Post and maintain all warning signs described in the Public Access Control Plan as follows:

a. post all signs as stated in the Public Access Control Plan;

b. use a font, font size and contrast coloring that makes all lettering easy to read;

c. inspect and repair the signs according to the schedule described in the Public Access Control Plan; and

d. keep all signs free of nearby visible obstructions (including wind-blown snow).

[Condition 15, Minor Permit No. AQ0923MMS09, Date]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

31. Comply with the provisions contained in the November 6, 2009 "Eni Local Policy" (as provided in Appendix C), or a subsequent written version approved by the Department that contains at least the following elements:

31.1. a statement specifying that the worker housing area is for official business / worker use only; and

31.2. a statement specifying that the on-site workers are on 24-hour call.

[Condition 16, Minor Permit No. AQ0923MMS09, Date]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

32. Annual Average NO_2 and SO_2 Ambient Air Quality Protection: Protect the Annual Average NO_2 and SO_2 ambient air quality standards by:

32.1. Limiting the operation of EUs listed in Table F as follows:

a. Install a dedicated engine hour meter on each EU listed in Table F.

b. For each calendar month, monitor and record the total hours of operation during the month of each EU listed in Table F.

c. By the end of each month, calculate and record the cumulative hours of operation during the previous 12 months for each EU listed in Table F. During the initial 12 month of operation, use the operation period to date as a substitute for the 12-month period.

d. Report the hours recorded under Condition 32.1.b and 32.1.c with the report required under

(i) Condition 98 for each month covered by the reporting period;

(ii) Condition 97 if the operation hours exceed the limits listed in Table F.

Table F - Annual Operating Limits of Emission Units

EU	Description of EU	Operating Limit
3	2,500 kW MTU 16V 4000 Diesel-fired Generator	2,000 hr/yr
14-17	1,125 bhp Diesel-fired Rig Engine #1 through #4, Caterpillar D399	6,570 hr/yr each
49	3,635 bhp Diesel-fired Standby Generator Engine #2	2,000 hr/yr each
50	183 bhp Diesel-fired Fire Water Pump Engine	100 hr/yr
78 and 79	2,763 bhp Diesel-fired Construction Power Generators, CAT 3616C	1,500 hr/yr each
93	1,495 bhp Diesel-fired MTU 16V 2002 Standby Generator	500 hr/yr
113	Portable Fuel Gas Flare rated at 83 Mscf/hr	30 MMscf/yr

32.2. Limiting the operation of the Workover Rig to 55 days per consecutive 12-month period as follows:

a. For each calendar month in which the Workover Rig is on site, monitor and record the total days of operation during the month. Days of operation includes movement between wellheads but does not include transportation to and from the Nikaitchuq onshore and offshore pads.

b. By the 15th of each calendar month, calculate and record the cumulative days of operation during the previous 12 months. During the initial 12 months of operation, use the operating period to date as a substitute for the 12-month period.

c. Report the days recorded under Condition 32.2.a in the report required under

(i) Condition 98 for each month of the reporting period; and

(ii) Condition 97 if the days exceed the limit specified in Condition 32.2.

[Condition 17, Minor Permit No. AQ0923MMS09, Date]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

33. Annual, 24-hr, and 3-hr Average SO_2 Ambient Air Quality Protection. Protect the Annual, 24-hr, and 3-hr Average SO_2 ambient air quality standards as follows:

33.1. For EUs 1, 2, 4, 32 (while burning natural gas), 33, and 106 burn only natural gas with hydrogen sulfide (H_2S) content not exceeding 250 ppmv (on an instantaneous basis at standard conditions).

a. Monitor compliance monthly using ASTM D 4810-88, D 4913-89, or Gas Producers Association 2377-86, or an alternative analytical method approved by the Department.

b. Report the results of the monitoring conducted under Condition 33.1.a, under

(i) Condition 98 for each month of the reporting period, as applicable; and

(ii) Condition 97 if H_2S content of the fuel gas exceeds 250 ppmv at any time.

33.2. For diesel burning EUs, burn only ultra low sulfur diesel (USLD) fuel[13].

a. For each shipment of fuel, keep receipts that specify fuel grade and amount.

b. Clearly label the fuel tanks for the diesel burning EUs as "ULSD Only".

c. Report under

(i) Condition 98 the sulfur content of the diesel fuel burned in each of the diesel-burning EUs; and

(ii) Condition 97 if the sulfur content of the diesel fuel burned in any diesel-burning emission unit exceeds 15 ppmw.

33.3. For propane burning EUs, burn only propane with sulfur content not exceeding 185 ppmw.

a. For each shipment of fuel, keep receipts that specify fuel grade and amount.

b. Clearly label the fuel tanks for the propane burning EUs as "Propane Only".

c. Report under

(i) Condition 98 the sulfur content of the fuel burned in each of the propane-burning EUs; and

(ii) Condition 97 if the sulfur content of the propane fuel burned in any propane-burning emission unit exceeds 185 ppmw.

[Condition 18, Minor Permit No. AQ0923MMS09, Date]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

[13] USLD is diesel fuel with sulfur content not exceeding 15 parts per million by weight (ppmw).

34. Limit to Avoid Source Testing When Operating EU 32 on Diesel Fuel

34.1. Limit the use of diesel fuel in EU 32 to no more than 600 hours per 12 consecutive months .

34.2. Monitor, record and report as follows:

a. Install, maintain and operate a non-resettable hour meter on EU 32.

b. Monitor and record monthly operating hours for EU 32 when using diesel fuel except when conducting a source test required under Condition 34.2.e(iii).

c. By the end of each calendar month, add the previous month's total operating hours for EU 32 when using USLD to the previous 11 months' total operating hours of EU 32 when USLD was used.

d. Include the records of the 12 month rolling totals recorded in Condition 34.2.c in the Operating Report required under Condition 98.

e. If the 12 month rolling total diesel fuel consumption for EU 32 recorded in Condition 34.2.c exceeds the limits in Condition 34.1:

(i) report as a permit deviation under Condition 97;

(ii) within 60 days after the permit deviation report under Condition 34.2.e(i) is due, submit to the Department a complete plan for conducting a source test to verify NOx and CO emission factors specified in Condition 25.1.f using the applicable test methods set out in 40 CFR Part 60, Appendix A. The Permittee may propose alternative test methods if it can be shown to be of equivalent accuracy, and will ensure compliance with the applicable standards or limits. The Department must approve the source test plan prior to the test date;

(iii) conduct a source test within 180 days of Department approval of the plan submitted under Condition 34.2.e(ii);

(iv) within 60 days after completion of the source test required under Condition 34.2.e(iii), submit the results, to the extent practical, in the format set out in Section 6; and

(v) in the source test report submitted under Condition 34.2.e(iv) compare the NOx and CO emissions factors in lb/min to the NOx and CO emission factors specified in Condition 25.1.f. Propose for Department approval under Condition 27 revised NOx and CO emission factors in lb/min if source test results exceed the NOx and CO emission factors specified in Condition 25.1.f.

[Condition 21, Minor Permit AQ0923MSS09,]

Insignificant Emission Units

35. 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:

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

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

35.2. **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)]

35.3. **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)]

35.4. General MR&R for Insignificant Emission Units

a. The Permittee shall submit the certification of compliance of Condition 99 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 98 if an emission unit is insignificant because of actual emissions less than the thresholds of 18 AAC 50.326(e) and actual emissions become greater than any of those thresholds; and

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

[18 AAC 50.346(b)(4)]

Section 4. Federal Requirements

Emission Units Subject to Federal NSPS, Subpart A

36. NSPS Subpart A Notification. For any affected facility[14] or existing facility[15] 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]

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

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

36.2. 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]

36.3. the date of a continuous monitoring system performance demonstration, postmarked not less than 30 days prior to such date;

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

36.4. the anticipated date for conducting the opacity observations required by 40 C.F.R. 60.11(e)(1), including, if appropriate, a request for the Department to provide a visible emissions reader during a performance test, postmarked not less than 30 days prior to such date.

[40 C.F.R. 60.7(a)(6), Subpart A]

37. NSPS Subpart A Startup, Shutdown, & Malfunction Requirements. The Permittee shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of EU IDs 1, 2, 32, 33 48, and 96, any malfunctions of associated air-pollution control equipment, or any periods during which a continuous monitoring system or monitoring device for EU IDs 1, 2, 32, 33 48, or 96 is inoperative.

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

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

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

38. NSPS Subpart A Excess Emissions and Monitoring Systems Performance Report. The Permittee shall submit to the Department and to EPA a written "excess emissions and monitoring systems performance report " (EEMSP)[16] any time a limit in Condition 54, or a limit in Condition 44 for which continuous emission monitoring is being conducted, has been exceeded as described in this condition. Submit the EEMSP reports with the summary report form as required in Condition 39. Written reports of excess emissions shall include the following information:

[18 AAC 50.040(a)(1)]
[40 C.F.R. 60.7(c), Subpart A]
[40 C.F.R. 60.4375(a)]

38.1. The magnitude of excess emissions computed in accordance with 40 C.F.R. 60.13(h), any conversion factors used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period.

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

38.2. Identification of each period of excess emissions that occurred during startup, shutdown, and malfunction of EU IDs 1, 2, 32, 33, 48, and 96; the nature and cause of any malfunction, and the corrective action taken or preventative measures adopted.

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

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

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

38.4. A statement indicating whether or not any excess emissions occurred or the CMS was inoperative, repaired, or adjusted, at any time during the reporting period.

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

39. NSPS Subpart A Summary Report Form. The Permittee shall submit to the Department and to EPA one "summary report form" in the format shown in Figure 1 of 40 C.F.R. 60.7 (see Attachment A) for each pollutant monitored for EU IDs 1, 2, 32, 33, 48, and 96. The report shall be submitted semiannually, postmarked by the 30th day following the end of each 6-month period, except when more frequent reporting is specifically required by an applicable subpart, case-by-case basis, or the EPA, as follows:

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

39.1. 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 a summary report form **unless** the EEMSP report described in Condition 38 is requested, or

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

[16] The Federal EEMSP report is not the same as the State excess emission report required by Condition 97.

39.2. If the total duration of excess emissions for the reporting period is one percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is five percent or greater of the total time for the reporting period, then submit a summary report form **and the EEMSP** described in Condition 38.

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

40. NSPS Subpart A Performance (Source) Tests. Except as provided in Condition 47.9, the Permittee shall conduct initial source tests according to Section 6 and as indicated in this condition on any affected facility within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after initial startup, and at such other times as may be required by EPA, and shall provide the Department and EPA with a written report of the results of the source test. The Permittee shall:

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

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

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

40.2. Conduct source tests under conditions specified by EPA to be based on representative performance of EU IDs 1, 2, 32, 33,48, and 96 as applicable.

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

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

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

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

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

41. 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 47, 48, 49, 50, 93, 96, and 106, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. The Administrator will determine whether acceptable operating and maintenance procedures are being used based on information available, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance records, and inspections of these emission units.

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

42. 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 49, 50, 53, 54 nothing in 40 C.F.R. Part 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether EU IDs 1, 2, 32, 33, 47, 48, 49, 50, 93, 96, and 106, 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]

43. 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 49, 50, 53, 54. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard that is based on the concentration of a pollutant in the gases discharged to the atmosphere.

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

Steam Generating Units Subject to NSPS Subpart Dc

44. NSPS Subpart Dc Notification Requirement. The Permittee of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by 40 C.F.R. 60.7 (Condition 36). This notification shall include:

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

44.1. The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

[40 C.F.R. 60.48c(a)(1), Subpart Dc]

44.2. If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under 40 C.F.R. 60.42c, or 40 C.F.R. 60.43c.

[40 C.F.R. 60.48c(a)(2), Subpart Dc]

44.3. The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

[40 C.F.R. 60.48c(a)(3), Subpart Dc]

44.4. Notification if an emerging technology will be used for controlling SO_2 emissions.

[40 C.F.R. 60.48c(a)(4), Subpart Dc]

45. NSPS Subpart Dc Fuel Consumption. For EU ID 106, the Permittee shall record the amounts of each fuel combusted during each day and maintain the records consistent with Condition 93,

45.1. As an alternative to meeting the requirements of Condition 45, the owner or operator of an affected facility that combusts only natural gas or fuel gas to demonstrate compliance with the SO_2 standard may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

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

Incinerators Subject to NSPS Subpart Ec

46. Subpart Ec Exemption Requirements - Composition of Wastes Burned in Incinerators: Limit the amount of hospital wastes, medical wastes, and infectious wastes combusted in each incinerator, EUs 48 and 96, to less than 10 percent by weight of the wastes and fuels combusted on a calendar quarter basis in each incinerator. Monitor, record, and report as follows:

46.1. Keep records on a calendar quarter basis of the weight of hospital waste, medical waste, infectious waste, and all other fuels and wastes combusted in each incinerator.

46.2. At the end each of calendar month, calculate and record the percent by weight of hospital wastes, medical wastes, and infectious wastes in the total amount of material combusted in each incinerator.

46.3. Report in the operating report required by Condition 98, the percent of hospital wastes, medical wastes, and infectious wastes in the total wastes calculated in Condition 46.2 for each calendar quarter in the reporting period.

46.4. Report as a permit deviation in the Excess Emissions and Deviations Report required by Condition 97, if the percent of hospital wastes, medical wastes, and infectious wastes in the total wastes calculated in Condition 46.2 for each calendar quarter in the reporting period is not less than 10 percent.

[AQ0923MSS09, Condition 22, Date]
[40 C.F.R. 60.50c(c)]

Incinerators Subject to NSPS Subpart CCCC

47. Subpart CCCC Requirements. For EU IDs 48 and 96, the Permittee shall comply with Condition 47.1 to 47.12.

[40 C.F.R. 60.2010, 60.2015]

47.1. **Siting Analysis.** Except as provided in Condition 47.3, prepare a siting analysis consistent with 40 C.F.R. 60.2040 - 2050.

[40 C.F.R. 60.2040 - 60.2050]

47.2. **Waste Management Plan.** Except as provided in Condition 47.3, prepare a waste management plan consistent with 40 C.F.R. 2055 -2065.

[40 C.F.R. 60.2055 - 60.2065]

47.3. **Compliance Plan and Schedule for Siting Analysis and Waste Management Plan.**[17] For any requirement of Condition 47.1 or 47.2 for which the Permittee is not in compliance by the effective date of this permit:

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(c)(3) & 71.5(c)(8)(iii)(C)]
[40 C.F.R. 71.6(c)(4) & 71.5(c)(8)(iv)]
[40 C.F.R. 60.2190 - 60.2195]

a. Within 90 days of the effective date of this permit, comply with Condition 47.1 and 47.2, and submit to the EPA Administrator and the Department the information required under the notification requirements of 40 C.F.R. 60.2190 and 60.2195, as applicable.

(i) The Permittee may request in writing an extension to this schedule based on proposed changes to 40 C.F.R. 60, Subpart CCCC.

(ii) Submit progress reports to the Department with each semiannual operating report under Condition 98 until full compliance is achieved.

b. Submit a permit deviation report under Condition 97 if any provision of Condition 47.3.a is not met.

47.4. **Operator Training and Qualification.** Except as provided in Condition 47.4.a and 47.4.b, comply with the Operator Training and Qualification requirements of 40 C.F.R. 60.2070 through 60.2095.

[40 C.F.R. 60.2070 - 2095, 60.2100, & 60.2225]

a. If qualified operators are not accessible for more than 8 hours, but less than 2 weeks,

(i) EUs 48 and 96 may be operated by other plant personnel familiar with their operation who have completed a review of the information specified in 40 C.F.R. 60.2095(a) within the past 12 months; and

(ii) the Permittee shall record the period when all qualified operators were not accessible and include this deviation in the annual report as specified under 60.2210;

b. If no qualified operators are accessible for 2 weeks or more, the Permittee shall

[17] Subpart CCCC requires the siting plan, waste management plan, and operator training before commencing construction. However, because EPA stayed the March 21, 2011 revisions to CCCC, and the stay was removed by the D.C. Circuit Court January 9, 2012, the subpart did not apply to the emission units until after construction. Therefore a compliance schedule is added here. For operator training requirements, the permit relies on the notification provisions of 40 C.F.R. 60.2100 and 60.2225.

(i) notify the EPA Administrator and the Department of this deviation in writing within 10 days; in the notice, state what caused this deviation, what the Permittee is doing to ensure that a qualified operator is accessible, and when the Permittee anticipates that a qualified operator will be accessible; and

(ii) submit a status report to the Administrator and the Department every 4 weeks outlining what the Permittee is doing to ensure that a qualified operator is accessible, stating when the Permittee anticipates that a qualified operator will be accessible and requesting approval from the Administrator to continue operation of EUs 48 and 96;

(A) submit the first status report 4 weeks after notifying the EPA Administrator of the deviation under Condition 47.4.b(i);

(B) if the Administrator gives notification that the request to continue operation of the unit is disapproved, the unit may continue operation for 90 days, then must cease operation; operation of the unit may resume if

(1) a qualified operator is accessible as required under 40 C.F.R. 60.2070(a); and

(2) the Permittee notifies the Administrator that a qualified operator is accessible and that the Permittee is resuming operation.

47.5. **Classification as *Small Remote Incinerators*.** In each of EUs 48 and 96, the Permittee shall combust 3 tons per day or less solid waste, or, upon reporting waste combustion in excess of that amount under Condition 47.5.b, shall request a permit modification to add requirements applying to incinerators other than *small remote incinerators* as defined in 40 C.F.R., Subpart CCCC.

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1) & (3)]
[40 C.F.R. 60.2265]

a. The Permittee shall weigh and record the amount of solid waste fed to the incinerator. By the end of each month calculate the total quantity of waste combusted for the previous month and divide by the number of days in that month.

b. If the quantity of waste calculated under Condition 47.5.a exceeds 3 tons per day, report under Condition 97.

c. In the Operating Report of Condition 98, include the greatest daily average combusted during the period covered by the report.

47.6. **Emission Limitations.** For EUs 48 and 96, including any bypass stack or vent, comply with the emission limitations of 40 C.F.R. 60, Subpart CCCC, Table 8. The Permittee shall comply at all times, consistent with 40 C.F.R. 60.2145(a). For an exceedance of these standards caused by a malfunction, the Permittee may assert an affirmative defense consistent with 40 C.F.R. 60.2120.

[40 C.F.R. 60.2105(a), 60.2120, 60.2145(a), & Subpart CCCC Table 8]

47.7. **Operating Limitations.** Operating limitations of Condition 47.7.b through 47.7.e apply at all times except during startups, shutdowns, and malfunctions. Malfunctions must last no longer than three hours.

[40 C.F.R. 60.2110, 60.2115, & 60.2120]

a. Install monitoring equipment according to Condition 47.10 and establish corresponding operating limitations according to Condition 47.7.b to 47.7.e.

b. If a wet scrubber, electrostatic precipitator activated carbon injection, or selective non-catalytic reduction is used to comply with Condition 47.6,

(i) establish operating limits during the performance test of Condition 47.8 consistent with 40 C.F.R. 60.2110(a), (d), (e), or (f), as appropriate; and

(ii) meet the operating limits established during the initial performance test 60 days after the CISWI unit reaches the charge rate at which it will operate, but no later than 180 days after its initial startup.

c. If a fabric filter is used to comply with Condition 47.6, comply with 60.2110(c)

d. If a wet scrubber, electrostatic precipitator, or fabric filter is not used to comply with the emission limitations, and if compliance with the particulate matter emission limitation under Condition 47.6 is not determined with a particulate matter continuous emission monitoring system, maintain opacity to less than or equal to 10 percent opacity (1-hour block average).

e. If an air pollution control device other than a wet scrubber, activated carbon injection, selective non-catalytic reduction, fabric filter, or an electrostatic precipitator, or if emissions are limited in some other manner, including material balances, to comply with the emission limitations under Condition 47.6:

(i) petition the EPA Administrator for specific operating limits to be established during the initial performance test and continuously monitored thereafter; the petition must include the items listed in 40 C.F.R. 60.2115(a) - (e);

(ii) do not conduct the initial performance test until after the petition has been approved by the Administrator.

47.8. **Initial Performance Test.** Conduct an initial performance test as required under 40 C.F.R. 60.2125 and 60.2105[18] to determine compliance with emission limitations in Condition 47.6 and the opacity limit in Condition 47.7.d, and to establish the operating limitations of Condition 47.7. All performance tests must consist of a minimum of three test runs conducted under conditions representative of normal operations. Tests must be conducted and the results of the tests used according to 40 C.F.R. 60.2125, and Subpart CCCC Table 8.

[40 C.F.R. 60.2125(a), 60.2130, 60.2135, 60.2140, & Subpart CCCC Table 8]

47.9. **Compliance Plan and Schedule for Initial Performance Testing and Initial Air Pollution Control Device Inspection.[19]** No later than 180 days after the effective date of this permit, conduct the initial performance test of Condition 47.8, and perform the initial control device inspection of Condition 47.10.f. Within 10 operating days after an air pollution control device inspection, the Permittee shall complete all necessary repairs unless the Permittee obtains written approval from the Department establishing a date whereby all necessary repairs must be completed.

[40 C.F.R. 60.2140, 60.2141]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(c)(3) & 71.5(c)(8)(iii)(B)]

47.10. Demonstrating Continuous Compliance - Performance Tests and Continuous Monitoring Equipment, Methods, and Parameters.

[40 C.F.R. 60.2141(b), 60.2145, 60.2150, 60.2165, 60.2230]

a. For opacity if required under Condition 47.7.d, and for the pollutants listed in 40 C.F.R. Subpart CCCC Table 8 except carbon monoxide, either:

(i) Conduct an performance test consistent with 40 C.F.R. 60.2145(b) annually according to 60.2150 or on a different schedule according to 60.2155 or 60.2160, or

(ii) For any of the pollutants listed in (A) to (E) of this Condition 47.10.a(ii), use a continuous emission monitoring system as follows:

(A) for SO_2, monitor consistent with 40 C.F.R. 60.2145(s) and (u), and 60.2165(l),

(B) for particulate matter, monitor consistent with 40 C.F.R. 60.2145(u) and 60.2165(h),

[18] 40 C.F.R. 60.2105 references Subpart CCCC Table 8, which includes performance test requirements.

[19] The initial performance test is required by **§** 60.2140 within 60 days after reaching the normal charging rate but no later than 180 days after initial startup. The initial air pollution control device inspection is required by **§** 60.2141 60 days after installation of the control device and reaching normal charging rate, but no later than 180 days after the control device's initial startup. Because these provisions were stayed until January 9, 2012, if based on when normal charging rates are achieved the due dates may have occurred before EUs 48 and 96 were actually subject to the Subpart. Therefore, Condition 47.9 establishes an alternative compliance date 180 days after the effective date of the permit. 180 days is intended to allow enough time to approve any alternative operating limitations, if applicable.

(C) NO_X, monitor consistent with 40 C.F.R. 60.2145(t) and (u), and 60.2165(k),

(D) for dioxin/furan, monitor consistent with 40 C.F.R. 60.2145(u), and 60.2165(i),

(E) for mercury, monitor consistent with 40 C.F.R. 60.2145(u), and 60.2165(j),

b. Demonstrate continuous compliance with the carbon monoxide emission limit using a carbon monoxide continuous emission monitoring system according to the requirements of 40 C.F.R. 60.2145(g)(1) - (2) and (u), and 60.2165(o).

c. Continuously monitor the operating parameters of Condition 47.7, according to 40 C.F.R. 60.2145(c) and 60.2170.

d. Burn only the same types of waste used to establish operating limits during the performance test.

e. Perform an annual visual emissions test for ash handling.

f. If an air pollution control device is used to comply with Condition 47.6 or 47.7.d,

(i) conduct an initial and annual inspections of the air pollution control device to include:

(A) inspection of air pollution control device(s) for proper operation, for annual inspections, no more than 12 months following the previous air pollution control device inspection,

(B) development of a site-specific monitoring plan consistent with 40 C.F.R. 60.2145(k) and Condition 47.10.g,

(ii) within 10 operating days following an air pollution control device inspection, complete all necessary repairs, or obtain written approval from the Department establishing a date whereby all necessary repairs must be completed.

g. For each continuous monitoring system required under this condition, develop a site-specific monitoring plan consistent with 40 C.F.R. 60.2145(l), and submit it to the EPA Administrator for approval.

h. If using a wet scrubber or fabric filter to comply with Condition 47.6 or 47.7.c, comply with the monitoring equipment and parameter monitoring requirements of 40 C.F.R. 60.2165(a) or (b) as appropriate.

i. If using activated carbon injection, comply with 40 C.F.R. 60.2165(d).

j. If using selective non-catalytic reduction, comply with 40 C.F.R. 60.2165(e).

k. If using something other than a wet scrubber, activated carbon injection, selective non-catalytic reduction, or an electrostatic precipitator to comply with emission limitations under Condition 47.6 or 47.7.c, comply with 40 C.F.R. 60.2165(c).

l. If an operating limitation of Condition 47.7 requires the use of a flow metering system, comply with 40 C.F.R. 60.2145(m).

m. If an operating limitation of Condition 47.7 requires the use of a pressure monitoring system, comply with 40 C.F.R. 60.2145(n).

n. If an operating limitation of Condition 47.7 requires the use of a pH monitoring system, comply with 40 C.F.R. 60.2145(o).

o. If an electrostatic precipitator is used to comply with Condition 47.6 or 47.7.d, use a secondary electric power monitoring system. Comply with 40 C.F.R. 60.2145(p) and 40 C.F.R. 60.2165(f).

p. If an operating limitation of Condition 47.7 requires the use of a monitoring system to measure sorbent injection rate (*e.g.*, weigh belt, weigh hopper, or hopper flow measurement device), comply with 40 C.F.R. 60.2145(q).

q. If a fabric filter bag leak detection system is used to comply with the requirements Subpart CCCC, install, calibrate, maintain, and continuously operate the system in compliance with 40 C.F.R. 60.2145(r).

r. The use of a bypass stack at any time is an emissions standards deviation for particulate matter, HCl, Pb, Cd, Hg, NO_X, SO_2, and dioxin/furans. If EU 48 or 96 has a bypass stack, install, calibrate (to manufacturers' specifications), maintain, and operate a device or method for measuring the use of the bypass stack including date, time and duration.

s. If the Permittee ceases combusting solid waste but continues to operate EU 48 or 96, comply with 40 C.F.R. 60.2230(b).

47.11. **Record Keeping.** Keep the records of 40 C.F.R. 60.2175, as applicable, for at least 5 years. All records must be available onsite in either paper copy or computer-readable format that can be printed upon request, unless an alternative format is approved by the EPA Administrator.

[40 C.F.R. 60.2175, 60.2180]

47.12. **Reporting.** Submit the following reports to the Department consistent with Condition 95, and to the EPA Administrator in a format consistent with 40 C.F.R. 60.2235.

[40 C.F.R. 60.2200, 60.2205]

a. Within 60 days following the initial performance test, a test report consistent with 40 C.F.R. 60.2200.

b. In the operating report of Condition 98, the information described in 40 C.F.R. 60.2210, 60.2215, and 60.2220, as appropriate.

Compression Ignition Engines CI-ICE Subject to NSPS Subpart IIII

48. NSPS Subpart IIII Requirements. For EU IDs 3, 47, 49, and 93, the Permittee shall comply with any applicable requirement of 40 C.F.R. 60, Subpart IIII for stationary compression ignition (CI) internal combustion engine (ICE) whose construction[20], modification[21], or reconstruction[22] commences after July 11, 2005, and for EU ID 50, commences after July 1, 2006.

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

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.4200(a), 60.4206, & 60.4211(a)]

48.2. Comply with the applicable provisions of Subpart A as specified in Table 8 to Subpart IIII.

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

49. NSPS Subpart IIII Fuel Requirements. The Permittee shall comply with the following:

49.1. For EU IDs 3, and 93, shall comply with the applicable fuel requirements in 40 C.F.R. 60.4207, as provided under 40 C.F.R. 60.4216 for engines operated in Alaska, as follows:

a. use diesel fuel that meets the requirements of 40 C.F.R. 80.510(b) for non-road diesel fuel.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 60.4207(a), 60.4207(b) – (d) & 60.4216(d)]
[40 C.F.R. 80.510(a) & (b), Subpart I]

50. NSPS Subpart IIII Emission Standards. The Permittee shall comply with the applicable emission standards for EU IDs 3, 47, 49, 50, and 93, as listed below.

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

50.1. For EU ID 49, the Permittee shall comply with

[20] For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.
[21] As defined in 18 AAC 50.990(59).
[22] As defined in 40 C.F.R. 60.15, adopted by reference in 18 AAC 50.040(a)(1).

a. the emission standards in Table 1 to NSPS Subpart IIII:

(i) For hydrocarbons, 1.0 g/hp-hr;

(ii) For NO_X, 6.9 g/hp-hr;

(iii) For carbon monoxide, 8.5 g/hp-hr; and

(iv) For PM, 0.40 g/hp-hr; or

b. as allowed by 40 C.F.R. 60.4216(c).

[40 C.F.R. 60.4204(a), 60.4216(c), & Table 1 Subpart IIII]

50.2. EU IDs 3, 47, 50, and 93 must be certified by the manufacturer to meet the standards specified in Table G.

[40 C.F.R. 60.4211(c), Subpart IIII]

a. The Permittee shall install and configure the engines according to the manufacturer's emission-related specifications, except as provided in 40 C.F.R. 60.4211(g).

Table G - Citations for Emissions Standards
EUs 3, 47, 50, and 93

Emission Unit	Rating	Manufacture Date	Subject to Emission Standards In:
3	2.5 mw	2009	60.4204(b), 4201(b), Subpart IIII, Table 1, > 750 hp
47	3,351 bhp	2010	60.4204(b), 60.4201(b), 40 C.F.R. 60 Subpart IIII Table 1, > 560 KW, or 60.4216 (c)
50	183 bhp	2011	60.4205(c), 40 C.F.R. 60, Subpart IIII Table 4
93	1115 kw	2009	60.4204(b), 60.4201(a), 40 C.F.R. 89.112 Table 1, > 560 KW, Tier 2 and 89.113

[40 C.F.R. 60.4204(b) & 4201(a) - (b) and Table 1, Subpart IIII]
[40 C.F.R. 89.112 &113]
[40 C.F.R. 1039, Subpart B]

51. NSPS Subpart IIII Monitoring and Recordkeeping. The Permittee shall meet the monitoring requirements, as follows:

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(i & ii)]
[40 C.F.R. 60.4209(b), Subpart IIII]
[40 C.F.R. 60.4209(a), Subpart IIII]

51.1. For any engine with a diesel particulate filter, install a backpressure monitor for the filter that notifies the owner or operator when the high backpressure limit of the engine is approached.

a. Keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

[40 C.F.R. 60.4209(b) & 60.4214(c), Subpart IIII]

51.2. For EU ID 49, demonstrate compliance with Condition 50.1 according to one of the methods specified in Condition 51.2.a through 51.2.e:

a. Purchasing an engine certified according to 40 C.F.R. Part 89 or 40 C.F.R. Part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications;

b. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in Section 6 and these methods must have been followed correctly;

c. Keeping records of engine manufacturer data indicating compliance with the standards; and

d. Keeping records of control device vendor data indicating compliance with the standards.

e. Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 40 C.F.R. 60.4212, as applicable.

[40 C.F.R. 60.4211(b), Subpart IIII]

51.3. For EU ID 3, and for EU 49 if it is not certified consistent with Condition 51.2.a, keep records of the information in Condition 51.3.a through 51.3.d:

a. The notification required under 40 C.F.R. 60.4214(a)(1) and all documentation supporting the notification;

b. Maintenance conducted on the engine;

c. If the stationary CI ICE is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards; and

d. If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

[40 C.F.R. 60.4214(a)(2), Subpart IIII]

51.4. Keep records of the instructions, procedures, and settings under Condition 48.1.

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

52. NSPS Subpart IIII Reporting. The Permittee shall report the following in the first operating report of Condition 98 after the effective date of this permit:

52.1. if applicable provide

a. a copy of the records required in Condition 51.3.c or 51.3.d;

b. the method of compliance used to demonstrate compliance with Condition 51.2; and

c. the records required in Condition 51.1, and 51.2.

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

Turbines Subject to NSPS Subpart KKKK

53. NSPS Subpart KKKK NO_X Standard. For EU IDs 1, 2, 32, and 33, the Permittee shall meet the NO_X emission limit of 150 ppm at 15 percent O_2 or 1,100 ng/J of useful output (8.7 lb/MWh).

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.4320(a), 60.4400(a), & Table 1, Subpart KKKK]

53.1. **Monitoring**. Except as provided by the waiver of Condition 53.1.c, the Permittee shall perform annual performance tests (no more than 14 months following the previous performance test) in accordance with Condition 53.4 to demonstrate continuous compliance for each of EU IDs 1, 2, 32, and 33, as follows:

a. If the NO_X emission result from the performance test is less than or equal to 75 percent of the NO_X emission limit in Condition 53, the Permittee may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test).

b. If the results of any subsequent performance test exceed 75 percent of the NO_X emission limit in Condition 53, the Permittee must resume annual performance tests.

c. **Performance Test Waiver.** In each annual performance test, the Permittee may elect to test only one of the EUs 1, 2, 32, and 33 if the Permittee satisfies the provisions of Condition 53.1.c(i) through 53.1.c(iii).

(i) The Permittee shall conduct performance tests under this condition of different turbines, so that at the end of four tests (which may include the initial performance test of 40 C.F.R. 60.8), all four turbines will be tested.

(ii) In the event any performance test result is greater than 50 percent of the NO_X NSPS of 150 ppm, the Permittee will conduct performance test on the remaining turbines within 60 days of that test. Pursuant to 40 C.F.R. 60.4375(b), a written report of the performance test should be submitted to the EPA Administrator.

(iii) Once the Permittee has demonstrated that the NO_X performance test for all four of these emission units is less than or equal to 50 percent of the standard, the Permittee may continue to use the waiver provided by this Condition 53.1.c.

[40 C.F.R. 60.4340, Subpart KKKK]
[Performance test waiver in Letter from Krishna Viswanathan, EPA Region 10 to Larry Burgess, Eni, 3/15/12]

53.2. **Recordkeeping**. The Permittee shall keep records of all performance tests data in accordance with Condition 93.

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

53.3. **Reporting**. For EU IDs 1, 2, 32, and 33, the Permittee shall submit a written report of the results of each performance test required under Condition 53.1 and 53.4 before the close of business on the 60th day following the completion of the performance test and in accordance with Condition 98.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii)]
[40 C.F.R. 60.4375(b); Subpart KKKK]

53.4. **Performance Tests**. The Permittee shall conduct NO_X performance tests, as provided in Condition 53.1.a and 53.1.b.

a. The Permittee may use either one of the two methodologies described below in Condition 53.4.a(i) or 53.4.a(ii) to conduct performance test. For each test run:

(i) Measure the NO_X concentration (in ppm), using EPA Method 7E or EPA Method 20 in Appendix A of 40 C.F.R 60. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in Appendix A of 40 C.F.R 60, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the NO_X emission rate:

$$\mathbf{E = \frac{(1.194 \times 10^{-7}) \times (NO_x)_c \times (Q_{std})}{P}}$$

Where:

E	=	NO_X emission rate, in lb/MWh
1.194 X 10^{-7}	=	conversion constant, in lb/(dscf-ppm)
NO_X	=	average NO_X concentration for the run, in ppm
Q_{std}	=	stack gas volumetric flow rate, in dcf/hr
P	=	gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the

sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to 40 C.F.R. 60.4350(f)(2); or

(ii) Measure the NO_X and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in Appendix A of 40 C.F.R. 60. Concurrently measure the heat input to the unit, using a fuel flow meter(s), and measure the electrical and thermal output of the unit. Use EPA Method 19 in Appendix A of 40 C.F.R. 60 to calculate the NO_X emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in 40 C.F.R. 60.4350(f) to calculate the NO_X emission rate in lb/MWh.

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

c. Notwithstanding Condition 53.4.b, test at fewer points than are specified in EPA Method 1 or EPA Method 20 in Appendix A 40 C.F.R. 60 if the following conditions are met:

(i) Perform a stratification test for NO_X and diluent pursuant to the procedures specified in Section 6.5.6.1(a) through (e) of Appendix A of 40 C.F.R. 75;

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

(A) If each of the individual traverse point NO_X concentrations is within ±10 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±5 ppm or ±0.5 percent CO_2(or O_2) from the mean for all traverse points, then you may use three points (located either 16.7, 50.0 and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The three points must be located along the measurement line that exhibited the highest average NO_X concentration during the stratification test; or

(B) Sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NO_X concentrations is within ±5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±3 ppm or ±0.3 percent CO_2 (or O_2) from the mean for all traverse points;

d. The Permittee shall conduct performance test, as follows:

(i) The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load.

(ii) The Permittee may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice; and

(iii) The Permittee must conduct three separate test runs for each performance test at a minimum time of 20 minutes per run.

e. Compliance with the applicable emission limit in Condition 53 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NO_X emission rate at each tested level meets the applicable emission limit in Condition 53.

f. The ambient temperature must be greater than 0 °F during the performance test.

[40 C.F.R. 60.4400, Subpart KKKK]

54. NSPS Subpart KKKK SO_2 Standard. The Permittee shall not burn in EU IDs 1, 2, 32, and 33 any fuel which contains total potential sulfur emissions in excess of 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input.

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

54.1. **Monitoring**. Monitor compliance with the standards listed in this condition as follows:

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(i)]
[40 C.F.R. 60.4360, 60.4365, 60.4370 Subpart KKKK]

a. Except as provided in Condition 54.1.b, the sulfur content of the fuel must be determined using the total sulfur methods described in 40 C.F.R. 60.4415 and Condition 54.2. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half the applicable limit, ASTM D4084, D4810, D5504, or D6228, or Gas Processors Association Standard 2377, which measure the major sulfur compounds, may be used.

b. The owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input. The owner or operator shall use one of the following sources of information to make the required demonstration:

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

(ii) Representative fuel sampling data, which show that the sulfur content of the gaseous fuel does not exceed 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input. At a minimum, the amount of fuel sampling data specified in 40 C.F.R. 75, Appendix D, Section 2.3.1.4 or 2.3.2.4 is required.

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

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

[40 C.F.R. 60.4370(a), Subpart KKKK]

(ii) **Gaseous fuel**. For owners and operators that elect not to demonstrate sulfur content using options in Condition 54.1.b, and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined and recorded once per unit operating day.

[40 C.F.R. 60.4370(b), Subpart KKKK]

(iii) **Custom schedules**. Notwithstanding the requirements of Condition 54.1.c(i), operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in 40 C.F.R. 60.4370(c)(1) and (c)(2), custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in Condition 54.1.c(i). The two custom sulfur monitoring schedules set forth in 40 C.F.R. 60.4370(c)(1)(i) through (iv) and 60.4370(c)(2) are acceptable without prior Administrative approval.

[40 C.F.R. 60.4370(c), Subpart KKKK]

54.2. **Test Methods and Procedures**. If the owner or operator is required under Condition 54.1.b(i) or 54.1.c(iii) to periodically determine the sulfur content of the fuel combusted in the turbine, the Permittee shall comply with the following:

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 60.4415(a) & (a)(1), Subpart KKKK]

a. Collect a representative fuel sample following ASTM D5287 for natural gas or ASTM D4177 for oil. Alternatively, for oil, follow the procedures for manual pipeline sampling in Section 14 of ASTM D4057.

b. Analyze the samples for the total sulfur content of the fuel using:

(i) For liquid fuels, ASTM D129, or alternatively D1266, D1552, D2622, D4294, or D5453; or

[40 C.F.R. 60.4415(a)(1)(i), Subpart KKKK]

(ii) for gaseous fuels, ASTM D1072, or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standard 2377.

[40 C.F.R. 60.4415(a)(ii), Subpart KKKK]

c. The fuel analyses required under Condition 54.2 may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency and shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test).

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 60.4415(a) & (a)(1), Subpart KKKK]

54.3. **Recordkeeping**. Keep records as required by Condition 54.1 and 54.2, and in accordance with Condition 93.

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

54.4. **Reporting**. For each affected unit that periodically determines the fuel sulfur content under Condition 54.1.a, the owner or operator shall submit reports of excess emissions and monitor downtime[23], in accordance with 40 C.F.R. 60.7(c) as summarized in Condition 38, except where otherwise approved by a custom fuel monitoring schedule. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction.

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii)]
[40 C.F.R. 60.4375(a), Subpart KKKK]

[23] Excess emissions and monitor downtime for SO_2 are as defined in 40 C.F.R. 60.4385.

55. NSPS Subpart KKKK General Compliance Monitoring. Monitor compliance as follows:

55.1. Operate and maintain EU IDs 1, 2, 32, and 33, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 60.4333(a), Subpart KKKK]

Emission Units Subject to Federal NESHAPS Subpart A

56. NESHAP Subpart A.

56.1. 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 Subpart ZZZZ Table 8.

56.2. 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 JJJJJJ.

Reciprocating Engines Subject to NESHAP Subpart ZZZZ

57. NESHAP Subpart ZZZZ - Engines Subject to NSPS Subpart IIII. For Emission Units 3, 47, 49, 50, and 93, which are located at an area source of HAPs, comply with the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII. No further requirements apply for these engines under Subpart ZZZZ.

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

58. NESHAP Subpart ZZZZ - Engines Not Accessible by the FAHS. For EU IDs 64, 68, and 116 the Permittee must do the following:

58.1. **Management Practices**: For EU IDs 64, 68, and 116, existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the FAHS must meet the management practices that are shown for stationary non-emergency CI RICE less than or equal to 300 HP in Table 2d to this subpart:

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

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

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

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 63.6603(b) & Table 2d(1), Subpart ZZZZ]

58.2. At the Permittee's discretion, comply with the optional oil analysis program of 40 C.F.R. 63.6625(i);

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 63.6625(i) Subpart ZZZZ]

58.3. Keep records of the maintenance conducted in order to demonstrate operation and maintenance of the stationary RICE and after-treatment control device (if any) according to Condition 58.1and 58.2. Keep each record readily accessible in hard copy or electronic form for at least 5 years. The records must be maintained onsite for a minimum of 2 years and can be maintained offsite for the remaining 3 years.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 63.10(b)(1)]
[40 C.F.R. 63.6655(e), and 63.6660, Subpart ZZZZ]

58.1. **NESHAP Subpart ZZZZ - General Requirements**. For EUs 64, 68, and 116 the Permittee shall at all times operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the EPA Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source;

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 63.6605(b), Subpart ZZZZ]

59. NESHAP Subpart ZZZZ - Notifications. For EUs 64, 68, and 116 the Permittee shall:

59.1. **General Notifications.** For EU 64, 68, and 116, submit all of the notifications listed under 40 C.F.R. 63.6645(a) that apply.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 63.6645(a), Subpart ZZZZ, 8/20/10]

60. NESHAP Subpart ZZZZ - Reporting.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii)]
[40 C.F.R. 63.6640, 63.6650(c) - (e), Table 7 #1& Table 8, Subpart ZZZZ]

60.1. **Deviations.** For EUs 64, 68, and 116 the Permittee shall report under Condition 97 each instance when the requirements of Conditions 58 through 59 are not met.

60.2. **Semiannual Reports.** Report to EPA, and to the Department as part of the semiannual operating report of Condition 98, according to the schedule in that condition, the information listed in 40 C.F.R. 63.6650(c) through (e), and each instance in which the requirements of 40 C.F.R. 63, Subpart ZZZZ, Table 8 are not met.

Gasoline Dispensing Facilities Subject to NESHAP Subpart CCCCCC

61. NESHAP Subpart CCCCCC Gasoline Dispensing Facilities (GDF). For EU 118, the Permittee shall comply with this condition upon startup, except as otherwise noted.

61.1. The dispensing of gasoline from a fixed gasoline storage tank at a GDF into a portable gasoline tank for the on-site delivery and subsequent dispensing of the gasoline into the fuel tank of a motor vehicle or other gasoline-fueled engine or equipment used within the area source is only subject to Condition 61.3.a.

[40 C.F.R. 63.11111(j)]

61.2. At all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 C.F.R. 63.11115(a)]

61.3. **Requirements for facilities with monthly throughput of 10,000 gallons of gasoline or more.**

[40 C.F.R. 63.11117, 63.11111(e)]

a. Do not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

(i) Minimize gasoline spills;

(ii) Clean up spills as expeditiously as practicable;

(iii) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;

(iv) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

b. Only load gasoline into the storage tank by utilizing submerged filling,[24] as specified in Condition 61.3.b(i) and 61.3.b(ii). The applicable distances shall be measured from the point in the opening of the submerged fill pipe that is the greatest distance from the bottom of the storage tank.

(i) Submerged fill pipes must be no more than 6 inches from the bottom of the tank.

(ii) Submerged fill pipes not meeting the specifications of Condition 61.3.b(i) are allowed if the owner or operator can demonstrate that the liquid level in the tank is always above the entire opening of the fill pipe. Documentation providing such demonstration must be made available for inspection by the Administrator's delegated representative during the course of a site visit.

c. Have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

d. Submit the applicable notifications as required under Condition 61.5.

61.4. **Throughput of 100,000 or More.** If the throughput of gasoline for EU 118 is 100,000 or for any calendar month, the Permittee must comply with the provisions of 40 C.F.R. 63.11118 for the life of the emission unit.

[40 C.F.R. 63.11111(i)]

61.5. **Notifications.**

[40 C.F.R. 63.11124(a)(1) & (2)]

a. **S**ubmit an Initial Notification that you are subject to the control requirements in Condition 61.3. The Initial Notification must contain the information specified in Condition 61.5.a(i) through 61.5.a(iii). The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in 40 C.F.R. 63.13.

(i) The name and address of the owner and the operator;

(ii) The address (i.e., physical location) of the GDF;

(iii) A statement that the notification is being submitted in response to 40 C.F.R. 63 Subpart CCCCCC and identifying the requirements in paragraphs (a) through (c) of 40 C.F.R. 63.11117 that apply.

[24] *Submerged filling* means, for the purposes of this condition, the filling of a gasoline storage tank through a submerged fill pipe whose discharge is no more than the applicable distance specified in Condition 61.3.b(i) from the bottom of the tank. Bottom filling of gasoline storage tanks is included in this definition. [40 C.F.R. 63.11132]

b. Submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in 40 C.F.R. 63.13, within 60 days of initial startup. The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facilities' monthly throughput is calculated based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If EU 118 is in compliance with the requirements of this Condition 61 at the time the Initial Notification required under Condition 61.5.a is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under Condition 61.5.a(i) - 61.5.a(iii).

61.6. **Recordkeeping. The Permittee shall keep the following records:**

[40 C.F.R. 63.11111(e), 63.11125(d)]

a. Recordkeeping to document monthly throughput beginning upon startup of EU 118;

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

c. Records of actions taken during periods of malfunction to minimize emissions in accordance with Condition 61.2, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

61.7. **Reporting.** The Permittee shall report to the Administrator, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with Condition 61.2, including actions taken to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred.

[40 C.F.R. 63.11126(b)]

61.8. **NESHAP Subpart A Requirements.** Comply with the applicable requirements of 40 C.F.R. 63, Subpart A, consistent with 40 C.F.R. 63, Subpart CCCCCC Table 3.

[40 C.F.R. 63.11130]

Industrial, Commercial, and Institutional Boilers Area Sources Subject to NESHAP Subpart JJJJJJ

62. NESHAP Subpart JJJJJJ Industrial, Commercial, and Institutional Boilers. For each new boiler, EU IDs 98, 99, and 107 - 115, the Permittee shall comply with the applicable work practice and management practice standards upon startup. For each existing boiler, EU IDs 9, 10, and 69 - 71, the Permittee shall comply with the applicable work practice and management practice standards no later than March 21, 2012[25].

[40 C.F.R. 63.11201(b) and Table 2, 40 CFR 63.1196(a)(1) and (c), Subpart JJJJJJ]

NESHAP Subpart JJJJJJ General Compliance Requirements

63. Operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment (if applicable), in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator or the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 C.F.R. 63.11205(a), Subpart JJJJJJ]

NESHAP Subpart JJJJJJ Work Practice and Management Practice Standards

64. The Permittee shall conduct tune-ups as follows:

64.1. For new boilers, EU IDs 98, 99, and 107 - 115, conduct the initial tune-up upon startup.

64.2. For existing boilers, EU IDs 9, 10, and 69 - 71, conduct the initial tune-up no later than March 21, 2012[26].

64.3. For new and existing boilers, after the initial tune-up, conduct biennially tune-ups no later more than 25 months after the previous tune-up.

[40 CFR 63.11196(a)(1) and (c) and 63.11201(a), 63.11223(a) and Table 2, Subpart JJJJJJ]

65. The Permittee shall conduct the initial and biennial tune-ups on each new and existing boiler as follows:

65.1. Inspect the burner, and clean or replace any components of the burner as necessary (the burner inspection may be delayed until the next scheduled unit shutdown, but it must be inspected at least once every 36 months),

65.2. Inspect the flame pattern and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications (if available),

[25] EPA issued a No Action Assurance Letter on March 12, 2012 and an extension to the No Action Assurance Letter on July 18, 2012 to extend the deadline to October 1, 2012 and then to December 31, 2012 or until a final rule is promulgated, whichever is later, for existing boilers.

[26] See Footnote 25.

65.3. Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly,

65.4. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.

65.5. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, (ppmv) and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as longs it is the same basis before and after the adjustments are made),

65.6. Maintain onsite and submit, if requested by EPA or the Department, the biennial report containing the information below:

a. The concentration of carbon monoxide (CO) in the effluent stream in ppmv and oxygen (O_2) in volume percent, measured before and after the tune-up of the boiler,

b. A description of any corrective actions taken as a part of the tune-up of the boiler, and

c. The type and amount of fuel used over the 12 months prior to the biennial tune of the boiler.

65.7. If a unit is not operating on the required date for the tune up, the tune up must be conducted within one week of startup.

[40 C.F.R. 63.11201(b), 63.11214(b), 63.11223(b), and Table 2, Subpart JJJJJJ]

NESHAP Subpart JJJJJJ Recordkeeping Requirements

66. The Permittee will keep the following records for a minimum of 5 years. The records must be maintained onsite for a minimum of 2 years and can be kept offsite for the remaining 3 years. Records must be maintained and readily available for expeditious review.

66.1. All notifications and reports that are submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted.

66.2. Records to document conformance with the work practices and management practices.

66.3. Records must identify each boiler, the date of tune-up, the procedures followed for the tune-up, and the manufacturer's specification to which the boiler was tuned.

66.4. Records documenting the fuel type(s) used monthly by each boiler, including, but not limited to, a description of the fuel, including whether the fuel has received a non-waste determination by Eni or EPA, and the total fuel usage amount with units of measure.

66.5. Records of the occurrence and duration of each malfunction of the boiler.

66.6. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions, including corrective actions to restore the malfunctioning boiler to its normal or usual manner of operation.

66.7. Records of all inspections and the information below:

a. The date, place, and time of the monitoring event.

b. Person conducting the monitoring.

c. Technique or method used.

d. Operation conditions during the activity.

e. Results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation.

66.8. Maintenance or corrective action taken.

[40 C.F.R. 63.11225(c) and (d), Subpart JJJJJJ]

NESHAP Subpart JJJJJJ Reporting Requirements

67. Notification Requirements. The Permittee shall submit a Notification of Compliance as follows:

67.1. A **Notification of Compliance** is required for new emission units EU IDs 98, 99, and 107 - 115, no later than 120 days after startup.

67.2. A **Notification of Compliance** is required for existing emission units EU IDs 9, 10, and 69 - 71, no later than July 19, 2012[27].

[40 CFR 63.11225(a)(4), Subpart JJJJJJ]

67.3. The Notification of Compliance for both existing and new boilers must certify compliance with the following statements:

a. "*This facility complies with the requirements in §63.11214 to conduct an initial tune-up of the boiler*."

b. "*This facility has had an energy assessment performed according to §63.11214(c).*" As set forth in §63.11214(c), the Permittee is not required to perform an energy assessment so this statement is not required.

[40 CFR 63.11225(a)(4), Subpart JJJJJJ]

[27] See Footnote 20.

67.4. For new and existing boilers, the Permittee must prepare a report by March 1st of each year, and submit to EPA and the Department only upon request, an annual compliance certification report for the previous calendar year. The report must be submitted by March 15th of each year if there was any instance the boiler experiences any deviations from the applicable requirements during the year. The report must include the following information:

a. Company name and address.

b. A statement by a responsible official, with the official's name, title, phone number, email address, and signature certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of NESHAP Subpart JJJJJJ.

c. If there are any deviations during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.

[40 C.F.R. 63.11225(b), Subpart JJJJJJ]

Other General Federal Conditions

Protection of Stratospheric Ozone

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

68.1. **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.

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

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

[18 AAC 50.040(d)]
[40 C.F.R. 82, Subpart G, §82.174 (b) - (d)]

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

[18 AAC 50.040(d)]
[40 C.F.R. 82, Subpart H, §82.270 (b)-(f)]

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

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

NESHAPs Applicability Determinations

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

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

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

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, 6/7/03]

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. 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 649.6 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), 50.035, 50.326(j)(1), 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., 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. The Permittee shall do the following for EU IDs 4A, 4B, 23, 24, 78, 94, 95, and 98 - 101:

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.

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

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.

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

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 source constructed or modified after November 1, 1982, except as authorized by a construction permit, Title V permit, or air quality control permit issued before October 1, 2004.

[18 AAC 50.055(g)]

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)]

81.1. **Monitoring**:

a. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 97.

b. As soon as practicable after becoming aware of a complaint that is attributable to emissions from the stationary source, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of Condition 81.

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

a. after an investigation because of a complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of Condition 81; or

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

81.3. **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.

81.4. **Reporting**. With each operating report under Condition 98, 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.

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

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 49, 50, 53, 54, 57, and 62 the Permittee shall take all reasonable steps to minimize levels of emissions that exceed the standard. Excess emissions reporting under Condition 97 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 97.

[18 AAC 50.235(a), 50.326(j)(4), & 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 an annual certification conducted under Condition 99.

[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.

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(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]

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

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

86.4. 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]

86.5. 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]

86.6. 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 by Method 9 Plan (Condition 12.1), or under Conditions 11.1 or 16. The Permittee is not required to comply with Condition 90 for the visible emission source tests of Conditions 10 and 12.

[18 AAC 50.345(a)]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(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 additionally certify the results in the manner set out in Condition 94. If requested in writing by the Department, the Permittee must provide preliminary results in a shorter period of time specified by the Department.

92.1. Include all information required under Condition 26.4, if applicable.

[18 AAC 50.040(j), 50.326(j), and 50.345(a) & (o)]
[40 C.F.R. 71.6(a)]

Section 7. General Recordkeeping and Reporting Requirements

Recordkeeping Requirements

93. 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, 40 C.F.R 71.6(a)(3)(ii)(B)]

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

93.2. 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

94. 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.

94.1. 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 94.1.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)]

95. 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 94.

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

96. 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)]

97. Excess Emissions and Permit Deviation Reports.

97.1. 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 of the end of the month in which the emissions or deviation occurs, except as provided in Condition 97.1.c(ii) and 97.1.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 97.1.c(i); and

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

97.2. When reporting either 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 13 of this permit. The Permittee must provide all information called for by the form that is used.

97.3. 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)]

98. 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 August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year.

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

98.2. If excess emissions or permit deviations that occurred during the reporting period are not reported under Condition 98.1, either

a. The Permittee shall identify

(i) the date of the deviation;

(ii) the equipment involved;

(iii) the permit condition affected;

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

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

b. When excess emissions or permit deviations have already been reported under Condition 97 the Permittee shall cite the date or dates of those reports.

98.3. The operating report must include a listing of emissions monitored under Conditions 12.1.e, 18, and 21 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

[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.

d. the monitoring result which triggered the additional monitoring.

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

99.1. 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 Condition 2 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;

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

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

100. NSPS and NESHAP Reports. The Permittee shall:

100.1. **Reports:** Attach to the operating report required by Condition 98 for the period covered by the report, a copy of any NSPS and NESHAPs reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10; and

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

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

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

101.1. Every third year by March 31 since the stationary source's potential to emit emissions for the previous calendar year exceed 100 TPY of NO_X or VOCs.

101.2. The Permittee shall commence reporting in 2015 for the calendar year of 2014, 2018 for calendar year 2017, etc.

101.3. Include in the report required by this condition, the required data elements contained within the form in Section 14 or those contained in Table 2A of Appendix A to Subpart A of 40 CFR 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) and18 AAC 50.200]
[40 CFR 51.15, 51.30(a)(1) & (b)(1) and
40 CFR 51, Appendix A to Subpart A, 73 FR 76556 (12/17/08)]

Section 8. Permit Changes and Renewal

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

102.1. 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[30];

102.2. The information shall be submitted to EPA-Region 10, Office of Air Quality, M/S OAQ-107, 1200 Sixth Avenue, Seattle, WA 98101.

102.3. 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

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

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

103. 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)]

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

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

104.2. 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;

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

[30] The documents required in Condition 102.1 are submitted to the Department's Anchorage office. The current address for the Anchorage office is: ADEC, 619 East Ship Creek Avenue, Suite 249, Anchorage, AK 99501.

104.4. The Permittee shall keep a record describing changes made at the 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)]

105. 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):

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

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

105.3. The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made pursuant to Condition 105.

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

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

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

Section 9. Compliance Requirements

General Compliance Requirements

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

107.1. included and specifically identified in the permit; or

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

[18 AAC 50.326(j)(3) & 50.345(a) & (b)]
[40 C.F.R. 71.6(f)(1)]

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

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

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

a. an enforcement action;

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

c. denial of an operating permit renewal application.

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

109. 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)]

110. 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

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

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

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

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

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

Compliance Schedule

111. Comply with the NSPS Subpart CCCC schedule of Condition 47.3, 47.4, and 47.9.
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(c)(3) & 71.5(c)(8)(iii)(C)]

Section 10. Permit As Shield from Inapplicable Requirements

In accordance with AS 46.14.290, and based on information supplied in the permit application, this section of the permit contains the requirements determined by the Department not to be applicable to the stationary source.

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

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

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

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

113. Table H 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 H becomes applicable during the permit term, the Permittee shall comply with such requirements on a timely basis including, but not limited to, providing appropriate notification to EPA, obtaining a construction permit and/or an operating permit revision.

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

Table H - Permit Shields Granted

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
Stationary Source-Wide	40 CFR 60 Subparts B, C, Cc, E, Eb, Cb, Ce, F, G, H, I, J, M, N, Na, O, S, T, U, V, W, X, Y, Z, AA, BB, CC, EE, HH, KK, LL, MM, NN, PP, QQ, RR, SS, TT, UU, VV, WW, XX, BBB, DDD, FFF, GGG, HHH, III, JJJ, KKK, NNN, OOO, PPP, QQQ, RRR, SSS, TTT, UUU, VVV and WWW	Not an affected stationary source, operation, or industry.
Stationary Source-Wide	40 CFR 60 Subpart Cd, D, Da, Db, K, Ka, Kb, L, P, Q, R, DD, AAA, LLL, DDDD, and JJJJ	No affected facility within stationary source. Boilers are not subject to D, Da, or Db because all are smaller than 100 MMBtu/hr. Storage tanks are exempted from K and Ka because all tanks are less than 40,000 gallons. Storage tanks are exempted from Subpart Kb because petroleum storage is prior to custody transfer, and none of the other liquids have a high enough maximum true vapor pressure.

1, 2, 32, 33	40 CFR 60 Subpart GG	All turbines are subject to subpart KKKK. In accord to 40 CFR 60.4305(b), stationary combustion turbines regulated under 40 CFR 60 Subpart KKKK are exempt from the requirements of Subpart GG.
48, 96	40 CFR 60 Subparts AAAA, BBBB, and EEEE	Incinerator EUs are not subject to Subparts AAAA or BBBB because they are not capable of burning 35 tons of waste per day per 40 C.F.R. 60.1010(b) and 60.1550(a)(1). EUs are not subject to Subpart EEEE because they are subject to emission standards of Subpart CCCC per 40 C.F.R. 60.2887(d).
64, 68116	40 CFR 60 Subpart IIII	Engines are not firewater pumps and were manufactured before April 2, 2006.
1, 2, 33	40 CFR 60 Subpart KKKK §60.4325	Turbines cannot burn both natural gas and distillate oil (or some other combination of fuels).
1, 2, 32, 33	40 CFR 60 Subpart KKKK §§60.4335, 60.4355	Turbines do not use water or steam injection.
1, 2, 32, 33	40 CFR 60 Subpart KKKK §§60.4340(b), 60.4345, 60.4350, 60.4405, 60.4410	CEMS or continuous parameter monitoring is not used to monitor compliance.
1, 2, 32, 33	40 CFR 60 Subpart KKKK §60.4390	Turbines are not emergency combustion turbines or a research and development turbine.
Stationary Source-Wide	40 CFR 61 Subpart B, C, D, E, F, H, I, K, L, N, O, P, Q, R, T, W, Y, BB, and FF	No affected facility within stationary source.
Stationary Source-Wide	40 CFR 61 Subpart J	Stationary source does not contain any equipment in benzene service (>10% by weight).
Stationary Source-Wide	40 CFR 61 Subpart V	No equipment at the stationary source contains or contacts fluid that is at least 10% benzene or vinyl chloride.
Stationary Source-Wide	40 CFR 63 Subpart F, G, H, J, M, O, R, S, T, U, W, X, Y, AA, BB, CC, DD, EE, GG, II, JJ, KK, LL, MM, CCC, DDD, GGG, HHH, III, JJJ, LLL, MMM, NNN, OOO, PPP, QQQ, RRR, TTT, UUU, VVV, XXX, AAAA, CCCC, DDDD, EEEE, FFFF, GGGG, HHHH, IIII, JJJJ, KKKK, MMMM, NNNN, OOOO, PPPP, QQQQ, RRRR, SSSS, TTTT, UUUU, VVVV, WWWW, XXXX, AAAAA, BBBBB, CCCCC, EEEEE, FFFFF, GGGGG, HHHHH, IIIII, JJJJJ, KKKKK, LLLLL, MMMMM, NNNNN, PPPPP, QQQQQ, RRRRR, SSSSS, TTTTT, DDDDDD, EEEEEE, FFFFFF, and GGGGGG	Not an affected facility, operation or industry.
Stationary Source-Wide	40 CFR 63 Subpart HH	Per 40 CFR 63.760(d), the facility is not subject to the requirements of 40 CFR 63, Subpart HH because the source is an area source of hazardous air pollutants and does not include a triethylene glycol dehydration unit. [40 C.F.R. 63.760(b)(2) and (d)]

1, 2, 32, 33	40 CFR 63 Subpart YYYY	The stationary source is not a major source of hazardous air pollutants.
64, 68,116	40 CFR 63 Subpart ZZZZ §§63.6600, 63.6601, 63.6602, 63.6610, 63.6611	Stationary source is not a major source of hazardous air pollutants. Emission units are not 4SLB engines.
64, 68, 116	40 CFR 63 Subpart ZZZZ §§63.6612, 63.6615, 63.6620, 63.6625, 63.6630, 63.6635, 63.6640	Engine is not accessible by Federal Aid Highway System and is not subject to a numerical emission standard or operating limitation.
69 through 71	40 CFR 63 Subpart DDDDD	The stationary source is not a major source of hazardous air pollutants.
106, 111, 112	40 CFR 63 Subpart JJJJJJ	Per 40 CFR 63.11195(e),emission units are not subject to the requirements of 40 CFR 63 Subpart JJJJJJ because unit are gas-fired boilers as defined in the subpart.
Stationary Source-Wide	40 CFR 63 Subpart L, N, Q, OO, PP, QQ, RR, SS, VV, XX, YY, and EEE	Not an affected facility within stationary source.
Stationary Source-Wide	40 CFR 98, Subparts D, E, F, G, H, I, K, L, N, O, P, Q, R, S, T, U, V, X, Y, Z, AA, BB, CC, DD, EE, FF, GG, HH, II, JJ, LL, MM, NN, OO, PP, QQ, RR, SS, TT, and UU	No affected facility within stationary source.
48, 96	18 AAC 50.050(b)	The limits of the standard do not apply to incinerators with a rated capacity less than 1,000 pounds per hour.

Section 11. Visible Emissions Forms

VISIBLE EMISSION OBSERVATION FORM

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

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

  Wet Bulb Temperature: can be measured using a sling psychrometer

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

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

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

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

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

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

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

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

Page No._____

Stationary Source Name		Type of Emission Unit		Observation Date			Start Time		End Time
				Sec / Min	0	15	30	45	Comments
Emission Unit Location				1					
City	State	Zip		2					
Phone # (Key Contact)		Stationary Source ID Number		3					
Process Equipment		Operating Mode		4					
Control Equipment		Operating Mode		5					
Describe Emission Point/Location				6					
Height above ground level	Height relative to observer	Clinometer Reading		7					
Distance From Observer Start / End		Direction From Observer 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 where the plume was read			10					
Point in Plume at Which Opacity Was Determined				11					
Describe Plume Background		Background Color		12					
Start / End		Start / 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. = 21 – [**vol%$_{dry}$O2, $_{exhaust}$**] = 21 - _____ = _____

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

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

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

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

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

The fuel weight percent (wt%) of sulfur is obtained pursuant to Condition 24.1. The fuel weight percents of carbon and hydrogen are obtained from the fuel refiner.

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

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

[18 AAC 50.346(c)]

Section 13. ADEC Notification Form[31]

Nikaitchuq Development | **AQ0923TVP01**
Stationary Source Name | **Air Quality Permit No.**
Eni **US Operating Co. 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

[31] 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

☐ Recording/Reporting/Compliance Certification

☐ Standard Conditions Not Included in the Permit

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

☐ Generally Applicable Requirements

☐ Reporting/Monitoring for Diesel Engines

☐ Recordkeeping Failure

☐ Insignificant Emission Unit

☐ Stationary Source Wide

(b) Emission Unit Involved:

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

EU ID	EU Name	Permit Condition/ Potential Deviation

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

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

Certification:

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

Printed Name: _____ Title: _____ Date: _____

Signature: _____ Phone Number: _____

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

To Submit this Report:

Fax to: 907-451-2187

Or

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

If faxed or emailed, the report must be certified within the Operating Report required for the same reporting period per Condition 98.

Or

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

Or

Phone Notification: 907-451-5173

Phone notifications require a written follow-up report.

Or

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

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

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

[18 AAC 50.346(b)(3)]

Section 14. Emission Inventory Form

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

Mandatory information is highlighted. Make additional copies as needed.	
Inventory start date:	
Inventory end date:	
Inventory Type:	
Facility Information:	
ADEC Stationary Source ID:	
(Stationary Source) Facility Name:	
AFS ID:	
Census Area/ Community:	
Line of Business (NAICS):	
Contact/Owner Name:	
Contact Owner Address:	
Contact/Owner Phone Number:	
Facility Physical Address:	
	Lat: Long:
Mailing Address :	

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

	Total Capture Efficiency (%):		
Pollutants Controlled			

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

EMISSIONS

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

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

Certification:

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

Printed Name:_____Title_____Date _____

Signature:_____ Phone number_____

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

To Submit this report:

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

[18 AAC 50.346(b)(9)]

Section 15. Appendices

Appendix A: Emission Factors

Table I presents NOx emission factors for the Solar Taurus Turbines (EUs 1, 2, 33, and 34) at various ambient temperatures. Eni provided the emission factors.

Table I - Solar Taurus NOx Emission Factors (lb/min) at Selected Ambient Temperatures

Percent of Load	NO_x Emission Factors at Indicated Ambient Temperature				
	lb/min at 60°F	lb/min at 30°F	lb/min at 0°F	lb/min at -20°F	lb/min at -60°F
10	0.10	0.11	0.11	0.25	0.26
20	0.13	0.13	0.14	0.29	0.31
30	0.16	0.16	0.17	0.34	0.35
40	0.19	0.20	0.20	0.38	0.40
50	0.05	0.05	0.06	0l16	0.51
60	0.05	0.06	0.06	0.18	0.56
70	0.06	0.06	0.07	0.20	0.62
80	0.06	0.07	0.07	0.43	0.66
90	0.07	0.07	0.08	0.43	0.72
100	0.07	0.08	0.09	0.25	0.78

Table Notes:
Original Source of Emission Factors: Manufacturer of Taurus 70-10301S

Table J presents CO emission factors for the Solar Taurus Turbines (EUs 1, 2, 33, and 34) at various ambient temperatures. Eni provided the emission factors.

Table J - Solar Taurus CO Emission Factors (lb/min) at Selected Ambient Temperatures

Percent of Load	CO Emission Factors at Indicated Ambient Temperature				
	lb/min at 60°F	lb/min at 30°F	lb/min at 0°F	lb/min at -20°F	lb/min at -60°F
10	11.25	11.52	11.87	12.03	12.67
20	12.50	12.95	13.38	13.70	14.37
30	13.62	14.15	14.70	15.03	15.75
40	14.55	15.20	15.78	16.22	17.03
50	0.06	0.06	0.07	0.28	0.46
60	0.05	0.06	0.06	0.26	0.43
70	0.06	0.06	0.07	0.29	0.47
80	0.06	0.07	0.07	0.31	0.51
90	0.07	0.07	0.08	0.33	0.54
100	0.07	0.08	0.09	0.36	0.60

Table Notes:
Original Source of Emission Factors: Manufacturer of Taurus 70-10301S

In order of hierarchy, Department-approved emission factors are as follows. Emission factors:

(a) determined from performance tests
(b) provided by the equipment manufacturer
(c) listed in Table K; or
(d) derived from emission factors listed in Table K and operation characteristics.

Table K - Average Emission Factors of Stationary Combustion Emission Units

Emission Unit	NOx	CO	Units of EF	Reference for Emission Factors
1, 2, and 33	5.1	5.2	lb/hr	Source test data
32 (burning fuel gas)	5.1	5.2	lb/hr	Vendor (CAT) data
32 (burning ULSD)	31.5	10	lb/hr	Vendor data (from AQ0923MSS08)
3	47.45	9.36	lb/hr	Vendor (CAT) data
4A, 4B, and 113	0.068	0.370	lb/MMBtu	AP-42, Table 13.5-1
4A, 4B, and 113	86.7	472	lb/million scf	Assuming 1,275 Btu/scf
47	5.4	0.70	g/bhp-hr	Vendor data
49	5.9	0.55	g/bhp-hr	Vendor data
50	2.7	1.10	g/bhp-hr	Vendor data
64	.031	6.68e-3	lb/bhp-hr	AP-42, Table 3.3-1
68 and 116	3.0	2.60	g/bhp-hr	Vendor data
48 and 96	3	10	lb/ton	AP-42, Table 2.1-12
48 and 96	0.45	1.5	lb/hr	From rating & AP-42
9-13, 23-24, 69-71, 107-110, 114, 115	20	5	lb/1,000 gal	AP-42, Table 1.3-1, 3
9-13, 23-24, 69-71, 107-110, 114, 115	0.1667	0.0417	lb/MMBtu	Carried over from previous permits
106	100	84	lb/MMscf	AP-42, Table 1.4-2
106	0.0980	0.0834	lb/MMBtu	Provided by Applicant
94, 95, 111, and 112	13	7.5	lb/1,000 gal	AP-42, Table 1.5-1
94, 95, 111, and 112	0.1436	0.0829	lb/MMBtu	AP-42, Table 1.5-1 and fuel properties
93	19.8	3.6	lb/hr	Vendor data

Table Notes

For EUs 1, 2, 32, and 33, emission factors in Table I and Table J supersede emission factors in Table K for fuel gas.

Appendix B: Public Access Control Plan

Public Access Control Plan

ENI US Operating Co. Inc.

November 26, 2012

Purpose

This Public Access Control Plan for the Nikaitchuq Project is designed to protect the general public from health and safety hazards that could occur as a result of heavy industrial work during well drilling, work-over activities, and crude oil production at Nikaitchuq. ENI US Operating Co. Inc. (ENI) has established these reasonable restrictions on general public access to ensure adequate protection of public health and welfare.

ENI is committed to fully and adequately protecting the health and safety of its work force by remaining within the standards for air exposure of the Occupational Safety and Health Administration (OSHA) and, where the general public has access, the National and Alaska Ambient Air Quality Standards (AAQS). The primary purpose of this plan is to delineate the area to be protected and controlled for occupational health and safety from the area that is subject to unrestricted, general public access where the AAQS are applicable. By limiting access to Nikaitchuq Project Facilities to ENI authorized personnel, ENI will reduce the chance that a member of the general public will be injured or otherwise impacted by ENI operations.

This plan ensures that reasonable measures are in place to accomplish reasonable restrictions on public access.

General Information

ENI is planning to construct an oil production facility and conduct production well drilling and development from a 600 foot by 600 gravel pad constructed on Oliktok Point (see Figure 1). ENI is also planning to construct a gravel Island approximately 3.5 miles north of the Oliktok Point Processing Facility to drill and install wells. The island will be approximately 630 feet wide and 830 feet long. Additionally during the construction phase of the Nikaitchuq Project, Nikaitchuq Project personnel will be housed in the Oliktok Construction Camp (OCC). As the Nikaitchuq Project moves from the construction phase into the operational phase, personnel responsible for the operation of the Nikaitchuq project will be housed in the Nikaitchuq Operations Camp (NOC). At this point, ENI will no longer house Nikaitchuq personnel at the OCC and will not be responsible for public access control. However, the camp may remain and be used by other companies.

ENI will restrict access to the on-shore production facility, the off-shore gravel island and the personnel housing camps to ENI authorized personnel for health and safety and property control reasons. As a result, the ambient air boundary is marked by the edge of the gravel production and personnel camp pads and the off-shore gravel island with signs and reflective boundary markers that will delineate the controlled area. This is consistent with other ambient air boundary selections that have been made for similar facilities and circumstances on the North Slope. To accommodate the required safety zone for the processing facility safety flare, a gravel triangle will be constructed on the south side of the pad that will extend some portions of the on-shore gravel pad up to 170 feet to the south.

Drilling, crude oil production and three-phase fluid processing will be conducted on the on-shore gravel pad. Drilling and crude oil production will occur on the off-shore gravel island. Three phase fluid that is produced from the off-shore gravel island will be shipped via pipeline to the Oliktok Point Processing Facility. Once development drilling and construction is completed on the off-shore gravel island, the island will be unoccupied with the exception of occasional maintenance activities. Operations on the off-shore gravel island will be monitored and controlled from the Oliktok Point Processing Facility. Remote monitoring systems will be installed on the off-shore gravel island to detect the presence of unauthorized personnel on the off-shore gravel island. Public access will be restricted at the edge of the of the gravel pad at the Oliktok Point Processing Facility, the NOC, and the off-shore gravel island.

The ambient boundary for the Oliktok Point Processing Facility will be marked on the east side by the west edge of the Oliktok road that provides access to the Kuparuk Seawater Treatment Plant (KSTP). The edge of the processing facility gravel pad will mark the north, south, and west ambient boundaries. The south edge of the NOC is marked by the north edge of the DS3Q access road. The east, north, and west edges of the NOC are marked by the gravel pad edge of the NOC.

Ambient air quality receptors were modeled on the Oliktok and DS3Q access roads and on the processing facility, and the NOC pad boundaries. The modeled concentrations on the roads and the pad boundaries show ambient air concentrations below the AAQS. Ambient air quality receptors were also modeled on the toe of the off-shore gravel island facility and the modeled concentrations on the toe of off-shore gravel island were also below the AAQS.

ENI will also establish a second boundary to ensure public safety during flaring by keeping the public a safe distance from the flare at all times. The safe distance from the flare is a semi-circle with a 170 foot radius centered on the extreme southern edge of the pad extension that contains the flare.

The ambient boundary for the off-shore gravel island will be marked along the edge of the off-shore gravel island and the ocean. The top of the off-shore gravel island is approximately 18 feet above sea level.

Public Access Control Measures

The Oliktok Point Processing Facility is located on Oliktok Point, which is a peninsula that is surrounded on three sides by the Beaufort Sea and is located within the Kuparuk River Unit (KRU). The KRU is controlled and operated by Conoco-Philips Alaska Incorporated (CPAI). Access to the KRU is controlled by CPAI. The only access to the Oliktok Point Processing Facility is from the south via the Oliktok Rd. Personnel are not allowed to travel to Oliktok Point without first obtaining permission from CPAI.

Personnel traveling to the KSTP will travel on the Oliktok Rd. passing east of the Oliktok Point Processing Facility. Personnel traveling to the KSTP will not need to cross or access the Oliktok Point Processing Facility in order to access the KSTP. KSTP personnel will not be allowed to enter the Oliktok Point Processing Facility without first obtaining permission from the operator of the Oliktok Point Processing Facility. As a practical matter, few people are likely to visit or traverse the area in which Nikaitchuq development and crude oil production will be located. However, road access by personnel without permission from CPAI to be in the area is possible. As a result, several measures will be implemented to reasonably ensure that unauthorized personnel do not access the Oliktok Point Processing Facility. These measures include:

1. Signs;
2. Pad boundary markers;
3. Education and training; and
4. Pad surveillance and exclusion.

The above listed measures will also be used to ensure that unauthorized personnel do not access the NOC, and off-shore gravel island, although the probability of unauthorized access to the gravel island is even less likely than the Oliktok Processing Facility. Details about the public access control measures are presented below.

Signs

To notify unauthorized personnel that they may not access the Oliktok Point Processing Facility, the NOC, and the off-shore gravel island, signs will be posted at strategic locations, as follows:

- On the northeast, northwest, southeast, and southwest corners of the Oliktok Point Processing Facility
- At designated points of ingress and egress from the Oliktok Point Processing Facility, and the NOC; and

- At the top of the two access ramps to the off-shore gravel island.

The sign specifications are:

- Each sign will be 4 feet by 6 feet and will be supported by sawhorse or pallet post with sandbags.
- Each sign will be inspected regularly and will be repaired or replaced, as necessary.
- Each sign will be free of visible obstructions.
- Each sign will read:

ENI US Operating Co. Inc.

DANGER

UNAUTHORIZED PERSONNEL KEEP OUT

If access is requested,

Contact Eni Security

In addition to the warning signs, reflective, boundary markers will be placed in the following locations:

- Along the eastern production pad border between the Oliktok Rd. and the Oliktok Point Processing Facility;
- Along the northern edge of the Oliktok Point Processing Facility pad separating it from the adjacent KSTP pad; and
- Along the southern edge of the NOC pad edge and the DS 3Q access road.

Reflective boundary markers will be used. In order to distinguish the pad boundary markers from the reflective road edge markers that are used on the North Slope, the pad boundary markers will be spaced at approximately fifty percent of the spacing that is normally used for road edge markers on the North Slope.

Education and Training

To work in or access the KRU, all personnel must have completed or be escorted by someone with eight hours of North Slope safety training. One rule that is emphasized in the training for North Slope workers is to be present only in locations where they are authorized to be. North Slope workers that are present at sites where they are not authorized are subject to discipline up to and including termination of employment. Additionally, during their local orientation training ENI workers and ENI contractors that will be working at the Oliktok Point Processing Facility and the gravel island will be made aware of this Public Access Control plan and that if they notice unauthorized personnel at the Oliktok Point Processing Facility, the NOC or the gravel island that they should notify appropriate personnel that an unauthorized person or persons are in Oliktok Point Processing Facility, the NOC, or the gravel pad.

Pad Boundary Surveillance

Unless prohibited by adverse weather conditions or similar safety related circumstances, the Oliktok Point Processing Facility, and the NOC will be formally checked at least twice a day. During these checks of the pad boundary, the inspector will check the following items:

1. The presence or indications of the presence, of unauthorized personnel within the Oliktok Point Processing Facility boundary;
2. That the pad boundary warning signs are clear of obstructions such as snow and are still standing. If possible, the inspector will fix sign problems when they are discovered; and
3. That the reflective pad boundary markers that delineate the northern and eastern pad boundaries are in place and are intact. If possible, the inspector will fix problems with the reflective pad boundary markers when they are discovered.

In addition to the formal pad inspections, all ENI personnel and ENI contractors will be responsible for maintaining Oliktok Point Processing Facility, the NOC, and the gravel island boundary integrity. When ENI personnel or ENI contractors notice either unauthorized persons within the pad boundaries or conditions that compromise the integrity of the pad boundaries, they are required to either correct the situation or notify appropriate personnel that have the authority to remedy the situation.

The gravel island will follow the same procedures that will be used for the Oliktok Point Processing Facility when ENI personnel or ENI contractors are present on the gravel island for construction, drilling, or maintenance activities. When the gravel island is unoccupied, the pad boundary will be monitored remotely from the Oliktok Point Processing Facility. If unauthorized personnel are present on the island, when the island is unoccupied, the person would not be exposed to pollutants exceeding the AAQS because with exception of the emergency generator, no emission units will be operating on the island when ENI or ENI contractor personnel are not present on the island.

Pad Boundary Violations

In the event that an unauthorized person enters the Oliktok Point Processing Facility, the NOC, or the offshore gravel island, they will be notified by a representative of ENI that they are not allowed within the perimeter of the Nikaitchuq facility without prior approval and will be escorted off the pad by a representative of ENI. The incident will be recorded in the Unauthorized Visitors Logbook and will list the person’s name (if the unauthorized visitor will provide his name), the mode of travel, and the date and time of the incident

Figure 1. Oliktok Point Processing Facility Ambient Air Boundary.

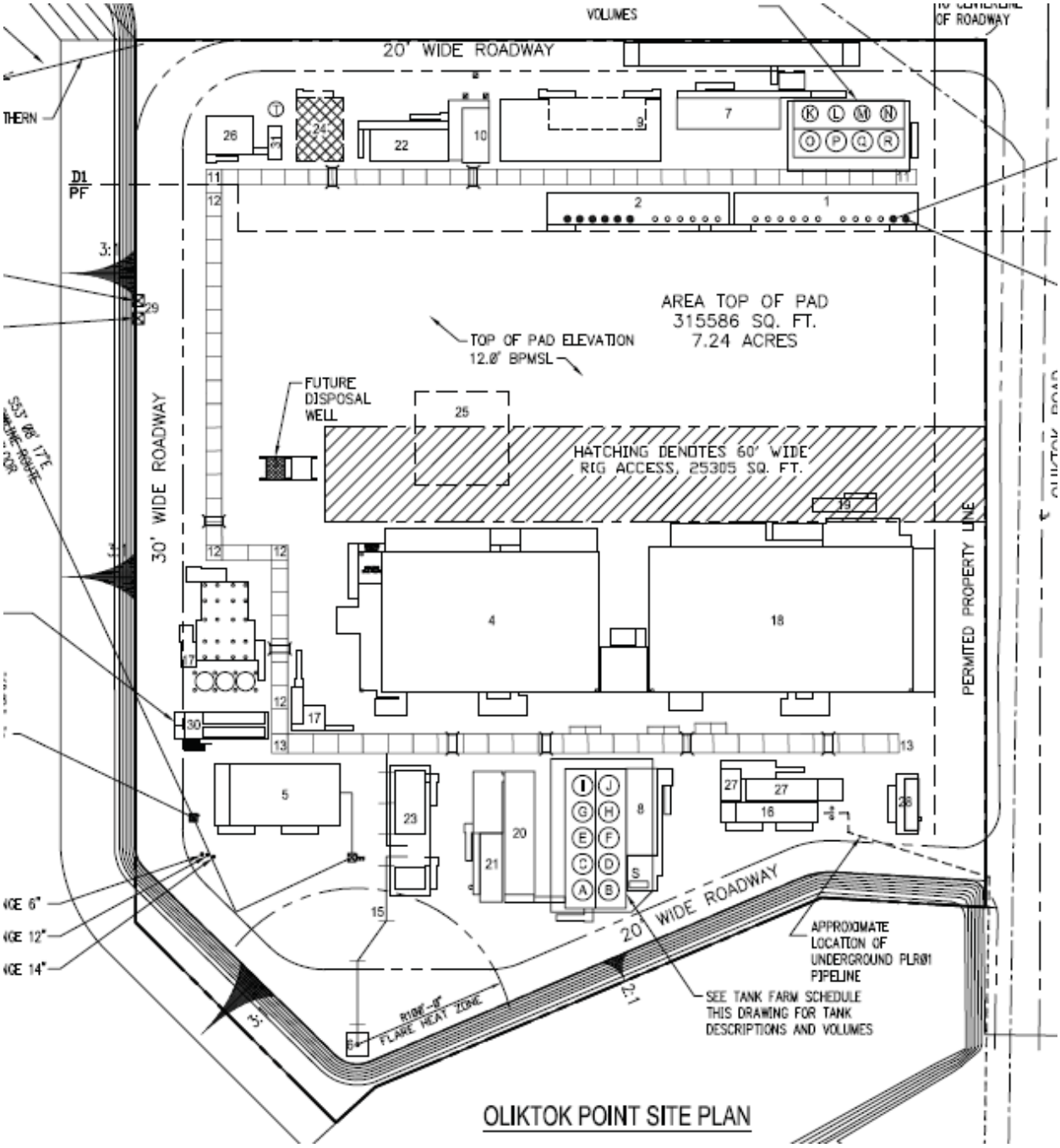


Figure 2. Off-Shore Oliktok Point Gravel Island

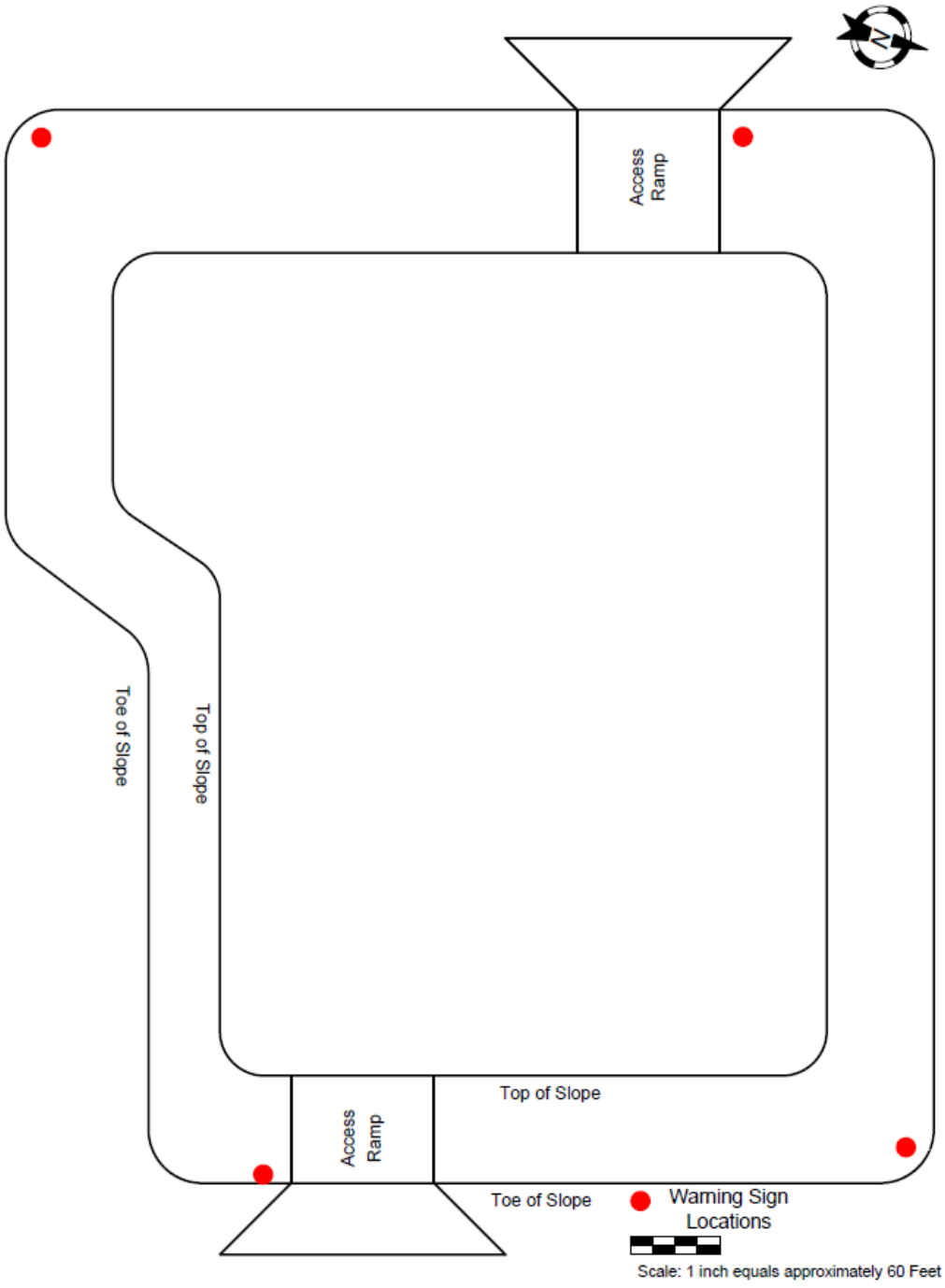
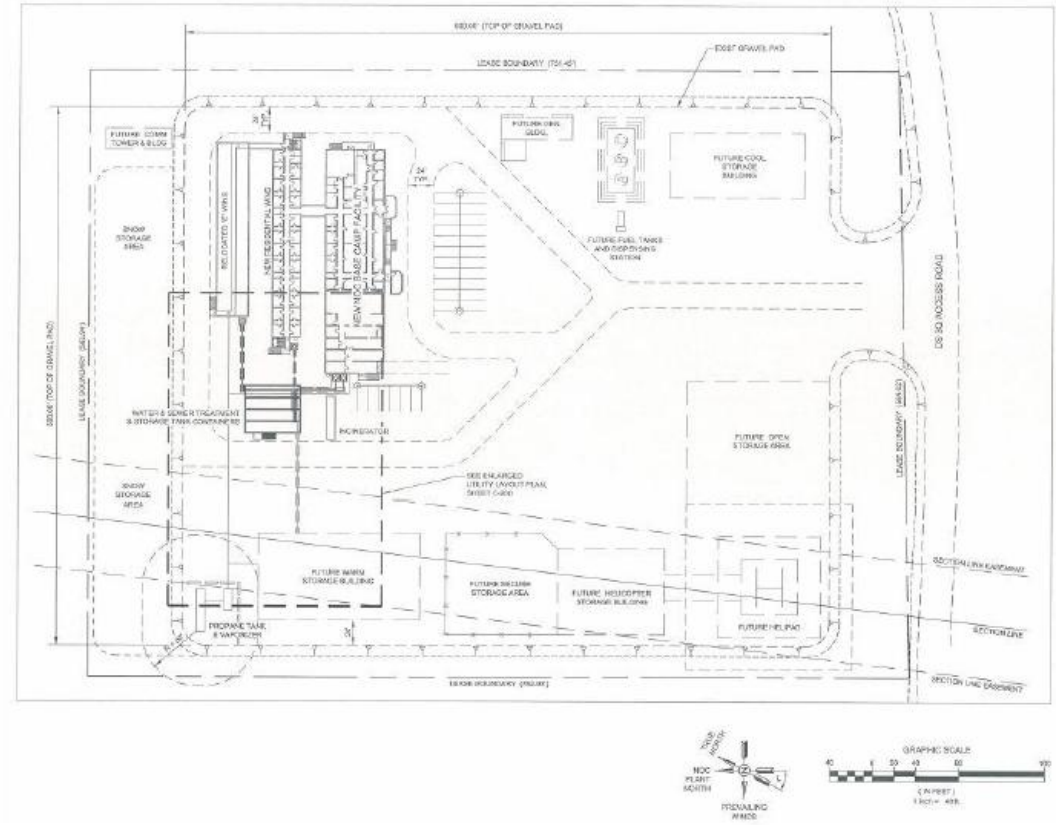


Figure 3. Nikaitchuq Operations Camp



Appendix C: Eni Local Policy (November 6, 2009)

ENI LOCAL POLICY
Nikaitchuq Working Times and Hours Policy for Employees and Contractors
November 6, 2009

POLICY NAME: "ENI Working Times and Hours Policy"
POLICY STATEMENT: It is important that all employees and contractor employees know and understand the work schedule that is expected of them. This policy is written with the goal of making clear the days and hours that employees and contractor employees are expected to work at Nikaitchuq.

The work schedule at Nikaitchuq varies depending on the activity that an employee or a contractor is performing. Generally speaking, Nikaitchuq will operate around the clock. Nikaitchuq drilling and construction activities will also be conducted on a 24-hour basis. The normal shift at Nikaitchuq is 12 hours on and 12 hours off. When employees or contractor employees are not working they will reside at a camp provided by ENI Petroleum. Nikaitchuq camp facilities are for ENI Petroleum Employees and Contractor Employees on official business. No visitors that are not on official business may use Nikaitchuq camp facilities.

Camp facilities may either be local to Nikaitchuq or may be removed from the immediate vicinity of Nikaitchuq. Regardless as to the camp location, ENI employees or contractor employees can be required to work shifts in excess of 12 hours or be recalled to work during their off-shift time if emergencies or other special circumstances occur.

Alaska Department of Environmental Conservation
Air Permits Program

Public Comment - May 9, 2013
Eni US Operating Co. Inc.
Nikaitchuq Development

STATEMENT OF BASIS
of the terms and conditions for
Permit No. AQ0923TVP01

Reviewed by Patrick Dunn
ADEC AQ/APP (Anchorage)

Prepared by
Bill Walker
Blue Creek Consulting

INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. AQ0923TVP01.

STATIONARY SOURCE IDENTIFICATION

Section 1 of Operating Permit No. AQ0923TVP01 contains information on the stationary source as provided in the Title V permit application.

The stationary source is owned and operated by, Eni US Operating Co. Inc. and Eni US Operating Co. Inc. is the Permittee for the stationary source's operating permit. The SIC code for this stationary source is 1311 – Crude Petroleum and Natural Gas. The NAICS Code is 211111 - Crude Petroleum and Natural Gas Extraction.

The stationary source Nikaitchuq is an oil and gas production facility with six stations and located on Alaska's North Slope. The stations are On-Shore Production Pad, Nikaitchuq Operations Camp, Off-Shore Production Pad, On-Shore Development Drilling Rig, Off-Shore Development Drilling Rig, and Intermittent Emission Units. The Oliktok Construction Camp was sold and is no longer part of this stationary source.

EMISSION UNIT INVENTORY AND DESCRIPTION

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

The emission units at the Nikaitchuq Development that are classified and have specific monitoring, recordkeeping, and reporting requirements are listed in Table A, Table B, Table C, and Table D of Operating Permit No. AQ0923TVP01.

Table A lists turbines, engines, heaters, boilers, flares, and incinerators supporting on-shore and off-shore production, and a camp. Table B, Table C, and Table D list equipment for two drilling rigs, and for intermittent well servicing equipment.

Table A through Table D of Operating Permit No. AQ0923TVP01 contain information on the emission units regulated by this permit as provided in the application and supplemental information and explained in the table notes. The tables are provided for informational and identification purposes only. Specifically, the emission unit rating/size provided in the table is not intended to create an enforceable limit. However Conditions 2 and 3 do carry over from minor permit AQ0923MSS09 enforceable limits on equipment ratings for the drilling rigs and intermittent well servicing equipment.

EMISSIONS

A summary of the potential to emit (PTE)[1] and assessable PTE as calculated by the Department from the Nikaitchuq Development is shown in the table below.

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

Pollutant	NOx	CO	PM-10	SO_2	VOC	CO_2e	HAPs	Total
PTE	225.0	225.0	32.3	55.3	112.0	250,319	10.0	649.6
Non-road Engines	1,040.5	392.7	21.4	0.8	24.8	79,025	0.9	
Assessable PTE	225.0	225.0	32.3	55.3	112.0	0	0	649.6

The assessable PTE listed under Condition 75.1 is the sum of the emissions of each individual regulated air pollutant for which the stationary source has the potential to emit quantities greater than 10 TPY. The emissions listed in Table L are estimates that are for informational use only. The listing of the emissions does not create an enforceable limit to the stationary source. HAP emissions were estimated in the permit application. AP-42 emission factors were used to estimate HAP emissions for fuel-burning equipment emission units. However, per 40 C.F.R. 71.2, emissions from oil or gas exploration or production wells with their associated equipment are not aggregated when determining the total potential to emit HAPs. Therefore, emissions from units located at any drill site are not aggregated when determining the HAPs major status of the stationary source. Most if not all HAPs are VOCs so HAPs was not double-counted in the Table.

Emissions are calculated from the emission unit characteristics and emission rates as provided in the application to AQ0923MSS09. The Department made some corrections to the calculations.

Emission factors were taken from

- AP-42;
- Vendor data;
- Source test data;
- Limitations from federal emission standards;
- For HAP emissions from flares, the Ventura County APCD; and
- GRI-HAPCalc®3.01.

PTE quantities are also based on the following:

- The application included VOC emissions from storage tanks using EPA TANKS 4.09.
- Emissions are limited by the operating hour limits for equipment listed in Table F and Condition 32.2.
- NO_X and CO emissions are limited by the ton per year limits for equipment listed in Condition 25.1.

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

- SO_2 mass balance was calculated based on fuel sulfur limits in Condition 33.
- Greenhouse gas emissions were based on 40 C.F.R. 98, Tables A-1, C-1, and C-2.

Emission were reduced by deleting EUs 72, 73, and 80 - 92 from the inventory. Eni's additional information letter dated February 10, 2012 states that on October 30, 2011 these units were permanently shut down. Emissions were increased by adding units 114 - 116, 64, and 68 to the stationary emission unit inventory based on applications for minor permits AQ0923MSS07 and AQ0923MSS09.

BASIS FOR REQUIRING AN OPERATING PERMIT

In accordance with AS 46.14.130(b), an owner or operator of a Title V source[2] must obtain a Title V permit consistent with 40 C.F.R. Part 71, as adopted by reference in 18 AAC 50.040.

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

- A major source;
- A stationary source including an area source subject to Federal new source performance standards under Section 111 of the Clean Air Act national emission standards under Section 112, or solid waste incinerator standards under Section 129 of the Clean Air Act;
- Another stationary source designated by the Federal administrator by regulation.

This stationary source requires an operating permit because it is classified under 18 AAC 50.326(a), 40 C.F.R. 71.3(a), and EPA's March 2011 *PSD and Title V Permitting Guidance for Greenhouse Gases* as:

- A major stationary source as defined in Section 302 of the Clean Air Act that directly emits, or has the potential to emit, 100 TPY or more of any air pollutant;
- Contains incinerators subject to solid waste incinerator standards under the Clean Air Act Part 129, 40 C.F.R. 60, Subpart CCCC. [See 40 C.F.R. 60.2242.]
- Contains a source, including an existing or newly constructed GHG emission source, that emits or has a PTE equal to or greater than 100,000 TPY of CO_2e **and** 100 TPY GHGs on a mass basis;

AIR QUALITY PERMITS

Previous Air Quality Permit to Operate

No previous air quality control permit-to-operate exists for this stationary source.

[2] *Title V source* means a stationary source classified as needing a permit under AS 14.130(b) [ref. 18 AAC 50.990(111)].

Title I (Construction and Minor) Permits

The Department issued Minor Permit AQ0923MSS01 on May 5, 2005 to the previous owner, Kerr McGee authorizing a new oil production facility with owner requested limits that avoided source classification. Absent these limits, this stationary source would be subject to pre-construction review under Alaska's Air Permits Program Prevention of Significant Deterioration Program. The Department revised that permit to transfer the permit to the current owner, Eni U.S. Operating Company on March 30, 2007. Eni submitted and withdrew two applications to modify terms and conditions of AQ0923MSS01. The Department identifies these two applications as AQ0923 MSS02 and MSS03. Eni submitted an application to change the project scope, increase equipment size and change the owner requested limits. The Department issued AQ0923MSS04 on April 30, 2010 approving the application. Eni submitted an application to aggregate the support facilities with the production facility and to change the owner requested limits. The Department issued AQ0923MSS05 on December 30, 2010 approving that application.

The Department issued Minor Permit AQ0923MSS06 to this stationary source on August 11, 2011. This action rescinded and replaced the previous active minor permits. The Department established stationary source-specific requirements in this Title I permit included in the new operating permit as described in Table M. The Department issued Minor Permit AQ0923MSS08 to this source on October 1, 2012 to allow dual fuel firing of turbine EU 32 and ULSD combustion up to 600 hours. This permit was active concurrent with AQ0923MSS06.

The Department issued Minor Permit AQ0923MSS07 to this stationary source on November 27, 2012. This action rescinded and replaced the previous active minor permits AQ0923MSS06 and AQ0923MSS08. AQ0923MSS07 revised the monthly deadline for calculating emissions for compliance with PSD avoidance limits, added and deleted emission units, revised the characteristics of several emission units, and added a 10 percent limit on the amount of hospital, medical, infectious waste to be burned in two incinerators.

The Department received the application for AQ0923MSS09 on November 27, 2012. AQ0923MSS09 is issued concurrently with this Title V permit. The permit deletes several emission units previously subject to PSD avoidance limits, adds emission units to the stationary inventory, updates emission unit characteristics, and makes associated changes to permit conditions.

Title V Operating Permit Application, Revisions and Renewal History

The owner or operator submitted an initial application for these activities on November 28. 2011 (dated November 21, 2011). The Department received additional information on February 9, 2012. This included information and documentation related to applicability or exemption of federal emission standards, information on insignificant emission units, and the Title V applicability date for the stationary source.

The Department also received additional information on March 23, 2012 and April 9, 2012.

COMPLIANCE HISTORY

The stationary source has operated at its current location since 2006. Review of the permit files for this stationary source, indicates a stationary source generally operating in compliance with its operating permit. Although the Department has not yet conducted an inspection or compliance evaluation, the Permittee reported intermittent non-compliance with PSD avoidance limits and notified the Department that installed equipment did not match the Minor Permit provisions. Also, the Permittee was not in continuous compliance with the requirement to calculate and report emissions for NO_X and CO PSD avoidance limits by the 15th of each month for the previous month and 12 months. Eni requested a minor permit to allow more time for completing this monthly requirement. AQ0923MSS07 was issued to update the limits consistent with expected performance.

APPLICABLE REQUIREMENTS FROM PRE-CONSTRUCTION PERMITS

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

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

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

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

These requirements include, but are not limited to, each emission unit- or source-specific requirement established in these permits issued under 18 AAC 50 that are still in effect at the time of this operating permit issuance. Table M below lists the requirements carried over from Minor Permit No. AQ0923MSS09 into Operating Permit No. AQ0923TVP01 to ensure compliance with the applicable requirements.

Table M - Comparison of Minor Permit No. AQ0923MSS09 Conditions to Operating

Permit No. AQ0923MSS09 Condition No.	Description of Requirement	Permit No. AQ0923TVP01 Condition No.	How Condition was Revised
1	Emission units authorization	1	No change
2	Limitations on drilling rig cumulative rated capacities	2	No change
3	Limitations on workover rig	3	No change

	cumulative rated capacity		
4	EU labeling requirement	4	No change
5	Notification of installed equipment	5	No change
6	Turbines - Emission and fuel control settings notification, sampling ports, utilities for testing	6	No change
7	Diesel engines - Emission and fuel control setting notification	7	No change
8	Notification of drilling rig selection	8	No change
9	Fuel burning equipment VE standard and initial compliance verification	10 & 10.1	No change
10	Incinerator VE standard and initial compliance verification	11	No change
11	Fuel burning equipment PM standard and initial compliance verification	17 & 17.1	No change
12	SO_2 standard	24	No change
13	Carbon Monoxide and NO_X PSD avoidance limits	25	No change
14	General ambient air quality provisions	29	No change
15	Public access control plan	30	No change
16	On-site worker housing policy	31	No change
17	NO_X and SO_2 ambient protection - hours of operation	32	No change
18	SO_2 ambient protection - fuel quality	33	No change
19	Assessable emissions	75	No change
21	Limit to Avoid Source Testing When Operating EU 32 on ULSD	34	No change
22	Composition of Wastes Burned in Incinerators	46	No change
20, 23 - 30	Standard provisions	76, 77, 81, 94 - 98	No change
31	Procedure for revised emission factors	27	No change
Appendices A - C	Turbine emission factors; Access control plan; On-site worker housing policy	Appendices A - C	No change

NON-APPLICABLE REQUIREMENTS

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

- NSPS standards for incinerators (EUs 48, 96): Subpart Ec does not apply because the incinerators burn less than 10% medical waste, a 10% enforceable limit has been issued through a minor permit, the Permittee has notified EPA of the exemption, and this permit contains the requirement to keep appropriate records. Subpart EEEE does not apply because Subpart CCCC does apply.
- NSPS Subpart GG: Turbines (EUs 1, 2, 32, 33) are not subject to Subpart GG because they are subject to KKKK. A permit shield has granted for this regulation.
- CAM. No stationary emission unit has uncontrolled potential emissions greater than or equal to the major source classification threshold. Incinerators subject to 40 CFR 60, Subpart CCCC include federal periodic monitoring, record keeping and reporting promulgated after the Clean Air Act 1990 amendments.
- 40 CFR 60, Subpart OOOO for crude oil storage tanks—Each crude oil storage tank at this stationary source has a potential to emit of less than 6 tons per year.

STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The State and Federal regulations for each condition are cited in Operating Permit No. AQ0923TVP01. This Statement of Basis provides the legal and factual basis for each term and condition as set forth in 40 C.F.R. 71.6(a)(1)(i).

Conditions 1 through 9: Emission Unit Inventory

Legal Basis: These conditions ensure compliance with requirements in AQ0923MSS09. The Department added a new condition to ensure Eni and the Department are aware of when a transportable engine's classification under the Clean Air Act changes from mobile source to stationary emission unit.

Factual Basis: The conditions reiterate the requirements of AQ0923MSS09, Conditions 1 through 8. To protect ambient air quality standards or increments, the minor permit defines groupings of emission units listed in the permit, and restricts the aggregate ratings of units operating at the locations covered by the permit. The Department updated EU ID 49 consistent with Eni's June 2, 2012 letter informing the Department that the unit has been replaced.

The Department imposed record keeping and notification requirements in the event a transportable internal combustion engine loses its non-road engine (mobile source) status. A transportable engine would be subject to State and Federal emission standards for stationary fuel burning equipment and reciprocating internal combustion engines respectively in the event that it is not classified as a mobile source. This new term is Condition 9.

Conditions 10 - 16: Visible Emissions Standard and MR&R

Legal Basis: These conditions ensure compliance with the applicable requirements in 18 AAC 50.050(a) and 18 AAC 50.055(a).

- 18 AAC 50.055(a) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 1 - 3, 4A, 4B, 9 - 13, 23, 24, 32, 33, 47, 49, 50, 64, 68, 93 - 95, 98, 99, 100, 101, 106 - 116 are fuel-burning equipment.
- 18 AAC 50.050(a) applies to the operation of incinerators. EU IDs 48 and 96 are incinerators.

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

Factual Basis: Condition 10 prohibits the Permittee from causing or allowing visible emissions in excess of the applicable standard in 18 AAC 50.055(a)(1).

MR&R requirements are listed in Conditions 12 through 14, and 16 of the permit.

These conditions have been adopted into regulation as Standard Conditions, and have been modified to be consistent with the time schedules for initial verification of compliance in Minor Permit AQ0923MSS09. They were also modified to remove the optional smoke/no smoke provisions at the request of the applicant.

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

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

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

Condition 16 was developed to provide a standardized version of flare monitoring that is not dependent upon the type or design of upstream equipment. It has been claimed that gas-fired flares normally burn without emitting visible emissions, but actual field data demonstrating this assumption is not available. However, gas-fired flares have been shown to smoke when a control device, i.e. a knockout drum, flare scrubber, gas or steam assist, or vapor recovery system malfunctions. Thus, the condition sets out a protocol to collect actual field data to determine compliance with the 20 percent opacity standard for flares.

Gas-Fired Fuel Burning Equipment:

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

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

Liquid Fuel-Fired Burning Equipment:

Monitoring – The Permittee is required to conduct PM source testing if threshold values for opacity are exceeded.

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

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

Dual Fuel-Fired Emission Units:

For EU ID 32, as long as it operates only on gas, monitoring consists of a statement in each operating report to indicate whether only gaseous fuels were used in the equipment during the reporting period. This unit must be limited to 600 hours per year of operation on liquid fuel, consistent with Condition 21 of AQ0923MSS09, which allows duel fuel operation, and will avoid minor and PSD permitting. (See Section 2.2 of the Technical Analysis Report for AQ0923MSS07.) If the unit operates on liquid fuel for more than 600 hours, the Permittee must report a permit deviation, and monitor visible emissions consistent with Condition 15.2.

Flares:

Monitoring for flares (EU IDs 4A, 4B, and 113) requires Method 9 observations of scheduled flaring events lasting more than one hour. The Permittee must report the results of these observations to the Department.

Incinerators:

Condition 11 prohibits the Permittee from causing or allowing visible emissions in excess of the applicable standard in 18 AAC 50.050(a). Condition 11 applies to Federal and State visible emissions standards to each solid waste incinerator. The Permittee shall not cause or allow the equipment to violate these standards. The Permittee is required to monitor, record, and report according to Condition 11.1 and 11.2.

Conditions 17 through 23, Particulate Matter (PM) Standard

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

- EU IDs 1 - 3, 4A, 4B, 9 - 13, 23, 24, 32, 33, 47, 49, 50, 64, 68, 93- 95, 98, 99, 100, 101, 106 - 116 are fuel-burning equipment.

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

Factual Basis: Condition 17 prohibits emissions in excess of the state PM (also called grain loading) standard applicable to fuel-burning equipment and industrial processes. The Permittee shall not cause or allow fuel-burning equipment nor industrial processes to violate this standard.

MR&R requirements are listed in Conditions 17 through 23 of the permit.

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

Gas-Fired Fuel Burning Equipment:

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

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

Liquid Fuel-Fired Burning Equipment:

Monitoring – The Permittee is required to conduct PM source testing if threshold values for opacity are exceeded.

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

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

Dual Fuel-Fired Emission Units:

For EU ID 32, as long as it operate only on gas, monitoring consists of certification statement in the operating report to indicate whether only gaseous fuels were used in the equipment during the period covered by the report. When this unit operates on a liquid fuel for more than 600 hours in a calendar year, monitoring as detailed in Condition 18 is required for that emission unit. The unit is not a backup unit, and is therefore not subject to Department Policy and Procedure No. AWQ 04.02.103, Topic # 2, 10/8/04, or the related 400 hour trigger for additional monitoring.

Flares:

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

Condition 24, Sulfur Compound Emissions

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

- EU IDs 1 - 3, 4A, 4B, 9 - 13, 23, 24, 32, 33, 47, 49, 50, 64, 68, 93 - 95, 98, 99, 100, 101, 106 - 116 are fuel-burning equipment.

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

Factual Basis: The condition requires the Permittee to comply with the sulfur compound emission standard applicable to fuel-burning equipment in 18 AAC 50.055(c). The Permittee may not cause or allow the affected equipment to violate this standard.

Sulfur dioxide comes from the sulfur in the fuel (e.g. coal, natural gas, fuel oils).

To protect the SO_2 ambient air quality standards, Minor Permit No. AQ0923MMS09 Condition 20 limits fuel sulfur from all of the fuel burning equipment listed under this permit to concentrations lower than necessary to comply with 18 AAC 50.055(c). That condition includes all necessary MR&R. Condition 33 of this permit contains those requirements from the minor permit.

Therefore, the MR&R for Condition 24 is to show compliance with Condition 33.

Conditions 25 to 34, Pre-Construction Permit Requirements

Legal Basis: The Permittee is required to comply with all effective stationary source-specific requirements that were carried forward from previous EPA PSD permits, SIP approved permits to operate issued before January 18, 1997, SIP approved construction permits, SIP approved minor permits, operating permits issued between January 18, 1997 and September 30, 2004, or owner requested limits established under 18 AAC 50.225. These requirements include Best Available Control Technology limits, limits to ensure compliance with the attainment or maintenance of ambient air quality standards or maximum allowable ambient concentrations, and owner requested limits. State pre-construction requirements apply because they were originally developed through case-by-case action under a Federally approved SIP or approved Operating Permit program. EPA approved the latest SIP effective September 13, 2007.

Factual Basis: Condition 25.1 contains a PSD avoidance limit for carbon monoxide and NO_X. Condition 25.1.a to 25.1.f require calculations of monthly and 12-month rolling CO and NO_X emissions from each group of similar equipment and for the stationary source as a whole. Condition 25.2 and 25.3 say what information needs to be reported as excess emissions or in the operating report.

Conditions 26 through 28 require periodic performance testing to verify the emission factors used to demonstrate PSD avoidance, and revising the factors as appropriate. Condition 34 requires testing to verify emission factors for EU 32 if it exceeds 600 hours while burning liquid fuel, and avoids that requirement for 600 hours or less.

Conditions 29 to 33 are for protection of NO_2, SO_2, and PM-10 air quality standards. They include maintaining the ambient boundaries, minimum stack heights and configuration, procedures related to on-site housing (which result in housing not being considered in ambient air), a plan to control public access inside the ambient boundaries, limits on hours of operation and associated monitoring, and limits on fuel sulfur and associated monitoring for each fuel type,.

Condition 35, Insignificant Emission Units

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

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

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

Condition 35.4.a requires certification that the units did not exceed state emission standards during the previous year and did not emit any prohibited air pollution.

Conditions 36 - 43, NSPS Subpart A Requirements

Legal Basis: The Permittee must comply with those New Source Performance Standard (NSPS) provisions incorporated by reference the NSPS effective July 1, 2007, for specific industrial activities, as listed in 18 AAC 50.040[3].

Most affected facilities (with the exception of some storage tanks) subject to an NSPS are subject to Subpart A. At this stationary source, EU ID(s) 1, 2, 3, 32, 33, 47, 48, 49, 50, 93, 96, and 106, are subject to NSPS Subpart CCCC, IIII, or KKKK and therefore subject to Subpart A.

Condition 36.1 through 36.4 - The Permittee has already complied for most of the above units. However, not all units are listed as having been installed by the application date. The Permittee may still be subject to the notification requirements in 40 C.F.R. 60.7 (a)(1) - (3), and these requirements will apply in the event of a new NSPS affected facility[4].

Other portions of 40 C.F.R. 60.7(a) only apply to EUs 48 and 96 because other than fuel monitoring, CMS are only required for those units (under Subpart CCCC). There is not an "existing facility"[5] (as that term is defined in Subpart A) at the stationary source.

Condition 37 - Start-up, shutdown, or malfunction record maintenance requirements in 40 C.F.R. 60.7(b) are applicable to NSPS affected facilities subject to Subpart A. However, 60.7 does not apply to engines subject to Subpart IIII. Table 8 of that subpart states that 60.7 only applies as specified in 60.4214(a). 60.4214(a) does not include start-up, and shutdown. 60.4214(a) does include maintenance for engines rated at greater than 2,237 KW, and pre-2007 model engines that are greater than 130 KW and not certified. EU 3 is rated at 2,500 KW. Therefore, EU 3 is subject to 60.4214(a). EU 49 is a pre-2007 engine, and may satisfy the requirements of Condition 50.1 by being a certified engine. If so it is not subject to 60.4214(a).

The requirements for of 60.4214(a) are listed separately in Condition 51.3 because they differ from 60.7.

EUs subject to Subparts CCCC and KKKK are subject to 60.7(b).

Conditions 38 and 39 - NSPS excess emission reporting requirements and summary report form in 40 C.F.R. 60.7(c) & (d) are applicable to EU IDs 1, 2, 32, and 33 (40 C.F.R. 60.4375(a)) and EU IDs 48 and 96 (40 C.F.R. 60.2230(a)). EU IDs 1, 2, 32, and 33 are subject to these reporting requirements only for fuel sulfur monitoring. The Department has included in Attachment A of the statement of basis a copy of the Federal EEMSP summary report form for use by the Permittee. These reports are not required for engines under Subpart IIII.

Recordkeeping requirements in 40 C.F.R. 60.7(f) are applicable to all NSPS affected facilities. (Satisfied by Condition 93)

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

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

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

Condition 40 - The Permittee has already complied with the initial performance test requirements in 40 C.F.R. 60.8 for most of the above units. However, not all units are listed as having been installed by the application date, and the Permittee may still be subject for EUs 48 and 96. The Permittee is still subject to these requirements in the event of a new NSPS affected facility, in the event of a modification or reconstruction of an existing facility into an affected facility or at such other times as may be required by EPA.

Condition 41 - Good air pollution control practices in 40 C.F.R. 60.11 are applicable to NSPS affected facilities subject to Subpart A (EU IDs 3, 47, 48, 49, 50, 93, 96, and 106). However, turbines subject to Subpart KKKK are subject to the good air pollution control practice provision of 40 C.F.R. 60.4333(a) - that provision is included separately in Condition 55 of this permit.

Condition 42 - states that any credible evidence may be used to demonstrate compliance or establishing violations of relevant NSPS standards for EU IDs 1, 2, 3, 32, 33, 47, 48, 49, 50, 93, 96, and 106.

Condition 43 - Concealment of emissions prohibitions in 40 C.F. R. 60.12 are applicable to EU IDs 1, 2, 3, 32, 33, 47, 48, 49, 50, 90, 93, 96, and 106.

The flares are not subject to 40 C.F. R. 60.18 because they are safety devices and not control devices. They do not receive any tank vapors from any NSPS regulated emission units.

Factual Basis: Subpart A contains the general requirements applicable to all affected facilities (emission units) subject to NSPS. In general, the intent of NSPS is to provide technology-based emission control standards for new, modified and reconstructed affected facilities.

Conditions 44 - 45, NSPS Subpart Dc Requirements

Legal Basis: The NSPS applies to steam generating units for which construction, modification, or reconstruction commenced after June 9, 1989 and have maximum design heat input capacities of 29 MW (100 MMBtu/hr) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr). EU ID 106 has a heat input capacity of 10.5 MMBtu/hr. The application lists the construction date as unknown. It is presumed to be newer than 1989 and would therefore be subject to Subpart Dc.

EU ID 106 burns fuel gas. Therefore, the only requirements this subpart require are notification and fuel monitoring.

Factual Basis: The conditions require the Permittee to comply with the Subpart Dc notification and fuel monitoring requirements. The more restrictive requirement of Condition 93 will assure compliance with the records retention requirement.

Condition 46, Incinerators - NSPS Subparts Ec

Legal Basis: NSPS Subpart Ec applies to incinerators that burn any amount of hospital or medical/infectious waste, that commence construction after June 20, 1996. NSPS Subpart CCCC applies to incinerators that burn Commercial or Industrial Solid Waste Incineration Units for Which Construction Is Commenced after November 30, 1999.

Factual Basis: Incinerators subject to these subparts must either comply with the exemption provisions of the subparts, or comply with emission limitations, MR&R and

other requirements. Condition 46 contains the waste stream limitations and record keeping to implement the exemption provisions.

Condition 47, Incinerators - NSPS Subpart CCCC Requirements

Legal Basis: NSPS Subpart CCCC applies to new Commercial or Industrial Solid Waste Incineration Units (CISWI), as defined in 40 C.F.R. 60.2265. A CISWI is new if it is constructed after May 20, 2011.

Subpart CCCC was revised March 21, 2011, but the effective date was stayed by EPA May 18, 2011, two days before the rule was to come into effect. The stay was removed January 9, 2012 by the D.C. Circuit Court so that the revisions are currently in effect. EPA is preparing further revisions to the rule. Emission units 48 and 96 are subject to this rule.

Factual Basis: Incinerators subject to this subpart must comply with requirements for:

- a siting analysis [60.2045, 60.2050],
- a waste management plan [60.2055 - 2065],
- operator training and qualification [60.2070 - 2100],
- emission limitations and operating limits [60.2105 - 2120 and Subpart CCCC, Table 8],
- performance testing [60.2125 - 2130 and Subpart CCCC, Table 8],
- Initial compliance requirements [60.2135, 60.2140, 60.2141, 60.2125],
- continuous compliance requirements [60.2145 - 2160],
- monitoring [60.2165 - 2170],
- recordkeeping and reporting [60.2175 - 2240],

These requirements are included under Condition 47.

Some of the NSPS Subpart CCCC requirements were required to be completed before January 9, 2012 when the stay on the compliance deadline with the rule was lifted. When the stay was removed, the units became subject to the requirements retroactively to May 20, 2011. Because the rule became retroactively in effect, it was not possible for Eni to meet the compliance deadlines specified in Subpart CCCC. So the Department has added compliance schedules for these provisions. [See Condition 47.3, 47.4, and 47.9.]

In the additional information received by the Department March 23, 2012, the applicant identified EUs 48 and 96 as being small remote incinerators. To completely meet the definition of small remote incinerators in 40 C.F.R. 60.2265, they must combust 3 tons of waste per day or less. Because these units have a rated capacity of 300 lb/hr (3.6 tons per day), the Department has added a requirement for the operator to report the amount of waste burned on a monthly average [Condition 47.5].

Conditions 48 - 52, NSPS Subpart IIII Requirements

Legal Basis: NSPS Subpart IIII applies to stationary compression ignition internal combustion engines (CI ICE) that commence construction, modification, or reconstruction after July 11, 2005 where the stationary CI ICE are manufactured after April 1, 2006 for non-fire pump engines and after July 1, 2006 for certified fire pump engines. EU IDs 3, 47, 49, 50, and 93 are subject to Subpart IIII under 40 C.F.R. 60.4200 because they are non-emergency non-fire pump engine constructed after July 11, 2005 and manufactured after April 1, 2006.

Factual Basis: These conditions incorporate the Subpart IIII emissions standards applicable to EU IDs 3, 47, 49, 50, and 93. The Permittee may not cause or allow these emission units to violate these standards. These conditions also provide MR&R specifically called out for within the Subpart. The Permittee is required to operate and maintain the stationary CI ICE according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer.

For each 2007 and later model year, the Permittee must purchase an engine that is certified by the manufacturer to comply with the appropriate standards. Since manufacturers are also required to certify all of the engines of those model years, no specific monitoring is required of the operator for this requirement.

Each affected pre-2007 model year stationary CI ICE (EUs 49, 80, and 81) must comply with the emission standards in Table 1 to Subpart IIII. Since 40 C.F.R. 60.4211(b) allows the operator options for complying with the standard, the Permittee shall provide documentation of compliance under Condition 52.1.a, which could by a copy of the Manufacturer's Engine Certification. The documentation is to be provided in the first operating report required by Condition 98.

EUs 47, 49, and 50 are permitted to operate off shore and are therefore not considered accessible by the Federal Air Highway System (FAHS). Pre-2014 engines in Alaska not accessible by the FAHS are exempt from the fuel requirements of 60.4207. [60.4216(d)]

60.4216 (c), which allows alternate standards for engines not accessible by the FAHS, applies to EUs 47 and 49 because they are subject to standards listed under 60.4201 or 60.4204.

For any engine that complies by use of a particulate filter, the Subpart requires monitoring backpressure from the filter, and keeping associated records.

The requirements in Conditions 51.4 and 52 are added to fill gaps in the reporting requirement under this Subpart.

Conditions 53 - 55, NSPS Subpart KKKK Requirements

Legal Basis: Conditions 53 and 54 prohibit the Permittee from exceeding emission standards for NO_X and SO_2 set out in Subpart KKKK. Condition 55 reiterates the “good air pollution control practices” requirements for the affected emission unit. The Subpart applies to combustion turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005. EU IDs 1, 2, 32, and 33 meets these criteria and are therefore subject to these requirements.

Factual Basis: These conditions incorporate the Subpart KKKK NO_X and SO_2 emissions standards. The Permittee may not cause or allow EU IDs 1, 2, 32, and 33 to violate these standards. These conditions also provide MR&R specifically called out for within the Subpart. Condition 53.2, which requires keeping records of performance tests data by referencing the standard requirement in Condition 93, is added to fill gaps in the recordkeeping requirement under this Subpart. The requirement for initial performance tests has been deleted from the condition because it has been either satisfied or waived by EPA for these turbines. The provisions of the EPA waiver for testing multiple turbines have been included in Condition 53.1.c.

Condition 56, NESHAP Subpart A Requirements

Legal Basis: Condition 56 requires the Permittee to comply with applicable requirements of 40 C.F.R. 63, Subpart A.

Factual Basis: Emission units under this permit are subject to Subpart A because they are subject to Subparts ZZZZ and JJJJJJ. Table 8 in each of those subparts identify the Subpart A provisions that apply.

Conditions 57 - 60, NESHAP Subpart ZZZZ

Legal Basis: 40 C.F.R. 63, Subpart ZZZZ applies to any stationary reciprocating internal combustion engine (RICE) at either a major or area source of HAPs (except at a test cell stand). EUs 3, 47, 49, 50, 64, 68, 93 and 116 are RICE at an area source.

Factual Basis: Engines that are also subject to 40 C.F.R. 60, Subpart IIII meet the requirements of Subpart ZZZZ by meeting Subpart IIII and are not subject to any additional requirements. EU IDs 3, 47, 49, 50, 93 are subject to Subpart IIII. [40 C.F.R. 63.6590(c)(1)]

EU IDs 64, 68, and 116 are not subject to Subpart IIII because they were manufactured before June 12, 2006. They are therefore subject to further provisions of Subpart ZZZZ.

EUs 64, 68 and 116 are permitted for off shore operation. They are therefore <u>not</u> considered accessible by the Federal Aid Highway System (FAHS). Compression Ignition (CI) RICE NOT accessible by the FAHS are subject to:

- Compliance with management practices that are shown for stationary non-emergency CI RICE less than or equal to 300 HP in Table 2d, 1. [63.6603(b)]
- Optional oil Analysis program [63.6625(i)]
- General requirements [63.6605]
- Applicable Subpart A notifications listed in 63.6645(a)
- Keeping records of 63.6655 (e), consistent with 63.6660
- Applicable portions of Subpart A General requirements in Table 8 [63.6665]

Because the engines are existing the Permittee must comply with applicable emission limitations and operating limitations no later than May 3, 2013.

Condition 61, NESHAP Subpart CCCCCC

Legal Basis: NESHAPS Subpart CCCCCC applies to Gasoline Distribution Facilities (GDF) at area sources of hazardous air pollutants. EU ID 118 is subject to Subpart CCCCCC under 40 C.F.R. 63.11111 because it is a new GDF. The applicant stated that upon completion the storage tank and associated equipment will have a monthly throughput between 10,000 and 100,000 gallons of gasoline.

Factual Basis: EU ID 118 is subject to the applicable work practice and management practice standards of 40 C.F.R. 63.11117 upon startup. If monthly throughput equals or exceeds 100,000 gallons, the GDF will be subject to the standards of 63.11118.

Conditions 62 - 67, NESHAP Subpart JJJJJJ

Legal Basis: NESHAPS Subpart JJJJJJ applies to industrial boilers at area sources of hazardous air pollutants that are not otherwise regulated under Part 63. EU IDs 9, 10, 69 – 71, 98, 99, 107 – 110, and 113 - 115 are subject to Subpart JJJJJJ under 40 C.F.R. 63.11193 and 63.11194 because they are new or existing industrial boilers. The boilers are not rated at 25 MW, and do not provide electric utility power, and are located at an area source of HAPs emissions.

Factual Basis: EU IDs 98, 99, 107 – 110 and 113 - 115 are new boilers subject to the applicable work practice and management practice standards upon startup. EU IDs 9, 10, and 69 – 71 are existing boilers. Per 40 CFR 63.11195(e), EU ID 106, 111 and 112 are not subject to the requirements of 40 CFR 63 Subpart JJJJJJ because the units are gas-fired boilers as defined in the subpart.

Condition 68, Protection of Stratospheric Ozone, 40 C.F.R 82

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.040(d) and applies if the Permittee engages in the recycling or disposal of certain refrigerants. The condition requires the Permittee to comply with the standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F, which will apply if the Permittee uses certain refrigerants. These prohibitions also apply to all stationary sources that use halon for fire extinguishing and explosion inerting. The condition prohibits the Permittee from causing or allowing violations of these prohibitions. The stationary source uses halon and is therefore subject to the federal regulations contained in 40 C.F.R. 82.

Factual Basis: Because these regulations include adequate monitoring and reporting requirements and because the Permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient to ensure compliance with this federal regulation. These conditions incorporate applicable 40 C.F.R. 82 requirements. Condition 68.3 is aimed at halon fire fighting systems used at stationary sources with significant sized emission units. The condition references the Protection of Stratospheric Ozone prohibitions in both Subpart G (Significant New Alternatives Policy Program) and Subpart H (Halon Emission Reduction).

Condition 69, Asbestos NESHAP

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

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

Condition 70, NESHAPs Applicability Determinations

Legal Basis: This condition requires the Permittee to keep and make available to the Department copies of the major stationary source determination and applicability of specific federal regulations that may apply to its stationary sources.

Factual Basis: The Permittee has conducted an analysis of the stationary source and determined that it is not a major HAPs stationary source based on emissions. This condition requires the Permittee to keep and make available to the Department copies of the major stationary source determination.

Conditions 71 - 73, Standard Terms and Conditions

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

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

Condition 74, Administration Fees

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

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

Conditions 75 - 76, Emission Fees

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

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

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

The default assessable emissions are generally potential emissions of each air pollutant in excess of 10 tons per year authorized by the permit (AS 46.14.250(h)(1)(A)).

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

This standard condition specifies that, unless otherwise approved by the Department, calculations of assessable emission based on actual emissions use the most recent previous calendar year's emissions. Since each current year's assessable emission are based on the previous year, the Department will not give refunds or make additional billings at the end of the current year if the estimated emissions and current year actual emissions do not match.

Condition 77, Good Air Pollution Control Practice

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.346(b)(5) and applies to all emission units, **except** those subject to Federal emission standards, those subject to continuous emission or parametric monitoring, and for insignificant emission units, i.e., except EU IDs 1, 2, 3, 32, 33, 47, 48, 49, 50, 64, 68 93, 96 and 116.

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

The Department adopted this condition under 18 AAC 50.346(b) as Standard Permit Condition VI pursuant to AS 46.14.010(e). This condition has been modified in the permit as follows. Records kept in accordance with Condition 77.2 for units previously subject to GAPCP need to be maintained for 5 years in accordance with Condition 93 even if a unit is no longer subject to this condition.

Beyond as noted above, the Department previously determined that this standard condition adequately meets the requirements of 40 C.F.R. 71.6(a)(3). No additional emission unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source specific conditions would better meet these requirements. Therefore, the Department concluded that the standard condition as modified meets the requirements of 40 C.F.R. 71.6(a)(3).

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

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

Condition 78, Dilution

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

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

Condition 79, Reasonable Precautions to Prevent Fugitive Dust

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

Factual Basis: The condition requires the Permittee to comply with 18 AAC 50.045(d), and take reasonable action to prevent particulate matter (PM) from being emitted into the ambient air.

Condition 80, Stack Injection

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

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

Condition 81, Air Pollution Prohibited

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.110. The condition prohibits the Permittee from causing any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property. Air Pollution Prohibited requirements apply to the stationary source because the stationary source will have emissions.

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

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

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

Condition 82, Technology-Based Emission Standard

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

Factual Basis: The conditions of this permit list applicable technology-based emission standards (NSPS and Part 63 NESHAPs) and require excess emission reporting for each standard in accordance with Condition 97. Excess emission reporting under Condition 97 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 97.

Condition 83, Open Burning

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

Factual Basis: No specific monitoring is required for this condition. Condition 83.1 requires the Permittee to keep "sufficient records" to demonstrate compliance with the standards for conducting open burning, but does not specify what these records should contain.

More extensive monitoring and recordkeeping is not warranted because the Permittee does not conduct open burning as a routine part of their business. Also, most of the requirements are prohibitions, which are not easily monitored. Compliance is demonstrated through annual certification required under Condition 99.

Condition 84, Requested Source Tests

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

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

Conditions 85 - 87, Operating Conditions, Reference Test Methods, Excess Air Requirements

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.220(b) and apply because the Permittee is required to conduct source tests by this permit. The Permittee is required to conduct source tests as set out in Conditions 85 through 87.

Factual Basis: These conditions supplement the specific monitoring requirements stated elsewhere in this permit. Compliance monitoring with Conditions 85 through 87 consist of the test reports required by Condition 92.

Condition 88, Test Exemption

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

Factual Basis: As provided in 18 AAC 50.345(a), amended November 9, 2008, the requirements for test plans, notifications and reports do not apply to visible emissions observations by smoke readers, except in connection with required particulate matter testing.

Conditions 89 - 92, Test Deadline Extension, Test Plans, Notifications and Reports

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

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

Condition 93, Recordkeeping Requirements

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

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

Condition 94, Certification

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

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

Condition 95, Submittals

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

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

Condition 96, Information Requests

Legal Basis: This condition requires the Permittee to submit requested information to the Department. This is a standard condition from 18 AAC 50.345(i) of the state approved operating permit program effective November 30, 2001.

Factual Basis: This condition requires the Permittee to submit information requested by the Department. Monitoring consists of receipt of the requested information.

Condition 97, Excess Emission and Permit Deviation Reports

Legal Basis: This condition requires the Permittee to comply with the applicable requirement in 18 AAC 50.235(a)(2) and 18 AAC 50.240. Also, the Permittee is required to notify the Department when emissions or operations deviate from the requirements of the permit.

Factual Basis: This condition satisfies two state regulations related to excess emissions - the technology-based emission standard regulation and the excess emission regulation. Although there are some differences between the regulations, the condition satisfies the requirements of each regulation.

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

Section 13, Notification Form

The notification form contained in Standard Permit Condition IV meets the requirements of Chapter 50, Air Quality Control.

Condition 98, Operating Reports

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.346(b)(6) and applies to all permits.

Factual Basis: The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements elsewhere in the permit. The reports themselves provide monitoring for compliance with this condition.

The Department used the Standard Permit Condition VII as adopted into regulation on August 20, 2008 pursuant to AS 46.14.010(e). The Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emission unit or stationary source operational or compliance factors indicate the unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard condition meets the requirements of 40 C.F.R. 71.6(a)(3).

Condition 99, Annual Compliance Certification

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.040(j)(4) and applies to all Permittees.

Factual Basis: This condition specifies the periodic compliance certification requirements, and specifies a due date for the annual compliance certification. Each annual certification provides monitoring records for compliance with this condition.

The Permittee is required to submit to the Department an original and one copy of an annual compliance certification report. The Permittee may submit one of the required copies electronically at their discretion. This change more adequately meets the requirements of 18 AAC 50 and agency needs, as the Department can more efficiently distribute the electronic copy to staff in other locations.

Condition 100, NSPS and NESHAP Reports

Legal Basis: The Permittee is required to provide the Federal Administrator and Department a copy of each emission unit report for units subject to NSPS or NESHAP Federal regulations under 18 AAC 50.326(j)(4). 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

Factual Basis: The condition supplements the specific reporting requirements in 40 C.F.R. 60, 40 C.F.R. 61, and 40 C.F.R. 63. The reports themselves provide monitoring for compliance with this condition.

Condition 101, Emission Inventory Reporting

Legal Basis: This condition requires the Permittee to submit emissions data to the State to satisfy the Federal requirement to submit emission inventory data from point sources as required under 40 CFR 51.321 (6/10/02). It applies to sources defined as point sources in 40 CFR 51.20. The State must report all data elements in Table 2A of Appendix A to Subpart A of 40 CFR 51 to EPA (73 FR 76556).

Factual Basis: The emission inventory data is due to EPA 12 months after the end of the reporting year (40 CFR 51.30(a)(1) and (b)(1), 12/17/08). A due date of March 31 corresponds with sources reporting actual emissions for assessable emissions purposes and provides the Department sufficient time to enter the data into EPA's electronic reporting system.

The air emissions reporting requirements under 40 CFR Part 51 Subpart A apply to States; however, States rely on information provided by point sources to meet the reporting requirements of Part 51 Subpart A. This is a State-only requirement and is not Federally enforceable. In the past, the Department has made information requests to point sources, to which the point source is obligated to reply under 18 AAC 50.200. The information requests occur on a routine basis as established by Part 51 Subpart A and consume significant staff resources. To increase governmental efficiency and reduce costs associated with information requests that occur on a routine basis, it has been determined that a standard permit condition best fulfills the need to gather the information needed to satisfy the requirements of Subpart A of 40 CFR 51.

To ensure that the Department's electronic system reports complete information to the National Emissions Inventory, Title V stationary sources classified as Type A in Table 1 of Appendix A to Subpart A of 40 CFR 51 are required to submit with each annual report all the data elements required for the Type B source triennial reports (see also Table 2A of Appendix A to Subpart A of 40 CFR Part 51). All Type A sources are also classified as Type B sources. However the Department has streamlined the reporting requirements so Type A sources only need to submit a single type of report every year instead of both an annual report and a separate triennial report every third year.

The Department revised the form in Section 14 to shorten the length and provide clear borders to the data entry fields, as well as a citation reference to the applicable regulation.

Condition 102, Permit Applications and Submittals

Legal Basis: The Permittee may need to submit permit applications and related correspondence.

Factual Basis: Standard Permit Condition XIV directs the applicant to send copies of all application materials required to be submitted to the Department directly to the EPA, in electronic format if practicable. This condition shifts the burden of compliance from the Department to ensure that copies of application materials are submitted to EPA by transferring that responsibility to the Permittee.

Conditions 103 - 105, Permit Changes and Revisions Requirements

Legal Basis: The Permittee is obligated to notify the Department of certain off-permit source changes and operational changes under18 AAC 50.326(j)(4). 40 C.F.R. 71.6(a)(10), (12), and (13) incorporated by reference under 18 AAC 50.040(j) require these provisions within this permit. 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

Factual Basis: These are conditions required in 40 C.F.R. 71.6 for all operating permits to allow changes within a permitted stationary source without requiring a permit revision.

The Permittee did not request trading of emission increases and decreases as described in 71.6(a)(13)(iii).

Condition 106, Permit Renewal

Legal Basis: The Permittee must submit a timely and complete operating permit renewal application if the Permittee intends to continue source operations in accord with the operating permit program under18 AAC 50.326(j)(3). The obligations for a timely and complete operating permit application are set out in 40 C.F.R. 71.5 incorporated by reference in 18 AAC 50.040(j)(3). 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

Factual Basis: In accordance with AS 46.14.230(a), this operating permit is issued for a fixed term of five years after the date of issuance, unless a shorter term is requested by the permit applicant. The Permittee is required to submit an application for permit renewal by the specific dates applicable to the stationary source as listed in this condition. As stated in 40 C.F.R. 71.5(a)(1)(iii), submission for a permit renewal application is considered timely if it is submitted at least six months but no more than eighteen months prior to expiration of the operating permit. According to 71.5(a)(2), a complete renewal application is one that provides all information required pursuant to 40 C.F.R. 71.5(c) and must remit payment of fees owed under the fee schedule established pursuant to 18 AAC 50.400. 40 C.F.R. 71.7(b) states that if a source submits a timely and complete application for permit issuance (including renewal), the source's failure to have a permit is not a violation until the permitting authority takes final action on the permit application.

Therefore, for as long as an application has been submitted within the timeframe allowed under 40 C.F.R. 71.5(a)(1)(iii), and is complete before the expiration date of the existing permit, then the expiration of the existing permit is extended and the Permittee has the right to operate under that permit until the effective date of the new permit. However, this protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit by the deadline specified in writing by the Department any additional information needed to process the application. Monitoring, recordkeeping, and reporting for this condition consist of the application submittal.

Conditions 107 - 110, General Compliance Requirements

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.326(j)(3). The Permittee is required to comply with these standard conditions set out in 18 AAC 50.345 included in all operating permits. 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

Factual Basis: These are standard conditions for compliance required for all operating permits.

Condition 111, Compliance Schedule

Legal Basis: This condition implements the provisions of 40 C.F.R. 71.6(c)(3), which require a compliance schedule for any requirements with which the stationary source is not in compliance at the time of permit issuance.

Factual Basis: The condition includes the schedule of compliance for NSPS Subpart CCCC. As described for Condition 47, the Subpart began to apply to EUs 48 and 96 after the NSPS due dates for some of the requirements. Condition 47 contains new due dates.

Conditions 112 - 113, Permit Shield

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.326(j) and apply because the Permittee has requested that the Department shield the source from the applicable requirements listed under these conditions under the Federally approved State operating program effective November 30, 2001

Factual Basis: Table H of Operating Permit No. AQ0923TVP01 shows the permit shield that the Department granted to the Permittee. The following table shows the requests that were denied and the reasons that they were denied. The Department based the determinations on the permit application, past operating permit, likelihood for the source to become subject during the life of the permit, Title I permits and inspection reports.

Table N - Permit Shields Denied

Shield Requested for:	Reason for Shield Request:	Reason for Denial
40 CFR 60 Subpart Ea	Not an affected stationary source, operation, or industry.	HMWI exemption is dependent upon meeting 10% medical waste exemption w MR&R. Status depends on compliance with Condition 46 of this permit.
40 CFR 60 Subpart Ec except §§60.50c(c) and 60.51c	EUs 48 and 96 are co-fired combustors as defined under 40 CFR 60 Subpart Ec and are therefore not subject to this subpart.	Status as co-fired combustors and exemption from Subpart Ec depends on compliance with Condition 46 of this permit.
40 CFR 60 Subpart CCCC except §60.2020(c)(2)	EUs 48 and 96 burn more than 30 percent municipal solid waste or refuse-derived fuel as defined in 40 CFR Part 60 Subpart Ea and have the capacity to burn less than 35 tons per day of municipal solid waste or refuse-derived fuel.	60.2020(c) was revised March 21, 2011. That rulemaking was stayed until January 9, 2012, when the stay was reversed by the DC Circuit Court. The revised 60.2020(c) does not contain the exemption originally in 60.2020(c)(2). EPA is considering future revisions to the rule.
40 C.F.R. 61, Subpart M	No affected facility within stationary source.	This subpart is a standard condition which applies if asbestos demolition or renovation occurs at the stationary source.
40 CFR 63 Subpart A	Per 40 CFR 63.1(a)(4), a facility must be subject to a specific subpart of 40 CFR 63 to be subject to Subpart A.	Units 68 and 116 are subject to 40 C.F.R. 63, Subpart ZZZZ.
3, 47, 49, 50, 93	40 CFR 63 Subpart ZZZZ	For an affected facility also subject to NSPS Subpart IIII, the NESHAP Subpart ZZZZ does not exempt the reciprocating internal combustion engine. Instead an owner or operator meets the NESHAPS Subpart ZZZZ by complying with NSPS Subpart IIII.
40 C.F.R. 98, Subparts J, M, and KK	No affected facility within stationary source.	These subparts are reserved. EPA has decided not to promulgate them.

ATTACHMENT A

FIGURE 1--SUMMARY REPORT--GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE

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

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

Reporting period dates: From _____ to _____

Company:
Emission Limitation: _____

Address: _____

Monitor Manufacturer: _____

Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

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

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

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

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

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

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

Name: _____

Signature: _____ *Date*: _____

Title: _____