DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ0064TVP04 Issue Date: PUBLIC COMMENT - August 19, 2019
Expiration Date: FIVE YEARS

The Alaska Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the Permittee, **Hilcorp Alaska, LLC**, for the operation of the **Bruce Platform**.

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

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

Citations listed herein are contained within the effective version of 18 AAC 50 at permit issuance. 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>.

Upon effective date of this permit, Operating Permit No. AQ0064TVP03, including all revisions, expires.

James R. Plosay, Manager
Air Permits Program

Table of Contents

Abbreviations and Acronyms

AAC.....Alaska Administrative Code
ADEC .....Alaska Department of Environmental Conservation
AS .....Alaska Statutes
ASTM.....American Society for Testing and Materials
BACT .....best available control technology
bHp .....brake horsepower
CAA or The Act .Clean Air Act
CDX.....Central Data Exchange
CEDRI .....Compliance and Emissions Data Reporting Interface
CFR .....Code of Federal Regulations
CO .....carbon monoxide
dscf .....dry standard cubic foot
EPA .....US Environmental Protection Agency
EU.....emissions unit
gph .....gallons per hour
gr/dscf.....grain per dry standard cubic foot (1 pound = 7000 grains)
HAPs .....hazardous air pollutants [as defined in AS 46.14.990]
hp .....horsepower
ID.....emissions unit identification number
kPa .....kiloPascals
kW .....kilowatts
LAER.....lowest achievable emission rate
MACT .....maximum achievable control technology [as defined in 40 CFR 63]
MMBtu/hr.....million British thermal units per hour
MMscf .....million standard cubic feet
MR&R .....monitoring, recordkeeping, and reporting
NAICS.....North American Industrial Classification System
NESHAP .....National Emission Standards for Hazardous Air Pollutants [as contained in 40 CFR 61 and 63]
NH_3.....ammonia
NOx.....nitrogen oxides
NSPS .....New Source Performance Standards [as contained in 40 CFR 60]
O_2 .....oxygen
PAL .....plantwide applicability limitation
Pb .....lead
$PM_{2.5}$.....particulate matter less than or equal to a nominal 2.5 microns in diameter
PM_{10} .....particulate matter less than or equal to a nominal 10 microns in diameter
ppm .....parts per million
ppmv, 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
SIP.....State Implementation Plan
SO_2 .....sulfur dioxide
tph .....tons per hour
tpy .....tons per year
ULSD .....ultra-low sulfur diesel
VOC .....volatile organic compound [as defined in 40 CFR 51.100(s)]
VOL .....volatile organic liquid [as defined in 40 CFR 60.111b, Subpart Kb]
vol% .....volume percent
wt% .....weight percent

Section 1. Stationary Source Information

Identification

Permittee:		Hilcorp Alaska, LLC 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503
Stationary Source Name:		Bruce Platform
Location:		60° 59' 45" North; 151° 17' 52" West
Physical Address:		Upper Cook Inlet, AK
Owner and Operator:		Hilcorp Alaska, LLC 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503
Permittee's Responsible Official:		David S. Wilkins, Senior Vice President 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503
Designated Agent:		CT Corporation System 9360 Glacier Highway, Suite 202 Juneau, AK 99801
Stationary Source and Building Contact:		David S. Wilkins, Senior Vice President 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503 (907) 777-8300 dwilkins@hilcorp.com
Fee Contact:		Lincoln Steele, Financial Reporting Supervisor 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503 (907) 777-8300 lstccle@hilcorp.com
Permit Contact:		Julieanna Potter, Environmental Specialist 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503 (907) 777-8444 jupotter@hilcorp.com
Process Description:	SIC Code	1311 Crude Petroleum and Natural Gas
	NAICS Code:	2111 Oil and Gas Extraction

[18 AAC 50.040(j)(3) & 50.326(a)]
[40 CFR 71.5(c)(1) & (2)]

Section 2. Emissions Unit Inventory and Description

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

Table A - Emissions Unit Inventory

EU ID	Emissions Unit Name	Emissions Unit Description	Fuel	Rating/Size	Installation or Construction Date
Platform Emission Units					
1a	Solar Saturn 10 Turbine	Gas Compressor	Fuel Gas	1,200 hp	1989
2	Solar MD 1000 Turbine	Generator Drive	Fuel Gas	1,000 hp	1977 (pre-October 3, 1977)
3	Waukesha Engine	Kobe #1 Drive	Fuel Gas	266 hp	1968
4	Waukesha Engine	Kobe #2 Drive	Fuel Gas	266 hp	1968
5	Waukesha Engine	Kobe #3 Drive	Fuel Gas	266 hp	1968
6	Waukesha Engine	Kobe #5 Drive	Fuel Gas	266 hp	1968
7	Waukesha Engine	Kobe #6 Drive	Fuel Gas	266 hp	1968
14	Detroit Diesel 671 Engine	Emergency Air Compressor Drive	Diesel	200 hp	1986
15	Waukesha E1197	Fire Water Pump Drive	Diesel	220 hp	1967
16	Cat 3208 Engine	Emergency AC Gen. Drive	Diesel	235 hp	1984
17	Cat D-399 Engine	Back-up AC Gen. Drive	Diesel	1,200 hp	1982
18	Cat 3406B Engine	Sea King Crane – East	Diesel	352 hp	1988
19	John Deere Engine	Seatrax Crane	Diesel	500 hp	2008
20	Flares (HP/LP) and Pilots	Safety/Operating Flares		10 MMcf/day	1966
21	Glycol Regenerator	TEG Dehydration Unit	-	10 MMcf/day	pre-1996
29	Solar Turbine	Saturn T-1301	Fuel Gas	1,100 kW	TBD
Drill Rig Emission Units					
22	Volcano Boiler	Boiler	Diesel	3.6 MMBtu/hr	TBD
23	Volcano Boiler	Boiler	Diesel	3.6 MMBtu/hr	TBD
24	Detroit Series IV Engine	Hydraulic Power Unit	Diesel	850 hp	TBD
25	Detroit Series IV Engine	Hydraulic Power Unit	Diesel	850 hp	TBD
26	Detroit Series 60 Engine	Light Plant Generator	Diesel	600 hp	TBD
27	Detroit Series 60 Engine	Light Plant Generator	Diesel	600 hp	TBD
28	TBD	Portable Hydraulic Generator	Diesel	101 hp	TBD

Table Notes:

[1] Nonroad engine.

[18 AAC 50.326(a)]
[40 CFR 71.5(c)(3)]

Section 3. State Requirements

Visible Emissions Standard

1. Industrial Process and Fuel-Burning Equipment Visible Emissions. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EU IDs 1a, 2 through 7, 14 through 23, and 29 listed in Table A to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

[18 AAC 50.040(j), 50.055(a)(1), & 50.326(j)]
[40 CFR 71.6(a)(1)]

1.1. For EU IDs 14 through 19, 22, and 23, monitor, record, and report in accordance with Conditions 2 through 4.

1.2. For EU IDs 1a, 2 through 7, and 29, burn only gas as fuel. Monitoring for these emissions units shall consist of a statement in each operating report under Condition 80 indicating whether each of these emissions units burned only gas during the period covered by the report. Report under Condition 79 if any fuel other than gas is burned.

1.3. For EU ID 20, monitor, record and report in accordance with Condition 5.

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]
[40 CFR 71.6(a)(3) & (c)(6)]

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

Liquid Fuel-Fired Emissions Units (EU IDs 14 through 19, 22, and 23)

2. Visible Emissions Monitoring. When required by Condition 1.1, or in the event of replacement during the permit term, the Permittee shall observe the exhaust of EU IDs 14 through 19 for visible emissions using the Method 9 Plan under Condition 2.2. Observe the exhaust of EU IDs 22 and 23 for visible emissions as required by Condition 2.3.

2.1. For EU IDs 14 through 19, 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 CFR 71.6(a)(3)(i)]

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

a. **First Method 9 Observation**. Except as provided in Condition 2.1, observe exhaust for 18 minutes within six months after the issue date of this permit. For any unit replaced during the term of this permit, observe exhaust for 18 minutes within 30 days of 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 emissions unit operates.

c. **Semiannual Method 9 Observations**. After observing emissions for three consecutive operating months under Condition 2.2.b, unless a six-minute average is greater than 15 percent and one or more observations are greater than 20 percent, perform 18-minute observations:

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

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

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

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

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

e. **Increased Method 9 Frequency**. If a six-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more observations are greater than 20 percent, then increase or maintain the 18-minute observation frequency for that emissions unit to at least monthly intervals as described in Condition 2.2.b, until the criteria in Condition 2.2.c for semiannual monitoring are met.

2.3. **Annual Method 9 Observation**. Conduct visible emission observations following 40 CFR 60, Appendix A-4, Method 9, for 18 minutes to obtain 72 consecutive 15-second opacity observations, at least once in each calendar year that the boiler operates for at least seven consecutive days under the terms and conditions of this permit.

3. Visible Emissions Recordkeeping. When required by Condition 1.1, or in the event of replacement of any of EU IDs 14 through 19 during the permit term, the Permittee shall keep records as follows:

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]
[40 CFR 71.6(a)(3)(ii)]

3.1. If using Method 9 Plan in accordance with Condition 2.2 or 2.3,

a. the observer shall record

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

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

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

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

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

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

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

4. Visible Emissions Reporting. When required by Condition 1.1, or in the event of replacement of any of EU IDs 14 through 19 during the permit term, the Permittee shall report visible emissions as follows:

[18 AAC 50.040(j), 50.326(j) & 50.346(c)]
[40 CFR 71.6(a)(3)(iii)]

4.1. Include in each operating report required under Condition 80:

a. for each emissions unit observed using Method 9,

(i) copies of the observation results (i.e. opacity observations), 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- and 18-consecutive-minute average opacities observed; and

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

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

4.2. Report under Condition 79:

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

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

Flares (EU ID 20)

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

5.1. Monitor flare events using Method 9.

5.2. 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.

5.3. Monitoring of a flare event may be postponed for safety or weather reasons, or because a qualified observer is not available. If monitoring of a flare event is postponed for any of the reasons described in this condition, the Permittee shall include in the next operating report required by Condition 80 an explanation of the reason the event was not monitored.

5.4. Attach copies of the records required by Condition 5.2 with the operating report required by Condition 80 for the period covered by that report.

5.5. Report under Condition 79 whenever the opacity standard in Condition 1 is exceeded.

[18 AAC 50.040(j), 50.326(j) & 50.346(c)]

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

[40 CFR 71.6(a)(3)]

Particulate Matter Emissions Standard

6. Industrial Process and Fuel-Burning Equipment Particulate Matter. The Permittee shall not cause or allow particulate matter emitted from EU IDs 1a, 2 through 7, 14 through 23, and 29 listed in Table A to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.040(j), 50.055(b)(1) & 50.326(j)]
[40 CFR 71.6(a)(1)]

6.1. For EU IDs 14 through 19, 22, and 23, monitor, record and report in accordance with Conditions 7 through 11.

6.2. For EU IDs 1a, 2 through 7, and 29, burn only gas as fuel. Monitoring for these emissions units shall consist of a statement in each operating report under Condition 80 indicating whether each of these emissions units fired only gas during the period covered by the report. Report under Condition 79 if any fuel other than gas is burned.

6.3. For EU ID 20, the Permittee must annually certify compliance under Condition 81 with the particulate matter standard.

[18 AAC 50.040(j), 50.326(j) & 50.346(c)]
[40 CFR 71.6(a)(3) & (c)(6)]

Particulate Matter MR&R

Liquid Fuel-Fired Engines (EU IDs 14 through 19)

7. Particulate Matter Monitoring. The Permittee shall conduct source tests on diesel engines, EU IDs 14 through 19, to determine the concentration of particulate matter in the exhaust of each emissions unit as follows:

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]
[40 CFR 71.6(a)(3)(i)]

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

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

b. make repairs so that emissions no longer exceed the criteria of Condition 7.2; to show that emissions are below those criteria, observe emissions as described in Condition 2.2 under load conditions comparable to those when the criteria were exceeded.

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

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

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

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

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

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

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]
[40 CFR 71.6(a)(3)(iii)]

8.1. Report under Condition 79:

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

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

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

8.3. in each operating report under Condition 80, include:

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

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

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

Liquid Fuel-Fired Boilers (EU IDs 22 and 23)

9. Particulate Matter Monitoring. The Permittee shall conduct source tests on EU IDs 22 and 23, to determine the concentration of particulate matter in the exhaust of each emissions unit as follows:

[18 AAC 50.040(j), 50.326(j) & 50.346(c)]
[40 CFR 71.6(a)(3)(i)]

9.1. Except as allowed under Condition 9.3, conduct a particulate matter source test according to the requirements set out in Section 6 no later than 90 calendar days 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.

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

9.3. The particulate matter source test requirement in Condition 9.1 is waived for an emissions unit if:

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

b. take corrective action and conduct two 18-minute visible emissions observations in a consecutive six-month period to show that the excess visible emissions described in Condition 9.1 no longer occur.

10. Particulate Matter Recordkeeping. The Permittee shall keep records of the results of any particulate matter testing and visible emissions observations conducted under Condition 9.

[18 AAC 50.040(j), 50.326(j) & 50.346(c)]
[40 CFR 71.6(a)(3)(ii)]

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

[18 AAC 50.040(j), 50.326(j) & 50.346(c)]
[40 CFR 71.6(a)(3)(iii)]

11.1. In each operating report required by Condition 80, 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 9.1.

b. a summary of the results of any particulate matter testing and visible emissions observations conducted under Condition 9.

11.2. Report as excess emissions, in accordance with Condition 79, any time the results of a source test for particulate matter exceed the particulate matter emission limit stated in Condition 6.

Sulfur Compound Emissions Standard

12. Sulfur Compound Emissions. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EU IDs 1a, 2 through 7, 14 through 23, and 29 to exceed 500 ppm averaged over three hours.

[18 AAC 50.040(j), 50.055(c) & 50.326(j)]
[40 CFR 71.6(a)(1)]

Sulfur Compound MR&R

Fuel Oil[2](EU IDs 14 through 19, 22, and 23)

13. Sulfur Compound Monitoring and Recordkeeping. The Permittee shall comply with the following:

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

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

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

(i) test the fuel for sulfur content; or

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

13.2. Fuel testing under Condition 13.1 must follow an appropriate method listed in 18 AAC 50.035(b)-(c) or 40 CFR 60.17 incorporated by reference in 18 AAC 50.040(a)(1).

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

14. Sulfur Compound Reporting. The Permittee shall report as follows:

14.1. If SO_2 emissions calculated under Condition 13.3 exceed 500 ppm, the Permittee shall report under Condition 79. When reporting under this condition, include the calculation under Section 12 or Method 19.

14.2. The Permittee shall include in the report required by Condition 80

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

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

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

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]
[40 CFR 71.6(a)(3)]

[2] *Oil* means crude oil or petroleum or a liquid fuel derived from crude oil or petroleum, including distillate and residual oil, as defined in 40 CFR 60.41b.

Fuel Gas (EU IDs 1a, 2 through 7, 20, and 29)

15. Sulfur Compound Monitoring. The Permittee shall either

15.1. obtain a statement from the fuel supplier, at least once per calendar year, of the fuel total sulfur level in ppm; or

15.2. analyze a representative sample of the fuel at least once per calendar year to determine the sulfur content using either ASTM D4084, D5504, D4810, D4913, D6228 or GPA Standard 2377, or other listed method approved in 18 AAC 50.035(b)-(c) or 40 CFR 60.17 incorporated by reference in 18 AAC 50.040(a)(1).

16. Sulfur Compound Recordkeeping. The Permittee shall keep records of the statement from the fuel supplier or the sulfur content analysis required under Conditions 15.1 or 15.2.

17. Sulfur Compound Reporting. The Permittee shall report as follows:

17.1. Report as excess emissions, in accordance with Condition 79, whenever the fuel combusted causes sulfur compound emissions to exceed the standard of Condition 12.

17.2. Include copies of the records required by Condition 16 with the operating report required by Condition 80 for the period covered by the report.

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]
[40 CFR 71.6(a)(3) & (c)(6)]

Preconstruction Permit [3] Requirements

18. Operating Hours Monitoring. The Permittee shall monitor and record the hours of operation of EU IDs 14 through 17 for each month.

[Condition 16, Permit to Operate 9223-AA002, 9/15/1992]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

18.1. In the operating report required by Condition 80, report the monthly hours of operation for EU IDs 14 through 17 during each month of the reporting period.

[40 CFR 71.6(a)(3) & (c)(6)]

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

Ambient Air Quality Standards and Maximum Allowable Increases

19. The Permittee shall track and report in the facility operating report required by Condition 80, the use of permanent and temporary non-road engines installed after final issue date of Construction Permit AQ0064CPT01 that have a size rating greater than 400 brake horse power. Include in the report: the engine's size, serial number and tag number if assigned, and the dates that the engine arrived on the platform, initially started up on-site, finally shut down on-site, and was removed from the platform.

[Condition 8, Minor Permit AQ0064MSS01, 5/26/2015]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

20. To protect the annual, 24-hour, three-hour, and one-hour SO_2 Alaska Ambient Air Quality Standards (AAAQS), the Permittee shall fire only liquid fuels with a sulfur content not to exceed 15 ppmw (also known as Ultra Low Sulfur Diesel (ULSD)), in EU IDs 22 through 28.

[Conditions 11 & 11.1, Minor Permit AQ0064MSS02, Rev 1, 7/24/2015]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

20.1. Clearly label all liquid fuel tank(s) “ULSD Fuel Only”.

20.2. For each delivery of liquid fuel, record the fuel sulfur grade of the fuel received, and retain a receipt from the supplier which specifies the fuel sulfur grade.

20.3. Include copies of the records specified in Condition 20.2 in the operating report required by Condition 80.

20.4. Report in accordance with Condition 79 whenever the fuel sulfur content exceeds the limit specified in Condition 20.

[Conditions 11.1a through 11.1d, Minor Permit AQ0064MSS02, Rev 1, 7/24/2015]
[40 CFR 71.6(a)(3)]

21. To protect the annual NO_2, 24-hour PM-10, annual PM-2.5, and annual, 24-hour, three-hour, and one-hour SO_2 AAAQS, the Permittee shall comply with the following:

[Condition 12, Minor Permit AQ0064MSS02, Rev 1, 7/24/2015]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

21.1. Construct and maintain vertical, uncapped exhaust stacks for all the Kuukpik V Drill Rig EUs listed in Table A, excluding

[Condition 12.1, Minor Permit AQ0064MSS02, Rev 1, 7/24/2015]
[40 CFR 71.6(a)(1)]

a. EU IDs 22 and 23, the boilers, which may use capped releases;

b. EU IDs 26 and 27, the light plant generators, which may use 45-degree exhaust releases; and

c. the use of flapper valve rain covers, or similar designs, that do not hinder the vertical momentum of an exhaust plume.

[Conditions 12.1a through 12.1c, Minor Permit AQ0064MSS02, Rev 1, 7/24/2015]

21.2. Confirm that the exhaust stack for each of the Kuukpik V Drill Rig EUs listed in Table A are in compliance with this condition in each operating report required by this permit.

[Condition 12.2, Minor Permit AQ0064MSS02, Rev 1, 7/24/2015]
[40 CFR 71.6(a)(3)]

21.3. The nonroad engines operated on the Kuukpik V Drill Rig while at the stationary source may be similar to or smaller than EU IDs 24 through 28 in Table A. In all situations, the cumulative rating of nonroad engines on the Kuukpik V Drill Rig while at the stationary source shall not exceed 3,071 horsepower.

[Condition 12.3, Minor Permit AQ0064MSS02, Rev 1, 7/24/2015]
[40 CFR 71.6(a)(1)]

a. Include in each operating report required by Condition 80 a list of all nonroad engines operated on the Kuukpik V Drill Rig while at the stationary source during the previous reporting period. The list shall include associated ratings and the cumulative nonroad engine rating.

b. Report in accordance with Condition 79 whenever the cumulative nonroad engine rating of the nonroad engines operated on the Kuukpik V Drill Rig while at the stationary source exceeds the limit specified in Condition 21.3.

[Conditions 12.3a & 12.3b, Minor Permit AQ0064MSS02, Rev 1, 7/24/2015]
[40 CFR 71.6(a)(3)]

Owner Requested Limits to Avoid Classification as a PSD Major Modification

22. The Permittee shall limit the operation of EU IDs 14, 15, and 16 to no more than 200 hours per year each for the purpose of performing routine maintenance and to verify its operational capability.

[Condition 6, Permit to Operate 9223-AA002, 9/15/1992; amended by AQ0064TVP01, 9/2/2003]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

22.1. Monitor, record, and report in accordance with Condition 18.

22.2. Report in accordance with Condition 79 whenever the limit in Condition 22 is exceeded.

[40 CFR 71.6(a)(3) & (c)(6)]

23. The Permittee shall limit the operation of EU ID 17 to no more than 6,500 hours in any consecutive 12-month period.

[Condition 6a, Permit to Operate 9223-AA002, 9/15/1992; amended by AQ0064TVP01, 9/2/2003]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

23.1. Monitor, record, and report in accordance with Condition 18.

23.2. Report in accordance with Condition 79 whenever the limit in Condition 23 is exceeded.

[40 CFR 71.6(a)(3) & (c)(6)]

24. The Permittee shall burn as fuel, in EU IDs 14 through 19, diesel with a sulfur content of not more than 0.5%.

[Condition 7, Permit to Operate 9223-AA002, 9/15/1992]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

24.1. Monitor, record, and report in accordance with Conditions 13.1, 13.2, and 14.2.a.

24.2. Report in accordance with Condition 79 whenever the limit in Condition 24 is exceeded.

[40 CFR 71.6(a)(3) & 71.6(c)(6)]

Department Imposed Limit to Avoid Classification as a PSD Major Modification

25. The Permittee shall maintain the nonroad engine status, as defined in 40 CFR 1068.30, of EU IDs 24 through 28 by complying with the following:

[Condition 8, Minor Permit AQ0064MSS02, Rev 1, 7/24/2015]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

25.1. Report in each operating report required in Condition 80 the date of arrival at the drill site, date of removal from the drill site, and consecutive days of presence at the drill site for each of EU IDs 24 through 28.

25.2. Report in accordance with Condition 79 in the event that any of EU IDs 24 through 28 loses its nonroad status (becomes a stationary engine).

[Conditions 8.1 & 8.2, Minor Permit AQ0064MSS02, Rev 1, 7/24/2015]
[40 CFR 71.6(a)(3)]

Department Imposed Limit to Avoid Classification Under NESHAP Subpart JJJJJJ

26. The Permittee shall maintain the temporary boiler status under 40 CFR 63 Subpart JJJJJJ of EU IDs 22 and 23 by complying with the following:

[Condition 9, Minor Permit AQ0064MSS02, Rev 1, 7/24/2015]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

26.1. Report in each operating report required in Condition 80 the date of arrival at the drill site, date of removal from the drill site, and consecutive days of presence at the drill site at the stationary source for each of EU IDs 22 and 23.

26.2. Report in accordance with Condition 79 in the event that any of EU IDs 22 or 23 loses its temporary status as defined in 40 CFR 63.11237.

[Conditions 9.1 & 9.2, Minor Permit AQ0064MSS02, Rev 1, 7/24/2015]
[40 CFR 71.6(a)(3)]

Department Imposed Limit to Avoid Permitting Under 18 AAC 50.502(c)(3)

27. To avoid permitting under 18 AAC 50.502(c)(3) for SO_2, the Permittee shall fire only liquid fuels with a sulfur content not to exceed 15 ppmw (also known as ULSD) in EU IDs 22 and 23.

[Condition 10, Minor Permit AQ0064MSS02, Rev 1, 7/24/2015]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

27.1. Comply with Conditions 20.1 through 20.4.

[Condition 10.1, Minor Permit AQ0064MSS02, Rev 1, 7/24/2015]
[40 CFR 71.6(a)(3)]

Insignificant Emissions Units

28. For emissions 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:

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

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

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

[18 AAC 50.055(b)(1)]

28.3. **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)]

28.4. **General MR&R for Insignificant Emissions Units**

a. The Permittee shall submit the compliance certifications of Condition 81 based on reasonable inquiry;

b. The Permittee shall comply with the requirements of Condition 62;

c. The Permittee shall report in the operating report required by Condition 80 if an emissions unit has historically been classified as insignificant because of actual emissions less than the thresholds of 18 AAC 50.326(e) and current actual emissions become greater than any of those thresholds; and

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

[18 AAC 50.346(b)(4)]

Section 4. Federal Requirements

40 CFR Part 60 New Source Performance Standards

Subpart A

29. New Source Performance Standards (NSPS) Subpart A Notification. For any affected facility[4] or existing facility[5] regulated under NSPS requirements in 40 CFR 60, the Permittee shall furnish the Administrator written notification or, if acceptable to both the Administrator[6] and the Permittee, electronic notification, as follows:

[18 AAC 50.035 & 50.040(a)(1)]
[40 CFR 60.7(a) & 60.15(d), Subpart A]

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

[40 CFR 60.7(a)(1), Subpart A]

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

[40 CFR 60.7(a)(3), Subpart A]

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

a. information describing the precise nature of the change,

b. present and proposed emission control systems,

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

d. the expected completion date of the change.

[40 CFR 60.7(a)(4), Subpart A]

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

[40 CFR 60.15(d), Subpart A]

[4] *Affected facility* means, with reference to a stationary source, any apparatus to which a standard applies, as defined in 40 CFR 60.2.

[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 CFR 60.2.

[6] For Section 4 of this permit, the Department defines *Administrator* to mean the EPA Administrator and the Department.

a. the name and address of owner or operator,

b. the location of the existing facility,

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

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

e. an estimate of the fixed capital cost of the replacements, and of constructing a comparable entirely new facility,

f. the estimated life of the existing facility after the replacements, and

g. a discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.

30. NSPS Subpart A Startup, Shutdown, & Malfunction Requirements. Maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of EU ID 1a, any malfunction of the air-pollution control equipment, or any periods during which a continuous monitoring system or monitoring device for EU ID 1a is inoperative.

[18 AAC 50.040(a)(1)]
[40 CFR 60.7(b), Subpart A]

31. NSPS Subpart A Excess Emissions and Monitoring Systems Performance Report. Each Permittee required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts and limits are in Condition 37.6) and-or summary report form (see Condition 32) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:

[18 AAC 50.040(a)(1)]
[40 CFR 60.7(c), Subpart A]

31.1. The magnitude of excess emissions computed in accordance with 40 CFR 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 CFR 60.7(c)(1), Subpart A]

31.2. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of EU ID 1a; the nature and cause of any malfunction (if known), and the corrective action taken or preventative measures adopted.

[40 CFR 60.7(c)(2), Subpart A]

31.3. 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 CFR 60.7(c)(3), Subpart A]

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

[40 CFR 60.7(c)(4), Subpart A]

32. NSPS Subpart A Summary Report Form. The summary report form shall contain the information and be in the format shown in figure 1 of 40 CFR 60.7 (see Attachment 1) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

[18 AAC 50.040(a)(1)]
[40 CFR 60.7(c) & (d), Subpart A]

32.1. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in Condition 31 need not be submitted unless requested by the Administrator.

[40 CFR 60.7(d)(1), Subpart A]

32.2. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in Condition 31 shall both be submitted.

[40 CFR 60.7(d)(2), Subpart A]

33. NSPS Subpart A Performance (Source) Tests. Conduct source tests according to Section 6 and as required in this condition on any affected facility.

[18 AAC 50.040(a)(1)]

33.1. Except as specified in paragraphs (a)(1),(a)(2), (a)(3), and (a)(4) of 40 CFR 60.8, within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, or at such other times specified by 40 CFR Part 60, and at such other times as may be required by the Administrator, the Permittee shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).

[40 CFR 60.8(a), Subpart A]

33.2. Tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors.

[40 CFR 60.8(b), Subpart A]

33.3. Tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

[40 CFR 60.8(c), Subpart A]

33.4. Provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the Permittee shall notify the Administrator as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator by mutual agreement.

[40 CFR 60.8(d), Subpart A]

33.5. Provide or cause to be provided, performance testing facilities as follows:

a. Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

b. Safe sampling platform(s),

c. Safe access to sampling platform(s), and

d. Utilities for sampling and testing equipment.

[40 CFR 60.8(e), Subpart A]

33.6. Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

[40 CFR 60.8(f), Subpart A]

34. 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 ID 1a including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. The Administrator will determine whether acceptable operating and maintenance procedures are being used based on information available, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance records, and inspections of EU ID 1a.

[18 AAC 50.040(a)(1)]
[40 CFR 60.11(d), Subpart A]

35. NSPS Subpart A Credible Evidence. For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of the standards set forth in Condition 37, nothing in 40 CFR Part 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether EU ID 1a would have been in compliance with applicable requirements of 40 CFR Part 60 if the appropriate performance or compliance test or procedure had been performed.

[18 AAC 50.040(a)(1)]
[40 CFR 60.11(g), Subpart A]

36. NSPS Subpart A Concealment of Emissions. The Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of a standard set forth in Condition 37 or 38. 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 CFR 60.12, Subpart A]

Subpart GG

37. NSPS Subpart GG Applicability. For EU ID 1a, comply with the following applicable requirements of NSPS Subpart GG.

[18 AAC 50.040(a)(2)(V), 50.040(j)(4), & 50.326(j)]

[40 CFR 60.330, Subpart GG]
[40 CFR 71.6(a)(1)]

NSPS Subpart GG Standard for NOx

37.1. The Permittee shall not allow the exhaust gas concentration of NOx to exceed 150 ppmv (at 15 percent O_2 and on a dry basis) for EU ID 1a.

[40 CFR 60.332(a)(2) & 60.332(c), Subpart GG]
[40 CFR 71.6(a)(1)]

37.2. Stationary gas turbines are exempt from Condition 37.1 when being fired with an emergency fuel.

[40 CFR 60.332(k), Subpart GG]
[40 CFR 71.6(a)(1)]

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

[18 AAC 50.040(j)(4) & 50.326(j)]

a. **Periodic Testing**. For each turbine subject to Condition 37, the Permittee shall comply with Conditions 37.3.a(i) through 37.3.a(iii).

[40 CFR 71.6(a)(3)(i)]

(i) The Permittee shall conduct an initial NOx source test as required in Condition 33.

(ii) For existing turbines whose latest emissions source test results were certified as less than or equal to 90 percent of the NOx limit in Condition 37.1, the Permittee shall conduct a NOx source test within 5 years of the latest performance test.

(iii) For existing turbines whose latest emissions source test results were certified as greater than 90 percent of the NOx limit in Condition 37.1, the Permittee shall conduct a NOx source test annually until two consecutive tests show results certified at less than or equal to 90 percent of the NOx limit in Condition 37.1.

[40 CFR 71.6(a)(3)(i)]

b. For NOx source testing, the Permittee shall comply with the following:

[18 AAC 50.040(a)(2)(V)]
[40 CFR 71.6(a)(3)(i)]

(i) The owner or operator shall conduct the performance tests using either EPA Method 20, ASTM D6522-00, or EPA Method 7E and either EPA Method 3 or 3A in appendix A to 40 CFR 60, to determine NOx and diluent concentration.

[40 CFR 60.335(a)(1) through (3), Subpart GG]

(ii) Sampling traverse points are to be selected following Method 20 or Method 1, (non-particulate procedures) and sampled for equal time intervals. The sampling shall 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.

(iii) Notwithstanding Condition 37.3.b(ii), the owner or operator may test at fewer points than are specified in Method 1 or Method 20 if the conditions of 40 CFR 60.335(a)(5)(i) and (ii) are met.

(iv) Other acceptable alternative reference methods and procedures are given in 40 CFR 60.335(c).

[40 CFR 60.335(a)(4) through (a)(6), Subpart GG]

(v) Each test run required under Condition 37.3.b(vi) shall be at least 21 minutes.

[40 CFR 71.6(a)(3) & 71.6(c)(6)]

(vi) The owner or operator shall determine compliance with the applicable nitrogen oxides emission limitation in Condition 37.1 and shall meet the performance test requirements of 40 CFR 60.8 as follows:

[40 CFR 60.335(b), Subpart GG]

(A) For each run of the performance test, the mean nitrogen oxides emission concentration (NO_{Xo}) corrected to 15 percent O_2 shall be corrected to ISO standard conditions using the equation in 40 CFR 60.335(b)(1).

(B) The 3-run performance test required must be performed within 5 percent at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. If the turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel. Notwithstanding these requirements, performance testing is not required for any emergency fuel (as defined in 40 CFR 60.331).

c. **Substituting Test Data**. The Permittee may perform emissions source testing on only one of a group of similarly configured turbines to satisfy the requirements of Condition 37.3.a if:

[40 CFR 71.6(a)(3)(i) & (c)(6)]

(i) the Permittee demonstrates that test results are less than or equal to 90 percent of the emission limit in Condition 37.1 and are projected under Condition 37.3.d to be less than or equal to 90 percent of the limit at maximum load; and

(ii) the Permittee identifies in a source test plan under Condition 71

(A) the turbine to be tested;

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

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

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

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

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

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

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

[18 AAC 50.040(j) & 50.326(j)(4)]
[40 CFR 71.6(a)(3)(i) & (c)(6)]

(i) In the source test plan state whether or not the test is scheduled when maximum NOx emissions are expected.

(ii) If the highest operating rate during the source test is less than the maximum load of the tested turbine or another turbine represented by the test data, for each such turbine the Permittee shall provide to the Department as an attachment to the source test report

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

(B) a demonstration based on the additional test information that projects the test results from Condition 37.3.b to predict the highest load at which emissions will comply with the limit in Condition 37.1.

(iii) The Permittee shall not operate any turbine represented by the test data at loads for which the Permittee's demonstration predicts that emissions will exceed the limit of Condition 37.1;

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

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

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

(C) the Permittee must retest during a period of greater expected demand on the turbine.

(v) The Permittee may revise a load limit by submitting results of a more recent test done at a higher load, and, if necessary, the accompanying information and demonstration described in Condition 37.3.d(ii); the new limit is subject to any new Department finding under Condition 37.3.d(iv).

(vi) In order to perform an emission test required by Conditions 37.3.a and 37.3.b, the Permittee may operate a turbine at a higher load than that prescribed by Conditions 37.3.d(ii) through 37.3.d(iv).

(vii) For the purposes of Conditions 37.3 through 37.5, maximum load means the hourly average load that is the smallest of

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

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

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

37.4. **NOx Recordkeeping**. The Permittee shall keep records as follows:

[18 AAC 50.040(j) & 50.326(j)(4)]
[40 CFR 71.6(a)(3)(ii)]

a. The Permittee shall comply with the following for each turbine for which a demonstration under Condition 37.3.d(ii) does not show compliance with the limit of Condition 37.1 at maximum load.

(i) The Permittee shall keep records of

(A) load; or

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

(ii) Records in Condition 37.4.a shall be hourly or otherwise as approved by the Department.

(iii) Within one month after submitting a demonstration under Condition 37.3.d(ii)(B) that predicts that the highest load at which emissions will comply is less than maximum load, or within one month of a Department finding under Condition 37.3.d(iv), whichever is earlier, the Permittee shall propose to the Department how they will measure load or load surrogates, and shall propose and comply with a schedule for installing any necessary equipment and beginning monitoring. The Permittee shall comply with any subsequent Department direction on the load monitoring methods, equipment, or schedule.

[40 CFR 71.6(c)(6)]

37.5. **NOx Reporting**. The Permittee shall report as follows:

[18 AAC 50.040(j) & 50.326(j)(4)]
[40 CFR 71.6(a)(3)(iii)]

a. In each operating report under Condition 80 the Permittee shall list for each turbine tested or represented by testing at less than maximum load and for which the Permittee must limit load under Conditions 37.3.d(ii) through 37.3.d(v)

(i) the load limit;

(ii) the turbine identification; and

(iii) the highest load recorded under Condition 37.4.a during the period covered by the operating report.

b. The Permittee shall report under Condition 79 if

(i) a test result exceeds the emission standard;

(ii) testing required under Condition 37.3.b is not performed, or

(iii) a turbine was operated at a load exceeding that allowed by Conditions 37.3.d(iii) and 37.3.d(iv); exceeding a load limit is deemed a single violation rather than multiple violations of both monitoring and the underlying emission limit.

NSPS Subpart GG Standard for SO_2

37.6. No owner or operator subject to the provisions of NSPS Subpart GG shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw).

[40 CFR 60.333(b), Subpart GG]

[40 CFR 71.6(a)(1)]

37.7. **SO_2 MR&R**. The Permittee shall comply with the following:

[40 CFR 71.6(a)(3)]

a. Monitor the total sulfur content of the fuel being fired in the turbine, except as provided in Condition 37.7.b. The sulfur content of the fuel must be determined using total sulfur methods described in 37.7.e. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084-82, 94, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86, which measure the major sulfur compounds may be used.

[40 CFR 60.334(h)(1), Subpart GG]

b. Notwithstanding the provisions of Condition 37.7.a, the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u), regardless of whether an existing custom schedule approved by the administrator for Subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:

[40 CFR 60.334(h)(3), Subpart GG]

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

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

[40 CFR 60.334(h)(3)(i) & (ii), Subpart GG]

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

[40 CFR 60.334(i), Subpart GG]

(i) Gaseous fuel. For owners and operators that elect not to demonstrate sulfur content using options in Condition 37.7.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.

(ii) Custom schedules. Notwithstanding the requirements of Condition 37.7.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 CFR 60.334(i)(3)(i) and (i)(3)(ii), custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in Condition 37.6.

[40 CFR 60.334(i)(2) & (3), Subpart GG]

(A) The two custom sulfur monitoring schedules set forth in 40 CFR 60.334(i)(3)(i)(A) through (D) and in 40 CFR 60.334(i)(3)(ii) are acceptable, without prior Administrative approval.

[40 CFR 60.334(i)(3)(i), Subpart GG]

d. For each affected unit that elects to periodically determine the fuel sulfur content under NSPS Subpart GG, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with Condition 31. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under Condition 31, periods of excess emissions and monitor downtime that shall be reported are defined as follows:

[40 CFR 60.334(j), Subpart GG]

(i) Sulfur dioxide. If the owner or operator is required to monitor the sulfur content of the fuel under Condition 37.7.a:

[40 CFR 60.334(j)(2), Subpart GG]

(A) For samples of gaseous fuel, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 weight percent and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.

(B) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours, and ends on the date and hour of the next valid sample.

[40 CFR 60.334(j)(2)(i) & (iii), Subpart GG]

(ii) Emergency fuel. Each period during which an exemption provided in Condition 37.2 is in effect shall be included in the report required in Condition 31. For each period, the type, reasons, and duration of the firing of the emergency fuel shall be reported.

[40 CFR 60.334(j)(4), Subpart GG]

e. Analyze samples for the total sulfur content of the fuel using ASTM D1072-80, 90 (Reapproved 1994); D3246-81, 92, 96; D4468-85 (Reapproved 2000); or D6667-01 (all of which are incorporated by reference, see §60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the prior approval of the Administrator.

f. The fuel analyses required under Condition 37.7.e may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

[40 CFR 60.335(b)(10) & (11), Subpart GG]

Subpart IIII

38. NSPS Subpart IIII Applicability. For EU ID 19, comply with the following applicable requirements of NSPS Subpart IIII.

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

NSPS Subpart IIII Emission Standards

38.1. The Permittee must comply with the following emission standards:

[40 CFR 60.4204(a), Subpart IIII]
[40 CFR 71.6(a)(1)]

a. HC: 1.3 g/kW-hr (1.0 g/hp-hr)

b. NOx: 9.2 g/kW-hr (6.9 g/hp-hr)

c. CO: 11.4 g/kW-hr (8.5 g/hp-hr)

d. PM: 0.54 g/kW-hr (0.40 g/hp-hr)

[Table 1, Subpart IIII]

38.2. Performance tests conducted in-use must meet the NTE standards as indicated in 40 CFR 60.4212.

[40 CFR 60.4204(d), Subpart IIII]
[40 CFR 71.6(a)(3)(i)]

38.3. Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in Condition 38.1 over the entire life of the engine.

[40 CFR 60.4206, Subpart IIII]
[40 CFR 71.6(a)(1)]

NSPS Subpart IIII Compliance Requirements

38.4. You must do all of the following, except as permitted under Condition 38.6:

[40 CFR 60.4211(a), Subpart IIII]
[40 CFR 71.6(a)(1)]

a. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

b. Change only those emission-related settings that are permitted by the manufacturer;

c. Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

[40 CFR 60.4211(a)(1) through (3), Subpart IIII]

38.5. You must demonstrate compliance with Condition 38.1 according to one of the methods specified in Conditions 38.5.b through 38.5.e.

[40 CFR 60.4211(b), Subpart IIII]
[40 CFR 71.6(a)(3)(i)]

a. Purchasing an engine certified according to 40 CFR part 89 or 40 CFR 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 NSPS Subpart IIII and these methods must have been followed correctly.

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

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 CFR 60.4212, as applicable.

[40 CFR 60.4211(b)(1) through (5), Subpart IIII]

38.6. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

[40 CFR 60.4211(g), Subpart IIII]
[40 CFR 71.6(a)(3)(i)]

a. You must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

[40 CFR 60.4211(g)(2), Subpart IIII]

NSPS Subpart IIII Testing Requirements

38.7. Owners and operators who conduct performance tests pursuant to NSPS Subpart IIII must do so according to paragraphs (a) through (e) of 40 CFR 60.4212.

[40 CFR 60.4212, Subpart IIII]
[40 CFR 71.6(a)(3)(i)]

40 CFR Part 61 National Emission Standards for Hazardous Air Pollutants

Subparts A & M

39. Comply with the applicable requirements set forth in 40 CFR 61.145, 61.146, 61.148, 61.150, and 61.152 of Subpart M, and the applicable sections set forth in 40 CFR 61, Subpart A and Appendix A.

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

40 CFR Part 63 National Emission Standards for Hazardous Air Pollutants

Subpart A

40. For EU ID 21, comply with the applicable requirements of 40 CFR 63 Subpart A in accordance with the provisions for applicability of Subpart A in Subpart HH, Table 2.

[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]
[40 CFR 63.764(a) & Table 2, Subpart HH]

41. For EU IDs 3 through 7 and 14 through 18, comply with the applicable requirements of 40 CFR 63 Subpart A in accordance with the provisions for applicability of Subpart A in Subpart ZZZZ, Table 8.

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

Subpart HH

42. NESHAP Subpart HH Applicability. For EU ID 21, comply with the following applicable requirements of NESHAP Subpart HH.

[40 CFR 63.760(a), Subpart HH]
[18 AAC 50.040(c)(13), 50.040(j), & 50.326(j)]

[40 CFR 71.6(a)(1)]

42.1. Emissions for major source determination purposes can be estimated using the maximum natural gas or hydrocarbon liquid throughput, as appropriate, calculated in Conditions 42.1.a through 42.1.b. As an alternative to calculating the maximum natural gas or hydrocarbon liquid throughput, the owner or operator of a new or existing source may use the facility's design maximum natural gas or hydrocarbon liquid throughput to estimate the maximum potential emissions.

[40 CFR 63.760(a)(1), Subpart HH]
[40 CFR 71.6(a)(1)]

a. The owner or operator shall maintain records of the annual facility natural gas or hydrocarbon liquid throughput each year and upon request submit such records to the Administrator. If the facility annual natural gas or hydrocarbon liquid throughput increases above the maximum natural gas or hydrocarbon liquid throughput calculated in 40 CFR 63.760(a)(1)(i)(A) or (a)(1)(i)(B), the maximum natural gas or hydrocarbon liquid throughput must be recalculated using the higher throughput multiplied by a factor of 1.2.

b. The owner or operator shall determine the maximum values for other parameters used to calculate emissions as the maximum for the period over which the maximum natural gas or hydrocarbon liquid throughput is determined in accordance with 40 CFR 63.760(a)(1)(i)(A) or (B). Parameters, other than glycol circulation rate, shall be based on either highest measured values or annual average. For estimating maximum potential emissions from glycol dehydration units, the glycol circulation rate used in the calculation shall be the unit's maximum rate under its physical and operational design consistent with the definition of potential to emit in 40 CFR 63.2.

[40 CFR 63.760(a)(1)(ii) & (iii), Subpart HH]

42.2. Any source that determines it is not a major source but has actual emissions of 5 tons per year or more of a single HAP, or 12.5 tons per year or more of a combination of HAP (i.e., 50 percent of the major source thresholds), shall update its major source determination within 1 year of the prior determination or October 15, 2012, whichever is later, and each year thereafter, using gas composition data measured during the preceding 12 months.

[40 CFR 63.760(c), Subpart HH]
[40 CFR 71.6(a)(1)]

NESHAP Subpart HH General Standards

42.3. Except as specified in Condition 42.4, the owner or operator shall comply with the standards specified in Conditions 42.3.a through 42.3.c.

[40 CFR 63.764(d) & (d)(2), Subpart HH]
[40 CFR 71.6(a)(1)]

a. Determine the optimum glycol circulation rate using the equation under 40 CFR 63.764(d)(2)(i).

b. Operate the TEG dehydration unit such that the actual glycol circulation rate does not exceed the optimum glycol circulation rate determined in accordance with Condition 42.3.a. If the TEG dehydration unit is unable to meet the sales gas specification for moisture content using the glycol circulation rate determined in accordance with Condition 42.3.a, the owner or operator must calculate an alternate circulation rate using GRIGLYCalc™, Version 3.0 or higher. The owner or operator must document why the TEG dehydration unit must be operated using the alternate circulation rate and submit this documentation with the initial notification in accordance with 40 CFR 63.775(c)(7).

c. Maintain a record of the determination specified in Condition 42.3.b in accordance with the requirements in Condition 42.9 and submit the Initial Notification in accordance with the requirements in 40 CFR 63.775(c)(7). If operating conditions change and a modification to the optimum glycol circulation rate is required, the owner or operator shall prepare a new determination in accordance with Condition 42.3.a or 42.3.b and submit the information specified under 40 CFR 63.775(c)(7)(ii) through (v).

[40 CFR 63.764(d)(2)(i) through (iii), Subpart HH]

42.4. The owner or operator is exempt from the requirements of Condition 42.3 if the criteria listed in Condition 42.4.a or 42.4.b are met, except that the records of the determination of these criteria must be maintained as required in Condition 42.8.

[40 CFR 63.764(e)(1), Subpart HH]
[40 CFR 71.6(a)(1)]

a. The actual annual average flowrate of natural gas to the glycol dehydration unit is less than 85 thousand standard cubic meters per day, as determined by the procedures specified in Condition 42.6.a; or

b. The actual average emissions of benzene from the glycol dehydration unit process vent to the atmosphere are less than 0.90 megagram per year, as determined by the procedures specified in Condition 42.6.b.

[40 CFR 63.764(e)(1)(i) & (ii), Subpart HH]

42.5. At all times the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. 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 CFR 63.764(j), Subpart HH]
[40 CFR 71.6(a)(1)]

NESHAP Subpart HH Test Methods, Compliance Procedures, and Compliance Demonstrations

42.6. Determination of glycol dehydration unit flowrate, benzene emissions, or BTEX emissions. The procedures of this paragraph shall be used by an owner or operator to determine glycol dehydration unit natural gas flowrate, benzene emissions, or BTEX emissions.

[40 CFR 63.772(b), Subpart HH]
[40 CFR 71.6(a)(3)]

a. The determination of actual flowrate of natural gas to a glycol dehydration unit shall be made using the procedures of either Condition 42.6.a(i) or 42.6.a(ii).

[40 CFR 63.772(b)(1), Subpart HH]

(i) The owner or operator shall install and operate a monitoring instrument that directly measures natural gas flowrate to the glycol dehydration unit with an accuracy of plus or minus 2 percent or better. The owner or operator shall convert annual natural gas flowrate to a daily average by dividing the annual flowrate by the number of days per year the glycol dehydration unit processed natural gas.

(ii) The owner or operator shall document, to the Administrator's satisfaction, the actual annual average natural gas flowrate to the glycol dehydration unit.

[40 CFR 63.772(b)(1)(i) & (ii), Subpart HH]

b. The determination of actual average benzene or BTEX emissions from a glycol dehydration unit shall be made using the procedures of either Condition 42.6.b(i) or 42.6.b(ii). Emissions shall be determined either uncontrolled, or with federally enforceable controls in place.

[40 CFR 63.772(b)(2), Subpart HH]

(i) The owner or operator shall determine actual average benzene or BTEX emissions using the model GRIGLYCalc™, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalcTM Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1); or

(ii) The owner or operator shall determine an average mass rate of benzene or BTEX emissions in kilograms per hour through direct measurement using the methods in 40 CFR 63.772(a)(1)(i) or (ii), or an alternative method according to 40 CFR 63.7(f). Annual emissions in kilograms per year shall be determined by multiplying the mass rate by the number of hours the unit is operated per year. This result shall be converted to megagrams per year.

[40 CFR 63.772(b)(2)(i) & (ii), Subpart HH]

NESHAP Subpart HH Recordkeeping Requirements

42.7. Each owner or operator of a facility subject to NESHAP Subpart HH shall maintain records as follows:

[40 CFR 63.774(b), Subpart HH]
[40 CFR 71.6(a)(3)(ii)]

a. The owner or operator of an affected source subject to the provisions of NESHAP Subpart HH shall maintain files of all information (including all reports and notifications) required by NESHAP Subpart HH. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or period.

[40 CFR 63.774(b)(1), Subpart HH]

(i) All applicable records shall be maintained in such a manner that they can be readily accessed.

(ii) The most recent 12 months of records shall be retained on site or shall be accessible from a central location by computer or other means that provides access within 2 hours after a request.

(iii) The remaining 4 years of records may be retained offsite.

(iv) Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

[40 CFR 63.774(b)(1)(i) through (iv), Subpart HH]

42.8. An owner or operator of a glycol dehydration unit that meets the exemption criteria in Condition 42.4.a or 42.4.b shall maintain the records specified in Condition 42.8.a or 42.8.b, as appropriate, for that glycol dehydration unit.

[40 CFR 63.774(d)(1), Subpart HH]
[40 CFR 71.6(a)(3)(ii)]

a. The actual annual average natural gas throughput (in terms of natural gas flowrate to the glycol dehydration unit per day) as determined in accordance with Condition 42.6.a, or

b. The actual average benzene emissions (in terms of benzene emissions per year) as determined in accordance with Condition 42.6.b.

[40 CFR 63.774(d)(1)(i) & (ii), Subpart HH]

42.9. The owner or operator of an area source not located within a UA plus offset and UC boundary must keep a record of the calculation used to determine the optimum glycol circulation rate in accordance with Condition 42.3.a or 42.3.b, as applicable.

[40 CFR 63.774(f), Subpart HH]
[40 CFR 71.6(a)(3)(ii)]

Subpart ZZZZ

43. NESHAP Subpart ZZZZ Applicability. For EU IDs 3 through 7 and 14 through 19, comply with the following applicable requirements of NESHAP Subpart ZZZZ.

[40 CFR 63.6585(c) & 63.6590(a)(1)(iii), Subpart ZZZZ]
[18 AAC 50.040(c)(23), 50.040(j), & 50.326(j)]
[40 CFR 71.6(a)(1)]

43.1. For EU ID 19, the Permittee must meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR part 60 Subpart IIII, for compression ignition engines. No further requirements apply for EU ID 19 under 40 CFR 63.

[40 CFR 63.6590(c), Subpart ZZZZ]
[40 CFR 71.6(a)(1)]

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

43.2. For EU IDs 3 through 7,

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

[40 CFR 63.6603(a), Subpart ZZZZ]
[40 CFR 71.6(a)(1)]

(i) Change oil and filter every 1,440 hours of operation or annually, whichever comes first;

(ii) Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and

(iii) Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.

[Table 2d, Item 10; NESHAP Subpart ZZZZ]

b. Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(j) in order to extend the specified oil change requirement in Condition 43.2.a(i).

[Table 2d, NESHAP Subpart ZZZZ]

c. You must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

[40 CFR 63.6625(h) & Table 2d, Subpart ZZZZ]
[40 CFR 71.6(a)(1)]

43.3. For EU IDs 14 through 18,

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

[40 CFR 63.6603(a) & (b), Subpart ZZZZ]
[40 CFR 71.6(a)(1)]

(i) Change oil and filter every 1,000 hours of operation or annually, whichever comes first;

(ii) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and

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

[Table 2d, Item 1; NESHAP Subpart ZZZZ]

b. Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in Condition 43.3.a(i).

[Table 2d, NESHAP Subpart ZZZZ]

c. You must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

[40 CFR 63.6625(h) & Table 2d, Subpart ZZZZ]
[40 CFR 71.6(a)(1)]

NESHAP Subpart ZZZZ General Requirements

43.4. You must be in compliance with the requirements under Condition 43 at all times.

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

[40 CFR 63.6605(a) & (b), Subpart ZZZZ]
[40 CFR 71.6(a)(1)]

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

43.6. You must demonstrate continuous compliance with each requirement in Conditions 43.2.a and 43.3.a by:

[40 CFR 63.6640(a), Subpart ZZZZ]
[40 CFR 71.6(a)(3)]

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

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

[40 CFR 63.6625(e) & Table 6, Item 9, Subpart ZZZZ]

NESHAP Subpart ZZZZ Reporting Requirements

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

[40 CFR 63.6640(e), Subpart ZZZZ]
[40 CFR 71.6(a)(3)(iii)]

43.8. You must report all deviations as defined in NESHAP Subpart ZZZZ in the monitoring report required by Condition 80.

[40 CFR 63.6650(f), Subpart ZZZZ]
[40 CFR 71.6(a)(3)(iii)]

NESHAP Subpart ZZZZ Recordkeeping Requirements

43.9. For EU IDs 3 through 7 and 14 through 18, you must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan.

[40 CFR 63.6655(e), Subpart ZZZZ]
[40 CFR 71.6(a)(3)(ii)]

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

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

43.12. You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

[40 CFR 63.6660(a) through (c), Subpart ZZZZ]
[40 CFR 71.6(a)(3)(ii)]

40 CFR Part 82 Protection of Stratospheric Ozone

Subparts F, G, & H

44. Subpart F – Recycling and Emissions Reduction. Comply with the applicable standards for recycling and emission reduction of refrigerants in 40 CFR 82 Subpart F.

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

45. Subpart G – Significant New Alternatives. Comply with the applicable prohibitions in 40 CFR 82.174.

[18 AAC 50.040(d) & 50.326(j)]
[40 CFR 82.174(b) through (d), Subpart G]

46. Subpart H – Halons Emissions Reduction. Comply with the applicable prohibitions in 40 CFR 82.270.

[18 AAC 50.040(d) & 50.326(j)]
[40 CFR 82.270(b) through (f), Subpart H]

General NSPS and NESHAP Requirements

47. NESHAP Applicability Determinations. Determine rule applicability and designation of affected sources under National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories (40 CFR 63) in accordance with the procedures in 40 CFR 63.1(b).

[18 AAC 50.040(c)(1), 50.040(j), & 50.326(j)]

47.1. An owner or operator of a stationary source who is in the relevant source category and who determines that the source is not subject to a relevant standard or other requirement established under 40 CFR 63 must keep a record as specified in 40 CFR 63.10(b)(3).

[40 CFR 71.6(a)(3)(ii)]
[40 CFR 63.1(b)(3), Subpart A]

48. If an existing source becomes affected by an applicable subpart of 40 CFR 63, the Permittee shall comply with such standard by the compliance date established by the Administrator in the applicable subpart, in accordance with 40 CFR 63.6(c).

[18 AAC 50.040(c)(1), 50.040(j), & 50.326(j)]

49. After the effective date of any relevant standard promulgated by the Administrator under 40 CFR 63, 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 CFR 63.9(b).

[18 AAC 50.040(c)(1), 50.040(j), & 50.326(j)]
[40 CFR 71.6(a)(3)(iii)]
[40 CFR 63.5(b)(4), Subpart A]

50. Reports. Except for previously submitted reports and federal reports and notices submitted through EPA's Central Data Exchange (CDX) and Compliance and Emissions Data Reporting Interface (CEDRI) online reporting system, attach to the operating report required by Condition 80 for the period covered by the report, a copy of any NSPS and NESHAPs reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10. For reports previously submitted to ADEC or submitted through CDX/CEDRI, state in the operating report the date and a brief description of each of the reports submitted during the reporting period.

[18 AAC 50.326(j)(4) & 50.040(j)]
[40 CFR 71.6(c)(6)]

51. 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 CFR 71.6(c)(6)]

Section 5. General Conditions

Standard Terms and Conditions

52. 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)]

53. 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)]

54. 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)]

55. **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 through 403.

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

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

56.1. the stationary source's assessable potential to emit of 3,354 tpy; or

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

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

b. material balance calculations;

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

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

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

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

57.1. 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, PO Box 111800, Juneau, AK 99811-1800; the submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates; or

57.2. if no estimate is submitted on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit set out in Condition 56.1.

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

58. Good Air Pollution Control Practice. The Permittee shall do the following for EU IDs 2 and 20:

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

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

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

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

59. 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)]

60. 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)]

60.1. The Permittee shall keep records of:

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

b. any additional precautions that are taken

(i) to address complaints described in Condition 60.1.a or to address the results of Department inspections that found potential problems; and

(ii) to prevent future dust problems.

60.2. The Permittee shall report according to Condition 62.

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

[18 AAC 50.055(g)]

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

[18 AAC 50.110, 50.040(e), 50.326(j)(3) & 50.346(a)]
[40 CFR 71.6(a)(3)]

62.1. Monitoring, Recordkeeping, and Reporting for Condition 62:

a. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 79.

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 62.

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

(i) after an investigation because of a complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of Condition 62; or

(ii) the Department notifies the Permittee that it has found a violation of Condition 62.

d. The Permittee shall keep records of

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

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

(iii) a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 62; and

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

e. With each stationary source operating report under Condition 80, the Permittee shall include a brief summary report which must include

(i) the number of complaints received;

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

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

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

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

63. Technology-Based Emission Standard. If an unavoidable emergency, malfunction (as defined in 18 AAC 50.235(d)), or non-routine repair (as defined in 18 AAC 50.990(64)), causes emissions in excess of a technology-based emission standard[7] listed in Condition 37, 38, or 44 (refrigerants),

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

63.2. report in accordance with Condition 79; the report must include information on the steps taken to mitigate emissions and corrective measures taken or to be taken.

[18 AAC 50.235(a), 50.326(j)(4), & 50.040(j)(4)]
[40 CFR 71.6(c)(6)]

Open Burning Requirements

64. Open Burning. If open burning is conducted at this stationary source, comply with the requirements of 18 AAC 50.065.

64.1. Keep written records to demonstrate compliance with the limitations in this condition and the requirements of 18 AAC 50.065. Submit copies of the records to the Department upon request.

64.2. Include this condition in the annual certification required under Condition 81.

[18 AAC 50.065, 50.040(j), & 50.326(j)]
[40 CFR 71.6(a)(3)]

[7] As defined in 18 AAC 50.990(106), the term "*technology-based emission standard*" means a best available control technology (BACT) standard; a lowest achievable emission rate (LAER) standard; a maximum achievable control technology (MACT) standard established under 40 CFR 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

65. 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)]

66. Operating Conditions. Unless otherwise specified by an applicable requirement or test method, conduct source testing

[18 AAC 50.220(b)]

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

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

67. Reference Test Methods. Use the following test methods when conducting source testing for compliance with this permit:

67.1. 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 CFR 60.

[18 AAC 50.220(c)(1)(A) & 50.040(a)]
[40 CFR 60]

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

[18 AAC 50.040(b) & 50.220(c)(1)(B)]
[40 CFR 61]

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

[18 AAC 50.040(c) & 50.220(c)(1)(C)]
[40 CFR 63]

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

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

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

[18 AAC 50.040(a)(3) & 50.220(c)(1)(E)]
[40 CFR 60, Appendix A]

67.6. Source testing for emissions of $PM_{2.5}$ and PM_{10} must be conducted in accordance with the procedures specified in 40 CFR 51, Appendix M, Methods 201 or 201A and 202.

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

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

[18 AAC 50.040(c)(32) & 50.220(c)(2)]
[40 CFR 63, Appendix A, Method 301]

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

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

69. Test Exemption. Compliance with Conditions 71, 72 and 73 is not required for Method 9 Plan (Condition 2.2) observations.

[18 AAC 50.345(a)]

70. 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)]

71. Test Plans. Except as provided in Condition 69, before conducting any source tests, the Permittee shall submit a plan to the Department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance and must specify how the emissions unit will operate during the test and how the Permittee will document that operation. The Permittee shall submit a complete plan within 60 days after receiving a request under Condition 65 and at least 30 days before the scheduled date of any test unless the Department agrees in writing to some other time period. Retesting may be done without resubmitting the plan.

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

72. Test Notification. Except as provided in Condition 69, 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)]

73. **Test Reports.** Except as provided in Condition 69, within 60 days after completing a source test, the Permittee shall submit one certified copy of the results in the format set out in the *Source Test Report Outline*, adopted by reference in 18 AAC 50.030. The Permittee shall certify the results in the manner set out in Condition 76. If requested in writing by the Department, the Permittee must provide preliminary results in a shorter period of time specified by the Department.

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

74. **Particulate Matter Calculations.** In source testing for compliance with the particulate matter standards in Conditions 6 and 28.2, the three-hour average is determined using the average of three one-hour test runs.

[18 AAC 50.220(f)]

Section 7. General Recordkeeping and Reporting Requirements

Recordkeeping Requirements

75. Keep all records required by this permit for at least five years after the date of collection, including:

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

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

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

a. calibration and maintenance records, original strip chart or computer-based recordings for continuous monitoring instrumentation;

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

c. the date(s) analyses were performed;

d. the company or entity that performed the analyses;

e. the analytical techniques or methods used;

f. the results of such analyses; and,

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

Reporting Requirements

76. Certification. 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.

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

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

b. the person providing the electronic signature has made an agreement, with the certifying authority described in Condition 76.1.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 CFR 71.6(a)(3)(iii)(A)]

77. Submittals. Unless otherwise directed by the Department or this permit, submit reports, compliance certifications, and/or other submittals required by this permit, to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician. Submit the documents either by hard copy or electronically.

77.1. Provide electronic submittals, either by:

a. email under a cover letter using dec.aq.airreports@alaska.gov; or

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

[18 AAC 50.326(j)]
[40 CFR 71.6(a)(3)(iii)(A)]

78. 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)]

79. Excess Emissions and Permit Deviation Reports.

79.1. Except as provided in Condition 62, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

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

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

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

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

c. Report all other excess emissions and permit deviations

(i) within 30 days after the end of the month during which the emissions or deviation occurred, except as provided in Condition 79.1.c(iii); or

(ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the Department provides written permission to report under Condition 79.1.c(i); and

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

79.2. When reporting either excess emissions or permit deviations, the Permittee shall report using either the Department's online form, which can be found at http://dec.alaska.gov/applications/air/airtoolsweb, 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.

79.3. 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)]

80. Operating Reports. During the life of this permit[8], the Permittee shall submit 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.

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

80.2. When excess emissions or permit deviations that occurred during the reporting period are not included with the operating report under Condition 80.1, the Permittee shall identify

a. the date of the deviation;

b. the equipment involved;

c. the permit condition affected;

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

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

80.3. when excess emissions or permit deviations have already been reported under Condition 79 the Permittee shall cite the date or dates of those reports.

80.4. The operating report must include, for the period covered by the report, a listing of emissions monitored under Conditions 2.2.e and 37.3 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

[8] *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.

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

[18 AAC 50.346(b)(6) & 50.326(j)]
[40 CFR 71.6(a)(3)(iii)(A)]

81. Annual Compliance Certification. Each year by March 31, compile and submit to the Department an annual compliance certification report according to Condition 77.

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

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

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

c. state whether compliance is intermittent or continuous; and

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

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

81.3. In addition, submit a copy of the report directly to the Clean Air Act Compliance Manager, US EPA Region 10, Mail Stop: OCE-101, 1200 Sixth Avenue, Suite 155, Seattle, WA 98101.

[18 AAC 50.205, 50.345(a) & (j), & 50.326(j)]
[40 CFR 71.6(c)(5)]

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

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

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

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

82.2. Every third year by April 30, if the stationary source's potential to emit for the previous calendar year (actual emissions for Pb) equals or exceeds:

a. 0.5 tpy of actual Pb, or

b. 1,000 tpy of CO; or

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

82.3. For reporting under Condition 82.2, the Permittee shall report in 2015 for calendar year 2014, 2018 for calendar year 2017, 2021 for calendar year 2020, etc., in accordance with the Environmental Protection Agency set schedule.

82.4. Include in the report required by this condition, the required data elements contained within the form in Section 14 or those contained in Table 2A of Appendix A to Subpart A of 40 CFR 51 for each stack associated with an emissions unit.

[18 AAC 50.346(b)(8) & 50.200]
[40 CFR 51.15, 51.30(a)(1) & (b)(1), & 40 CFR 51, Appendix A to Subpart A]

Section 8. Permit Changes and Renewal

83. Permit Applications and Submittals. Comply with the following requirements for submitting application information to the US Environmental Protection Agency (EPA):

83.1. 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;

83.2. The information shall be submitted to the Part 70 Operating Permit Program, US EPA Region 10, Mail Stop: OAW-150, 1200 Sixth Avenue, Suite 155, Seattle, WA 98101.

83.3. To the extent practicable, provide applications in portable document format (pdf); MS Word format (.doc); or other computer-readable format compatible with EPA's national database management system; and

83.4. Maintain records as necessary to demonstrate compliance with this condition.

[18 AAC 50.040(j)(7), 50.326(a) & 50.346(b)(7)]
[40 CFR 71.10(d)(1)]

84. 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 CFR 71.6(a)(8)]

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

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

85.2. 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;

85.3. The change shall not qualify for the shield under 40 CFR 71.6(f);

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

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 CFR 71.6(a)(12)]

86. Operational Flexibility. CAA Section 502(b)(10)[9] changes may be made within the permitted stationary source without 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): Provided, that the Permittee provides EPA and the Department with written notification no less than seven days in advance of the proposed change.

86.1. For each such change, the notification required by Condition 86 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.

86.2. The permit shield described in 40 CFR 71.6(f) shall not apply to any change made pursuant to Condition 86.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 CFR 71.6(a)(13)]

87. Permit Renewal. To renew this permit, the Permittee shall submit to the Department[10] 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 must 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 CFR 71.7(b) and 71.5(a)(1)(iii).

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

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

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

Section 9. Compliance Requirements

General Compliance Requirements

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

88.1. included and specifically identified in the permit; or

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

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

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

89.1. an enforcement action;

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

89.3. denial of an operating permit renewal application.

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

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

[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(c)(3) & 71.5(c)(8)(iii)(A)]

91. 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)]

92. 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

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

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

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

92.4. 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)]

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

[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(c)(3) & 71.5(c)(8)(iii)(B)]

Section 10. Permit As Shield from Inapplicable Requirements

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

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

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

94.2. 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 CFR 71.6(f)(3)(i) & (ii)]

95. Table B identifies the emissions units that are not subject to the specified requirements at the time of permit issuance. If any of the requirements listed in Table B becomes applicable during the permit term, 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 CFR 71.6(f)(1)(ii)]

Table B - Permit Shields Granted

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
Stationary Source-wide	40 CFR 63 Subpart HHH	Stationary source is not a "major source" of HAPs as defined in 40 CFR 63.1271.
2	40 CFR 60 Subpart GG	Construction, modification, or reconstruction of each stationary gas turbine commenced prior to the applicability date of October 3, 1977. A permit shield from NSPS Subpart GG only applies to currently installed units until modified, reconstructed, or replaced.
1a, 2	40 CFR 60 Subpart KKKK	Construction, modification, or reconstruction of each stationary combustion turbine commenced prior to the applicability date of February 18, 2005. A permit shield from NSPS Subpart KKKK only applies to currently installed units until modified, reconstructed, or replaced.
14 through 18	40 CFR 60 Subpart IIII	This unit commenced construction prior to the applicability date of the subpart.
19	40 CFR 60.4211(c), (d), & (e)	40 CFR 60.4211(c) does not apply because EU ID 19 is a pre-2007 engine. 40 CFR 60.4211(d) does not apply because EU ID 19 is not subject to an emission standard under 40 CFR 60.4204(c) or 40 CFR 60.4205(d). 40 CFR 60.4211(e) does not apply because EU ID 19 is not subject to an emission standard under 40 CFR 60.4204(e) or 40 CFR 60.4205(f).

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
19	40 CFR 60.4213 (Subpart IIII)	EU ID 19's displacement is less than 30 liters per cylinder.
19	40 CFR 60.4214(b) – (d) (Subpart IIII)	Does not apply because EU ID 19 is a non-emergency certified engine, and it is not equipped with a particulate filter.
1a	40 CFR 60.334(a) through (g), Subpart GG	Turbines do not have a continuous emissions monitoring system (CEMS) or water/steam injection.
1a	40 CFR 60.334(h)(2), Subpart GG	No fuel bound nitrogen allowance is claimed for the turbines so nitrogen content of the fuel does not have to be monitored.
21	40 CFR 63.765 (Subpart HH)	The non-applicability of 40 CFR 63.765 is indicated under 40 CFR 63.765(a).
21	40 CFR 63.766 (Subpart HH)	40 CFR 63.766 only applies to major sources. Based on information in the permit application, the Bruce Platform is not a major source of HAPs.
21	40 CFR 63.769 (Subpart HH)	40 CFR 63.769 only applies to major sources. Based on information in the permit application, the Bruce Platform is not a major source of HAPs.
21	40 CFR 63.771 (Subpart HH)	40 CFR 63.771 is not applicable because no control of emissions is required by the subpart.
21	40 CFR 63.772(a) and (c) through (i) (Subpart HH)	Performance testing is not required for EU 21 and this source is not required to operate controls in order to comply with this subpart.
21	40 CFR 63.773 (Subpart HH)	40 CFR 63.773 is not applicable because no control of emissions is required by the subpart.
1a, 2, 29	40 CFR 63 Subpart YYYY	Bruce Platform is not a major source of HAP emissions. Subpart YYYY applies to major sources of HAP emissions. A permit shield from Subpart YYYY only applies to the currently installed units until the source becomes a major source of HAP emissions.
3 through 7 & 14 through 18	40 CFR 63.6600, 63.6601, 63.6602, 63.6610, and 63.6611 (Subpart ZZZZ)	Bruce Platform is not a Major Source of HAPs.
14 through 18	40 CFR 63.6604(b) and (c), 63.6640(f), and 63.6655(f)	This unit is not an emergency engine.
22 & 23	40 CFR 63 Subpart JJJJJJ	Temporary boilers are exempt from Subpart JJJJJJ per 40 CFR 63.11195(h).
Stationary Source-wide	18 AAC 50.070, Marine Vessels, visible emission standards	Not an affected emission unit, operation, or industry.

[18 AAC 50.326(j)]
[40 CFR 71.6(f)(1)(ii)]

Section 11. Visible Emissions Observation Form

This form is designed to be used in conjunction with EPA Method 9, "Visual Determination of the Opacity of Emissions from Stationary Sources." Temporal changes in emission color, plume water droplet content, background color, sky conditions, observer position, etc. should be noted in the comments section adjacent to each minute of readings. Any information not dealt with elsewhere on the form should be noted under additional information. Following are brief descriptions of the type of information that needs to be entered on the form: for a more detailed discussion of each part of the form, refer to "Instructions for Use of Visible Emission Observation Form" (a copy is available at https://www3.epa.gov/ttnemc01/methods/webinar8.pdf).

- Source Name: full company name, parent company or division or subsidiary information, if necessary.
- Address: street (not mailing or home office) address of facility where visible emissions observation is being made.
- Phone (Key Contact): number for appropriate contact.
- Stationary Source ID Number: number from NEDS, agency file, etc.
- Process Equipment, Operating Mode: brief description of process equipment (include type of facility) and operating rate, % capacity, and/or mode (e.g. charging, tapping, shutdown).
- Control Equipment, Operating Mode: specify type of control device(s) and % utilization, control efficiency.
- Describe Emission Point: for identification purposes, stack or emission point appearance, location, and geometry; and whether emissions are confined (have a specifically designed outlet) or unconfined (fugitive).
- Height Above Ground Level: stack or emission point height relative to ground level; can use engineering drawings, Abney level, or clinometer.
- Height Relative to Observer: indicate height of emission point relative to the observation point.
- Distance from Observer: distance to emission point; can use rangefinder or map.
- Direction from Observer: direction plume is traveling from observer.
- Describe Emissions and Color: include physical characteristics, plume behavior (e.g., looping, lacy, condensing, fumigating, secondary particle formation, distance plume visible, etc.), and color of emissions (gray, brown, white, red, black, etc.). Note color changes in comments section.
- Visible Water Vapor Present?: check "yes" if visible water vapor is present.
- If Present, note in the Comments column whether the plume is "attached" if water droplet plume forms prior to exiting stack, or "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 color of clouds and 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 stack exit to w here the plume w as read: No Yes				10						
Point in Plume at Which Opacity Was Determined				11						
Describe Plume Background	Background Color			12						
Start	Start			13						
End	End									
Sky Conditions: Start	End			14						
Wind Speed Start End	Wind Direction From Start End			15						
Ambient Temperature	Wet Bulb Temp	RH percent		16						
SOURCE LAYOUT SKETCH: 1 Stack or Point Being Read 2 Wind Direction From 3 Observer Location 4 Sun Location 5 North Arrow 6 Other Stacks				17						
				18						
				19						
				20						
				21						
				22						
				23						
				24						
				25						
				26						
				27						
				28						
				29						
				30						
				Range of Opacity Minimum					Maximum	
I have received a copy of these opacity observations Print Name:				Print Observer's Name						
Signature:				Observer's Signature					Date	
									Observer's Affiliation:	
Title	Date			Certifying Organization Certified By:					Date	

Data Reduction:

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

Average Opacity Summary:

Set Number	Time			Opacity		
	Start	End		Sum	Average	Comments

Section 12. SO_2 Material Balance Calculation

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

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

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

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

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

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

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

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

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

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

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

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

The fuel weight percent (wt%) of sulfur is obtained pursuant to Condition 13. The fuel weight percents of carbon and hydrogen are obtained from the fuel refiner.

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

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

[18 AAC 50.346(c)]

Section 13. ADEC Notification Form[11]

Bruce Platform — **Stationary Source (Facility) Name**

AQ0064TVP04 — **Air Quality Permit Number.**

Hilcorp Alaska, LLC — **Company Name**

When did you discover the Excess Emissions/Permit Deviation?

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

When did the event/deviation?

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

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

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

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

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

☐ Excess Emissions – Complete Section 1 and Certify

☐ Deviation from Permit Condition – Complete Section 2 and Certify

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

Section 1. Excess Emissions

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

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

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

☐ Control Equipment Failure ☐ Schedule Maintenance/Equipment Adjustment

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

(c) **Description**

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

[11] Revised as of September 27, 2010.

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

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

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

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

(f) **Unavoidable Emissions:**

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

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

Certify Report (go to end of form)

Section 2. Permit Deviations

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

☐ Emissions Unit-Specific

☐ Failure to Monitor/Report

☐ General Source Test/Monitoring Requirements

☐ Recordkeeping/Reporting/Compliance Certification

☐ Standard Conditions Not Included in the Permit

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

☐ Generally Applicable Requirements

☐ Reporting/Monitoring for Diesel Engines

☐ Insignificant Emissions Unit

☐ Stationary Source Wide

(b) **Emissions Units Involved:**

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

EU ID	EU Name	Permit Condition/ Potential Deviation

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

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

(d) **Corrective Actions:**

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

Certification:

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

Printed Name: _____ Title: _____ Date: _____

Signature: _____ Phone Number: _____

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

To submit this report:

1. Fax to: 907-451-2187

   Or

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

   Or

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

   Or

4. Phone Notifications: 907-451-5173

   Phone notifications require a written follow-up report.

   Or

5. Submission of information contained in this report can be made electronically at the following website: *http://dec.alaska.gov/applications/air/airtoolsweb/.*

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 in bright yellow. Make additional copies as needed.	

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

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

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

Winter %	
Spring %	

Operational Schedule

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

Fuel Characteristics

Heat Content	Elem. Sulfur Content (%)	H2S Sulfur Content	Ash Content (if applicable)

Heating

Heat Input	Heat Output	Heat Values Convention

Emissions Operating Type:

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

Emissions' Release Point

Release Point ID					
Apportion%					

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

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

Operational Schedule

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

Fuel Characteristics

Heat Content	Elem. Sulfur Content (%)	H2S Sulfur Content	Ash Content (if applicable)

Heating

Heat Input	Heat Output	Heat Values Convention

Emissions Operating Type:

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

Emissions' Release Point					
Release Point ID					
Apportion%					

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

Certification:

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

Printed Name:_____Title_____Date _____

Signature:_____ Phone number_____

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

To submit this report:

1. Fax this form to: 907-465-5129; or
2. E-mail to: DEC.AQ.airreports@alaska.gov; or
3. Mail to: ADEC
   Air Permits Program
   PO Box 111800
   Juneau, AK 99811-1800

Or

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

[18 AAC 50.346(b)(9)]

Attachment 1 - 40 CFR 60 Subpart A 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: _____