

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ0186TVP04

Issue Date: PUBLIC COMMENT - March 8, 2024

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 North Slope, LLC**, for the operation of the **Central Power Station**.

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.

Upon effective date of this permit, Operating Permit No. AQ0186TVP03, including all revisions, expires.

This operating permit becomes effective <insert date—30 days after issue date>.

James R. Plosay, Manager
Air Permits Program

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Abbreviations and Acronyms

AAC.....	Alaska Administrative Code	NAICS.....	North American Industrial Classification System
ADEC	Alaska Department of Environmental Conservation	NESHAP	National Emission Standards for Hazardous Air Pollutants [as contained in 40 CFR 61 and 63]
AS.....	Alaska Statutes	NH ₃	ammonia
ASTM.....	American Society for Testing and Materials	NO _x	nitrogen oxides
BACT	best available control technology	NSPS	New Source Performance Standards [as contained in 40 CFR 60]
bHp	brake horsepower	O ₂	oxygen
CAA or The Act	Clean Air Act	PAL	plantwide applicability limitation
CDX.....	Central Data Exchange	Pb	lead
CEDRI.....	Compliance and Emissions Data Reporting Interface	PM _{2.5}	particulate matter less than or equal to a nominal 2.5 microns in diameter
CFR	Code of Federal Regulations	PM ₁₀	particulate matter less than or equal to a nominal 10 microns in diameter
CI.....	compression ignition	ppm	parts per million
CO	carbon monoxide	ppmv, ppmvd	parts per million by volume on a dry basis
dscf.....	dry standard cubic foot	psia	pounds per square inch (absolute)
EPA	US Environmental Protection Agency	PSD	prevention of significant deterioration
EU.....	emissions unit	PTE	potential to emit
gph.....	gallons per hour	RICE	reciprocating internal combustion engine
gr/dscf.....	grain per dry standard cubic foot (1 pound = 7000 grains)	SIC.	Standard Industrial Classification
HAPs	hazardous air pollutants [as defined in AS 46.14.990]	SIP.....	State Implementation Plan
hp	horsepower	SO ₂	sulfur dioxide
ICE.....	internal combustion engine	tph	tons per hour
ID.....	emissions unit identification number	tpy	tons per year
ISO.....	International Standards Organization	VOC	volatile organic compound [as defined in 40 CFR 51.100(s)]
kPa	kiloPascals	VOL	volatile organic liquid [as defined in 40 CFR 60.111b, Subpart Kb]
kW	kilowatts	vol%	volume percent
LAER.....	lowest achievable emission rate	wt%	weight percent
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		

Section 1. Stationary Source Information

Identification

Permittee:	Hilcorp North Slope, LLC 3800 Centerpoint Dr., Suite 1400 Anchorage, AK 99503	
Stationary Source Name:	Central Power Station	
Location:	70° 16' 34" North; 148° 39' 43" West	
Physical Address:	Section 30, Township 11N, Range 14E, Umiat Meridian Prudhoe Bay, AK	
Owner:	Hilcorp North Slope, LLC 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503	Chevron USA, Inc. 1029 West 3rd Ave., Suite 150 Anchorage, AK 99501-1972
	ExxonMobil Alaska Production, Inc. 3700 Centerpoint Drive, Suite 4600 (zip 99503) P.O. Box 196601 Anchorage, AK 99519-6601	ConocoPhillips Alaska, Inc. 700 G Street (zip 99501) P.O. Box 100360 Anchorage, AK 99510-0360
Operator:	Hilcorp North Slope, LLC 3800 Centerpoint Dr., Suite 1400 Anchorage, AK 99503	
Permittee's Responsible Official:	Luke Saugier, Senior Vice President 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503	
Designated Agent:	CT Corporation Systems 9360 Glacier Hwy, Suite 202 Juneau, AK 99801	
Stationary Source and Building Contact:	Greg Arthur, Air Program Lead 3800 Centerpoint Dr., Suite 1400 Anchorage, AK 99503 (907) 777-8509 greg.arthur@hilcorp.com	
Fee Contact:	Accounts Payable P.O. Box 61529 Houston, TX 77208 (713) 209-2400	
Permit Contact:	Greg Arthur, Air Program Lead 3800 Centerpoint Dr., Suite 1400 Anchorage, AK 99503 (907) 777-8509 greg.arthur@hilcorp.com	
Process Description:	SIC Code	1311 - Crude Petroleum and Natural Gas
	NAICS Code:	211120 - Crude Petroleum 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	Tag Number	Emissions Unit Description	Fuel	Rating/Size	Installation or Construction Date
Group I - Gas Turbines					
1	GTRB -17-1101	GE MS 5001R Serial Number: 179537	Fuel Gas	18,150 kW (ISO) 290.4 MMBtu/hr (LHV @ 0°F)	9/1970 ¹
2	GTRB -17-2101	GE MS 5001R Serial Number: 179538	Fuel Gas	18,150 kW (ISO) 290.4 MMBtu/hr (LHV @ 0°F)	9/1970 ¹
3	GTRB -17-3101	GE MS 5001P Serial Number: 226177	Fuel Gas	23,950 kW (ISO) 352.2 MMBtu/hr (LHV @ 0°F)	Commenced Construction 12/1974 Startup 8/1976
4	GTRB -17-4101	GE MS 5001P Serial Number: 226178	Fuel Gas	23,950 kW (ISO) 352.2 MMBtu/hr (LHV @ 0°F)	Commenced Construction 12/1974 Startup 8/1976
5	GTRB -17-5101	GE MS 5001P Serial Number: 244541	Fuel Gas	23,950 kW (ISO) 352.2 MMBtu/hr (LHV @ 0°F)	Commenced Construction Prior to 8/7/1977 Startup 4/1977
6	GTRB -17-6101	GE MS 5001P Serial Number: 244540	Fuel Gas	23,950 kW (ISO) 352.2 MMBtu/hr (LHV @ 0°F)	Commenced Construction Prior to 8/7/1977 Startup 4/1977
7	GTRB -17-7101	GE MS 5001P Serial Number: 244757	Fuel Gas	23,950 kW (ISO) 352.2 MMBtu/hr (LHV @ 0°F)	Commenced Construction Prior to 8/7/1977 Startup 7/1978

EU ID	Tag Number	Emissions Unit Description	Fuel	Rating/Size	Installation or Construction Date
Group II – Gas-Fired Heaters					
8	H-17-0601	BS & B 400IH Serial Number: 04759-01-01	Fuel Gas	4.0 MMBtu/hr	1974
9	H-17-0602	BS & B 400IH Serial Number: 04759-04-01	Fuel Gas	4.0 MMBtu/hr	1974
10	H-17-0603	CW 4500IH Serial Number: 6085-01	Fuel Gas	4.5 MMBtu/hr	1975
Group III – Liquid Fuel-Fired Engines					
13b	GNED-17-0101	Detroit Diesel 9123-7300 Emergency Generator Serial Number: 12E-1411	Diesel	1,050 hp	Prior to 2000 ²
14a	GNED-17-0102	Detroit Diesel 9123-7330 Emergency Generator Serial Number: 12E-1757	Diesel	1,050 hp	Prior to 2000 ²
Group IV – Black Start Engines ³					
15	GRSD-17-1101	Detroit Diesel 5063-5393 Serial Number: 6D-25-1009	Diesel	350 hp	2/1999
16	GTSD-17-2101	Cummins Diesel V8-300B Serial Number: 726343	Diesel	300 hp	9/1970
17	GTSD-17-0602	Detroit Diesel 7123-7300 Serial Number: 12VA-38585	Diesel	500 hp	12/1974
18	GTSD-17-4101	Detroit Diesel 7123-7300 Serial Number: 12VA-38578	Diesel	500 hp	12/1974

Table Notes:

- ¹ Unit commenced construction in September 1970, was originally installed in May 1974 as a “M model” unit and was modified in February 1980.
- ² The construction dates for EU IDs 13b and 14a are uncertain. However, these engines are Detroit Diesel “Series 149” engines and Series 149 engines were discontinued around the year 2000.
- ³ These engines have actual emissions less than the thresholds for insignificant units under 18 AAC 50.326(e). However, these engines are subject to the provisions of 40 CFR 63 Subpart ZZZZ and cannot be considered insignificant as specified under 18 AAC 50.326(d).

[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 1 through 10, 13b, 14a, and 15 through 18 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)(4), 50.055(a)(1), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(1)]

- 1.1. For EU IDs 1 through 10, burn only gas as fuel. In each operating report under Condition 65 indicate whether each of these emissions units burned only gas during the period covered by the report. Report under Condition 64 if any fuel other than gas is burned in any of these emissions units.
- 1.2. For each of EU IDs 13b and 14a, as long as the emissions unit does not exceed the limit in Condition 16, monitoring shall consist of an annual compliance certification under Condition 66 for the visible emissions standard based on reasonable inquiry. Otherwise, comply with Condition 1.3.
- 1.3. For each of EU IDs 13b and 14a, as long as actual emissions from the emissions unit are less than the significant emissions thresholds listed in 18 AAC 50.326(e) during any consecutive 12-month period, monitoring shall consist of an annual compliance certification under Condition 66 with the visible emissions standard based on reasonable inquiry. The Permittee shall report in the operating report under Condition 65 if any of EU IDs 13b and 14a reaches any of the significant emissions thresholds listed in 18 AAC 50.326(e) and monitor, record, and report in accordance with Conditions 2 through 4 for the remainder of the permit term for that emissions unit.
- 1.4. For EU IDs 15 through 18, monitoring shall consist of an annual compliance certification under Condition 66 for the visible emissions standard based on reasonable inquiry.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)]

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

Liquid Fuel-Burning Equipment

2. **Visible Emissions Monitoring.** When required by Condition 1.3, or in the event of replacement¹ during the permit term, the Permittee shall observe the exhaust of EU IDs 13b and 14a for visible emissions using the Method 9 Plan under Condition 2.2.

¹ "Replacement," as defined in 40 CFR 51.166(b)(32).

- 2.1. The Permittee may for each unit elect to continue the visible emissions monitoring schedule specified in Conditions 2.2.b through 2.2.e that remains in effect from a previous permit.
- 2.2. **Method 9 Plan.** For all observations in this plan, observe emissions unit exhaust, following 40 CFR 60, Appendix A-4, Method 9 for 18 minutes to obtain 72 consecutive 15-second opacity observations.²
- a. First Method 9 Observation. Except as provided in Condition 2.1, observe the exhaust of EU IDs 13b and 14a according to the following criteria:
- (i) For any unit replaced, observe exhaust within 60 days of the newly installed emissions unit becoming fully operational.³ Except as provided in Condition 2.2.e, after the first Method 9 observation:
- (A) For EU IDs 13b and 14a, comply with Conditions 1.2 and 1.3 as applicable.
- (ii) For each of EU IDs 13b and 14a, observe the exhaust of the emissions unit within 30 days after the end of the calendar month during which monitoring was triggered under Conditions 1.2 or 1.3; or for an emissions unit with intermittent operations, within the first 30 days during the unit's next scheduled operation.
- b. Monthly Method 9 Observations. After the first Method 9 observation conducted under Condition 2.2.a, perform observations at least once in each calendar month that the emissions unit operates.
- c. Semiannual Method 9 Observations. After at least three monthly observations under Condition 2.2.b, unless a six-consecutive-minute average opacity is greater than 15 percent and one or more individual observations are greater than 20 percent, perform semiannual observations
- (i) no later than seven months, but not earlier than five months, after the preceding observation; or
- (ii) for an emissions unit with intermittent operations, during the next scheduled operation immediately following seven months after the preceding observation.
- d. Annual Method 9 Observations. After at least two semiannual observations under Condition 2.2.c, unless a six-consecutive-minute average opacity is greater than 15 percent and one or more individual observations are greater than 20 percent, perform annual observations
- (i) no later than 12 months, but not earlier than 10 months, after the preceding observation; or

² Visible emissions observations are not required during emergency operations.

³ "Fully operational" means upon completion of all functionality checks and commissioning after unit installation. "Installation" is complete when the unit is ready for functionality checks to begin.

- (ii) for an emissions unit with intermittent operations, during the next scheduled operation immediately following 14 months after the preceding observation.
- e. Increased Method 9 Frequency. If a six-consecutive-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more individual observations are greater than 20 percent, then increase or maintain the observation frequency for that emissions unit to at least monthly intervals as described in Condition 2.2.b, and continue monitoring in accordance with the Method 9 Plan.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(i)]

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

3.1. For all Method 9 observations,

- a. the observer shall record the following:
 - (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 rate (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-consecutive-minute average opacity,
 - (i) divide the observations recorded on the record sheet into sets of 24 consecutive observations;
 - (ii) sets need not be consecutive in time and in no case shall two sets overlap;
 - (iii) for each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24; and

- (iv) record the average opacity on the sheet.
 - c. Calculate and record the highest six-consecutive and 18-consecutive-minute average opacities observed.
- 3.2. The records required by Condition 3.1 may be kept in electronic format.
- [18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(ii)]

4. Visible Emissions Reporting. The Permittee shall report as follows:

- 4.1. In the first operating report required in Condition 65 under this permit term, the Permittee shall state the intention to either continue the visible emissions monitoring schedule in effect from the previous permit or reset the visible emissions monitoring schedule.
 - 4.2. Include in each operating report required under Condition 65 for the period covered by the report:
 - a. for all Method 9 Plan observations:
 - (i) copies of the observation results (i.e. opacity observations) for each emissions unit, 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-consecutive- and 18-consecutive-minute average opacities observed; and
 - (C) dates when one or more observed six-consecutive-minute average opacities were greater than 20 percent; and
 - b. a summary of any monitoring or recordkeeping required under Conditions 2 and 3 that was not done.
 - 4.3. Report under Condition 64:
 - a. the results of Method 9 observations that exceed 20 percent average opacity for any six-consecutive-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.
- [18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(iii)]

Particulate Matter (PM) Emissions Standard

- 5. Industrial Process and Fuel-Burning Equipment PM Emissions.** The Permittee shall not cause or allow PM emitted from EU IDs 1 through 10, 13b, 14a, and 15 through 18 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)(4), 50.055(b)(1), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(1)]

- 5.1. For each of EU IDs 13b and 14a, as long as the emissions unit does not exceed the limit in Condition 16, monitoring shall consist of an annual compliance certification under Condition 66 for the PM emissions standard based on reasonable inquiry. Otherwise, comply with Condition 5.2.
- 5.2. For each of EU IDs 13b and 14a, as long as actual emissions from the emissions unit are less than the significant emissions thresholds listed in 18 AAC 50.326(e) during any consecutive 12-month period, monitoring shall consist of an annual compliance certification under Condition 66 for the PM emissions standard based on reasonable inquiry. The Permittee shall report in the operating report under Condition 65 if any of EU IDs 13b and 14a reaches any of the significant emissions thresholds and monitor, record and report in accordance with Conditions 6 through 8 for the remainder of the permit term for that emissions unit.
- 5.3. For each of EU IDs 15 through 18, the Permittee must annually certify compliance under Condition 66 for the PM standard based on reasonable inquiry.
- 5.4. For EU IDs 1 through 10, the Permittee shall comply with Condition 1.1.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)]

PM MR&R

Liquid Fuel-Burning Engines and Turbines

- 6. PM Monitoring.** The Permittee shall conduct source tests on EU IDs 13b and 14a, to determine the concentration of PM in the exhaust of each emissions unit as follows:
- 6.1. If the result of any Method 9 observation conducted under Condition 2.2 for any of EU IDs 13b and 14a is greater than the criteria of Condition 6.2.a or Condition 6.2.b, the Permittee shall, within six months of that Method 9 observation, either:
- take corrective action and observe the emissions unit exhaust under load conditions comparable to those when the criteria were exceeded, following 40 CFR 60, Appendix A-4 Method 9 for 18 minutes to obtain 72 consecutive 15-second opacity observations, to show that emissions are no longer greater than the criteria of Condition 6.2; or
 - except as exempted in Condition 6.4, conduct a PM source test according to requirements set out in Section 6.

- 6.2. Take corrective action or conduct a PM source test, in accordance with Condition 6.1, if any Method 9 observation under Condition 2.2 results in an 18-minute average opacity greater than
 - a. 20 percent for an emissions unit with an exhaust stack diameter that is equal to or greater than 18 inches; or
 - b. 15 percent for an emissions unit with an exhaust stack diameter that is less than 18 inches, unless the Department has waived this requirement in writing.
- 6.3. During each one-hour PM source test run under Condition 6.1.b, observe the emissions unit exhaust for 60 minutes in accordance with Method 9 and calculate the highest 18-consecutive-minute average opacity measured during each one-hour test run. Submit a copy of these observations with the source test report.
- 6.4. The PM source test requirements in Condition 6.1.b are waived for an emissions unit if
 - a. a source test on that unit has shown compliance with the PM standard during this permit term; or
 - b. corrective action was taken to reduce visible emissions and two consecutive 18-minute Method 9 visible emissions observations (as described in Condition 2.2) conducted thereafter within a six-month period show visible emissions less than the threshold in Condition 6.2.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(i)]

7. PM Recordkeeping. The Permittee shall comply with the following:

- 7.1. No later than 30 calendar days after the effective date of this permit, the Permittee shall record the exhaust stack diameters of EU IDs 13b and 14a.
- 7.2. Keep records of the results of any source test and visible emissions observations conducted under Condition 6.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(ii)]

8. PM Reporting. The Permittee shall report as follows:

- 8.1. Notify the Department of any Method 9 observation results that are greater than the threshold of either Condition 6.2.a or Condition 6.2.b within 30 days of the end of the month in which the observations occurred. Include the dates, EU ID(s), and results when an observed 18-minute average opacity was greater than an applicable threshold in Condition 6.2.
- 8.2. In each operating report under Condition 65, include:
 - a. a summary of the results of any PM source test and visible emissions observations conducted under Condition 6; and

- b. copies of any visible emissions observation results greater than the thresholds of Condition 6.2, if they were not already submitted.
- 8.3. Report the stack diameters of EU IDs 13b and 14a in the next operating report under Condition 65 following the deadline in Condition 7.1 for collecting the stack diameter records.
- 8.4. Report in accordance with Condition 64:
- a. anytime the results of a PM source test exceed the PM emissions standard in Condition 5; or
 - b. if the requirements under Condition 6.1 were triggered and the Permittee did not comply on time with either Condition 6.1.a or 6.1.b. Report the deviation within 24 hours of the date compliance with Condition 6.1 was required.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(iii)]

Sulfur Compound Emissions Standard

- 9. Sulfur Compound Emissions.** The Permittee shall not cause or allow sulfur compound emissions, expressed as SO₂, from EU IDs 1 through 10, 13b, 14a, and 15 through 18 to exceed 500 ppm averaged over three hours.

[18 AAC 50.040(j)(4), 50.055(c), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(1)]

Sulfur Compound MR&R

Fuel Gas (EU IDs 1 through 10)

- 10. Sulfur Compound Monitoring and Recordkeeping.** The Permittee shall monitor and keep records in accordance with Conditions 15.1 and 15.2.
- 11. Sulfur Compound Reporting.** The Permittee shall report as follows:
- 11.1. Report in accordance with Condition 15.3.
 - 11.2. Report in accordance with Condition 64 whenever the fuel combusted causes sulfur compound emissions to exceed the standard of Condition 9.

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

North Slope Liquid Fuel (EU IDs 13b, 14a, and 15 through 18)

- 12. Sulfur Compound Emissions MR&R.** For liquid fuel from a North Slope topping plant, the Permittee shall comply with the following:
- 12.1. Obtain from the topping plant the results of a monthly fuel sulfur analysis;
 - 12.2. Include in the operating report required by Condition 65 a list of the sulfur content measured for each month covered by the report; and

- 12.3. Report under Condition 64 if the sulfur content for any month exceeds 0.75 percent by weight ($\text{wt}\%S_{\text{fuel}}$).

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(i) through (iii)]

Fuel Oil⁴(EU IDs 13b, 14a, and 15 through 18)

13. Sulfur Compound Emissions Monitoring and Recordkeeping. The Permittee shall monitor and keep records, as follows:

- 13.1. Comply with either Condition 13.1.a or Condition 13.1.b:

a. For each shipment of fuel:

- (i) If the fuel grade requires a sulfur content 0.5 percent by weight ($\text{wt}\%S_{\text{fuel}}$) or less, keep receipts that specify fuel grade and amount; or
- (ii) If the fuel grade does not require a sulfur content 0.5 $\text{wt}\%S_{\text{fuel}}$ or less, keep receipts that specify fuel grade and amount, and
 - (A) test the fuel for sulfur content; or
 - (B) obtain test results showing the sulfur content of the fuel from the supplier or refinery; the test results must include a statement signed by the supplier or refinery of what fuel they represent; or

b. Test the sulfur content of the fuel in each storage tank that supplies fuel to EU IDs 13b, 14a, and 15 through 18 at least monthly.

- 13.2. Fuel testing under Condition 13.1.a or Condition 13.1.b 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 shipment of fuel contains greater than 0.75 $\text{wt}\%S_{\text{fuel}}$ or if the results of a fuel sulfur content test indicate that the fuel contains greater than 0.75 $\text{wt}\%S_{\text{fuel}}$, the Permittee shall calculate SO_2 emissions in parts per million (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)(3).

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(i) & (ii)]

14. Sulfur Compound Emissions 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 in accordance with Condition 64. When reporting under this condition, include the calculation under Condition 13.3.

⁴ *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.

- 14.2. The Permittee shall include in the operating report required by Condition 65 for each month covered by the report:
- a. a list of the fuel grades received at the stationary source;
 - b. for any fuel received with a fuel sulfur content greater than 0.5 wt% S_{fuel} , the fuel sulfur content of the shipment;
 - c. the results of all fuel sulfur analyses conducted under Condition 13.1.a or Condition 13.1.b and documentation of the method(s) used to complete the analyses; and
 - d. for any fuel received with a sulfur content greater than 0.75 wt% S_{fuel} , the SO_2 emissions in ppm calculated under Condition 13.3.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 CFR 71.6(a)(3)(iii)]

Preconstruction Permit ⁵ Requirements

SO₂ Ambient Air Quality Protection

15. To protect the 3-hour, 24-hour and annual average SO_2 ambient air quality standards and increments, the Permittee shall limit the hydrogen sulfide (H_2S) content of the gaseous fuel burned in EU IDs 1 through 10 to no greater than 140 parts per million by volume (ppmv) at any time.

[Condition 4, Minor Permit AQ0186MSS01, 7/21/2010]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

- 15.1. Determine compliance with the fuel gas H_2S content limit as follows:

[Condition 4.1, Minor Permit AQ0186MSS01, 7/21/2010]
[40 CFR 71.6(a)(3)]

- a. Analyze the fuel gas H_2S content at least monthly using ASTM D 4810-88, ASTM D 4913-89, or Gas Producer's Association (GPA) method 2377-86.
- b. The fuel gas H_2S analysis required under this condition may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

[Conditions 4.1a & b, Minor Permit AQ0186MSS01, 7/21/2010]

- 15.2. Keep records of the analysis conducted as required in Condition 15.1.a.
- 15.3. Report all fuel gas H_2S concentrations measured for each month of the reporting period, in each operating report required in Condition 65.
- 15.4. Report excess emissions and permit deviations in accordance with Condition 64 should the fuel gas H_2S concentration exceed the limit in Condition 15.

⁵ *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.

[Conditions 4.2 through 4.4, Minor Permit AQ0186MSS01, 7/21/2010]
[40 CFR 71.6(a)(3)]

16. To protect the annual average SO₂ ambient air quality standard and increment, the Permittee shall limit the hours of operation for EU IDs 13b and 14a to no more than 200 hours per consecutive 12-month period per unit.

[Condition 5, Minor Permit AQ0186MSS01, 7/21/2010]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

- 16.1. Monitor and record the monthly hours of operation and the consecutive 12-month summation of hours of operation for each of EU IDs 13b and 14a.
- 16.2. Report the monthly and the consecutive 12-month total hours that each of EU IDs 13b and 14a operated (both emergency and non-emergency operation) each month of the reporting period in the operating report required in Condition 65.
- 16.3. Report in accordance with Condition 64 if the consecutive 12-month total hours of operation exceed the limit in Condition 16.

[Conditions 5.1 through 5.3, Minor Permit AQ0186MSS01, 7/21/2010]
[40 CFR 71.6(a)(3)]

Insignificant Emissions Units

17. 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:

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

[50.055(a)(1)]

- 17.2. **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)]

- 17.3. **Sulfur Standard:** The Permittee shall not cause or allow sulfur compound emissions, expressed as SO₂, from an industrial process or fuel-burning equipment, to exceed 500 ppm averaged over three hours.

[18 AAC 50.055(c)]

- 17.4. **General MR&R for Insignificant Emissions Units:** The Permittee shall comply with the following:

- a. Submit the compliance certifications of Condition 66 based on reasonable inquiry;
- b. Comply with the requirements of Condition 47;

- c. Report in the operating report required by Condition 65 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 have become greater than any of those thresholds; and
- d. No other monitoring, recordkeeping or reporting is required for insignificant emissions units to demonstrate compliance with the emissions standards under Conditions 17.1, 17.2, and 17.3.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(b)(4)]

[40 CFR 71.6(a)(1) & (a)(3)]

Section 4. Federal Requirements

40 CFR Part 60 New Source Performance Standards

Subpart A

18. New Source Performance Standards (NSPS) Subpart A Notification. Unless exempted by a specific subpart, for any affected facility⁶ or existing facility⁷ regulated under NSPS requirements in 40 CFR 60, the Permittee shall furnish the Administrator written notification or, if acceptable to both the Administrator⁸ 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]

18.1. 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]

18.2. 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]

18.3. 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]

18.4. 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:

⁶ *Affected facility* means, with reference to a stationary source, any apparatus to which a standard applies, as defined in 40 CFR 60.2.

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

⁸ For Section 4 of this permit, the Department defines *Administrator* to mean the EPA Administrator and the Department.

[40 CFR 60.15(d), Subpart A]

- a. the name and address of owner or operator,
- b. the location of the existing facility,
- c. a brief description of the existing facility and the components that are to be replaced,
- d. a description of the existing and proposed air pollution control equipment,
- 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.

[40 CFR 60.15(d)(1) through (7), Subpart A]

- 19. 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 IDs 1 and/or 2, any malfunction of the air-pollution control equipment, or any periods during which a continuous monitoring system or monitoring device for EU IDs 1 and/or 2 is inoperative.

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

- 20. NSPS Subpart A Excess Emissions and Monitoring Systems Performance (EEMSP) Report.** For EU IDs 1 and 2, submit an excess emissions and monitoring systems performance report (excess emissions are defined in Condition 27.6.e(i)(A)) and/or summary report form (see Condition 21) to the Administrator semiannually, except when 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]

- 20.1. 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]

- 20.2. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of EU IDs 1 and 2; 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]

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

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

- 21. 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]

- 21.1. 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 20 need not be submitted unless requested by the Administrator.

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

- 21.2. 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 20 shall both be submitted.

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

- 22. NSPS Subpart A Recordkeeping.** Any owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

[18 AAC 50.040(a)(1)]

[40 CFR 60.7(f), Subpart A]

- 23. 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)]

- 23.1. 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]

- 23.2. 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]

- 23.3. 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]

- 23.4. 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]

- 23.5. 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]

- 23.6. Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method.

[40 CFR 60.8(f), Subpart A]

- a. 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.

- b. **Contents of report (electronic or paper submitted copy).** Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, the report for a performance test shall include the elements identified in 40 CFR 60.8(f)(2)(i) through (vi).

[40 CFR 60.8(f)(1) & (2), Subpart A]

- 23.7. The performance testing shall include a test method performance audit (PA) during the performance test in accordance with 40 CFR 60.8(g).

[40 CFR 60.8(g), Subpart A]

- 23.8. Unless otherwise specified in the applicable subpart, each test location must be verified to be free of cyclonic flow and evaluated for the existence of emission gas stratification and the required number of sampling traverse points. If other procedures are not specified in the applicable subpart to the regulations, use the appropriate procedures in Method 1 to check for cyclonic flow and Method 7E to evaluate emission gas stratification and selection of sampling points.

[40 CFR 60.8(h), Subpart A]

- 23.9. Whenever the use of multiple calibration gases is required by a test method, performance specification, or quality assurance procedure in a part 60 standard or appendix, Method 205 of 40 CFR part 51, appendix M of this chapter, "Verification of Gas Dilution Systems for Field Instrument Calibrations," may be used.

[40 CFR 60.8(i), Subpart A]

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

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

- 25. 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 27, nothing in 40 CFR Part 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether EU IDs 1 and 2 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]

- 26. 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 27. 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

- 27. NSPS Subpart GG Applicability.** For EU IDs 1 and 2, 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 71.6(a)(1)]
[40 CFR 60.330, Subpart GG]

- 27.1. NO_x Standard.** The Permittee shall not allow the exhaust gas concentration of NO_x from each of EU IDs 1 and 2 to exceed 150 ppmv at 15 percent oxygen on a dry basis and ISO corrected.

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

- 27.2. NO_x Monitoring.** The Permittee shall comply with the following:

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

- a. **Periodic Testing.** For each turbine subject to Condition 27, the Permittee shall comply with Conditions 27.2.a(i) and 27.2.a(ii) as applicable.

- (i) For an existing turbine whose latest emissions source test results are certified as less than or equal to 90 percent of the limit in Condition 27.1, the Permittee shall conduct subsequent source tests no more than 5 years after the latest source test.
 - (ii) For an existing turbine whose latest emissions source test results are certified as greater than 90 percent of the limit in Condition 27.1, the Permittee shall conduct subsequent source tests annually until the results of two consecutive tests are certified as less than or equal to 90 percent of the limit in Condition 27.1.
- b. For NO_x source testing, the Permittee shall comply with the following:
- [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 NO_x 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 27.2.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 27.2.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 27.1 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 O₂ 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. Notwithstanding these requirements, performance testing is not required for any emergency fuel (as defined in 40 CFR 60.331).

[40 CFR 60.335(b)(1) & (2), Subpart GG]

- c. **Substituting Test Data.** For EU IDs 1 and 2, the Permittee may use a source test completed under Condition 27.2.a performed on only one of a group of turbines to satisfy the requirements of those conditions for the other turbines in the group if

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

- (i) the Permittee demonstrates that test results are less than or equal to 90 percent of the emission limit in Condition 27.1 and are projected under Condition 27.2.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 56
 - (A) the turbine to be tested;
 - (B) the other turbines in the group that are to be represented by the test; and
 - (C) why the turbine to be tested is representative, including that each turbine in the group
 - (1) is located at a stationary source operated and maintained by the Permittee;
 - (2) operates under close to identical ambient conditions;
 - (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.** For EU IDs 1 and 2, the Permittee shall comply with the following:

[40 CFR 71.6(a)(3)(i) & 71.6(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 tested 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 27.2.a to predict the highest load at which emissions will comply with the limit in Condition 27.1;
- (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 in Condition 27.1;
- (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 is assured at 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 approved source test done at a higher load, and, if necessary, the accompanying information and demonstration under Condition 27.2.d(ii); the new limit is subject to any new Department finding under Condition 27.2.d(iv).
- (vi) In order to perform emission source tests, the Permittee may operate a turbine at a higher load than that prescribed by Condition 27.2.d(ii).
- (vii) For the purposes of Conditions 27.2 through 27.4, maximum load means the hourly average load that is the smallest of
 - (A) 100 percent of manufacturer's design capacity of the gas turbine at ISO standard day conditions;
 - (B) the highest load allowed by an enforceable condition that applies to the turbine; or

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

27.3. **NOx Recordkeeping.** For EU IDs 1 and 2, the Permittee shall keep records as follows:

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

- a. The Permittee shall comply with the following for each turbine for which a demonstration under Condition 27.2.d(ii) does not show compliance with the limit in Condition 27.1 at maximum load.
 - (i) Keep records of load or, as approved by the Department, surrogate measurements for load and the method for calculating load from those measurements.
 - (ii) Records in Condition 27.3.a shall be hourly or otherwise as approved by the Department.
 - (iii) Within one month after submitting a demonstration under Condition 27.2.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 27.2.d(iv), whichever is earlier, the Permittee shall propose for Department approval 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.

27.4. **NOx Reporting.** For EU IDs 1 and 2, the Permittee shall report as follows:

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

- a. In each operating report under Condition 65 the Permittee shall list for each turbine tested or represented by testing at less than maximum load and for which the Permittee must limit load under Condition 27.2.d(iii):
 - (i) the load limit;
 - (ii) the turbine identification; and
 - (iii) the highest load recorded under Condition 27.3.a during the period covered by the operating report.
- b. The Permittee shall report under Condition 64 if
 - (i) a test result exceeds the emission standard;
 - (ii) emissions source testing is required under Condition 27.2.a but is not performed, or

- (iii) the turbine was operated at a load exceeding that allowed by Condition 27.2.d(iii); exceeding a load limit is deemed a single violation rather than a multiple violation of both monitoring and the underlying emission limit.

27.5. **SO₂ Standard.** The Permittee shall not allow the sulfur content of the fuel burned in EU IDs 1 and 2 to exceed 0.8 percent by weight (8000 ppmw).

[40 CFR 71.6(a)(1)]
[40 CFR 60.333(b), Subpart GG]

27.6. **SO₂ Monitoring.** For EU IDs 1 and 2, 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 27.6.b. The sulfur content of the fuel must be determined using total sulfur methods described in Condition 27.6.f. 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 27.6.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. For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and for which a custom fuel monitoring schedule has previously been approved, the owner or operator may, without submitting a special petition to the Administrator, continue monitoring on this schedule.

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

- (i) The following alternative monitoring schedule was approved by EPA.
 - (A) The Permittee shall monitor the sulfur content of the natural gas at least monthly.
 - (B) The Permittee shall maintain records of all sulfur monitoring data.
 - (C) The Permittee shall maintain a record documenting a constant supplier or source of fuel. A substantial change in fuel quality shall be considered as a change in fuel supply.
 - (D) The Permittee shall maintain a record of all turbine operation on fuels other than natural gas.
 - (E) The Permittee shall maintain all records on-site for a period of 5 years from the generation of such record.
 - (F) The Permittee shall annually report results of all sulfur monitoring.
 - (G) The Permittee shall report any changes in supplier or source of fuel within 60 days of such a change.
 - (H) The Permittee shall report use of any fuel other than natural gas within 60 days of such use.

[EPA letter, 5/8/1996 Re: Custom Fuel Monitoring Schedule]

- d. 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 27.6.b, and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined and recorded once per unit operating day.

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

- (ii) **Custom schedules.** Notwithstanding the requirements of Condition 27.6.d(i), operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in 40 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 27.5.

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

- e. 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 20. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under Condition 20, 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 any of Conditions 27.6.a through 27.6.c:

[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.

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

- (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)(iii), Subpart GG]

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

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

- (i) ASTM D1072-80, 90 (Reapproved 1994); D3246-81, 92, 96; D4468-85 (Reapproved 2000); or D6667-01. The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the prior approval of the Administrator; or

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

- (ii) ASTM D4810-88, D4913-89, or Gas Producer's Association method 2377-86.

[EPA letter, 10/2/1997 Re: Alternate H₂S Sampling Method]

40 CFR Part 61 National Emission Standards for Hazardous Air Pollutants

Subparts A & M

28. 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

29. For EU IDs 13b, 14a, and 15 through 18, comply with the applicable requirements of 40 CFR 63 Subpart A in accordance with the provisions for applicability of Subpart A in NESHAP Subpart ZZZZ, Table 8.

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

Subpart ZZZZ

30. **NESHAP Subpart ZZZZ Applicability.** For EU IDs 13b, 14a, and 15 through 18, comply with the following applicable requirements of NESHAP Subpart ZZZZ.

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

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

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

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

- a. Change oil and filter every 500 hours of operation or annually, whichever comes first;
- b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[Table 2d, Item 4; NESHAP Subpart ZZZZ]

- 30.2. You have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Condition 30.1.a. The oil analysis must be performed at the same frequency specified for changing the oil in Condition 30.1.a. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil

has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[40 CFR 71.6(a)(3)]
[40 CFR 63.6625(i) & Table 2d, Subpart ZZZZ]

- 30.3. If EU ID 13b and/or EU ID 14a is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Condition 30.1, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[40 CFR 71.6(a)(3)]
[Table 2d, 40 CFR 63 Subpart ZZZZ]

- 30.4. Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

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

NESHAP Subpart ZZZZ General Requirements

- 30.5. You must be in compliance with the requirements under Condition 30 at all times.
- 30.6. 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 71.6(a)(1)]
[40 CFR 63.6605(a) & (b), Subpart ZZZZ]

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

30.7. Demonstrate continuous compliance with each requirement in Condition 30.1 by:
[40 CFR 71.6(a)(3)]
[40 CFR 63.6640(a), Subpart ZZZZ]

- 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]

30.8. For EU IDs 13b and 14a, you must install a non-resettable hour meter if one is not already installed.

[40 CFR 71.6(a)(3)]
[40 CFR 63.6625(f), Subpart ZZZZ]

30.9. You must operate EU IDs 13b and 14a according to the requirements in Conditions 30.9.a through 30.9.c. In order for the engine to be considered an emergency stationary RICE under NESHAP Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in Conditions 30.9.a through 30.9.c, is prohibited. If you do not operate the engine according to the requirements in Conditions 30.9.a through 30.9.c, the engine will not be considered an emergency engine under NESHAP Subpart ZZZZ and must meet all requirements for non-emergency engines.

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

- a. There is no time limit on the use of emergency stationary RICE in emergency situations.
- b. You may operate your emergency stationary RICE for any combination of the purposes specified in Condition 30.9.b(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition 30.9.c counts as part of the 100 hours per calendar year allowed by this paragraph.

[40 CFR 63.6640(f)(1) & (2), Subpart ZZZZ]

- (i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

[40 CFR 63.6640(f)(2)(i), Subpart ZZZZ]

- c. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in Condition 30.9.b.

[40 CFR 63.6640(f)(4), Subpart ZZZZ]

NESHAP Subpart ZZZZ Reporting Requirements

- 30.10. Report each instance in which you did not meet the requirements in Table 8 to NESHAP Subpart ZZZZ that apply to you.

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

- 30.11. Report all deviations as defined in NESHAP Subpart ZZZZ in the operating report required by Condition 65.

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

NESHAP Subpart ZZZZ Recordkeeping Requirements

- 30.12. 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 71.6(a)(3)]
[40 CFR 63.6655(e), Subpart ZZZZ]

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

- 30.14. 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.

- 30.15. 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 71.6(a)(3)]
[40 CFR 63.6660(a) through (c), Subpart ZZZZ]

40 CFR Part 82 Protection of Stratospheric Ozone

Subparts F, G, & H

31. **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]

32. **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]

33. **Subpart H – Halon 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]

NESHAP Applicability Determination Requirements

34. 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)]

- 34.1. 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]

35. 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)]

36. 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 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]

Section 5. General Conditions

Standard Terms and Conditions

37. 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)]
38. 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)]
39. 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)]
40. **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]
41. **Assessable Emissions.** For each period from July 1 through the following June 30, the Permittee shall pay to the Department an annual emission fee based on the stationary source's assessable emissions, as determined by the Department under 18 AAC 50.410. The Department will assess fees per ton of each air pollutant that the stationary source emits or has the potential to emit. The quantity for which fees will be assessed is the lesser of the stationary source's
- 41.1. potential to emit of 5,617.18 tpy; or
 - 41.2. projected annual rate of emissions, in tpy, based upon actual annual emissions for the most recent calendar year, or another 12-month period approved in writing by the Department, when demonstrated by credible evidence of actual emissions, based upon the most representative information available from 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)(4), 50.035, 50.326(j)(1) & (3), 50.346(b)(1), 50.410, & 50.420]
42. **Assessable Emission Estimates.** The Permittee shall comply as follows:

- 42.1. No later than March 31st of each year, the Permittee may submit an estimate of the stationary source's assessable emissions as determined in Condition 41.2. Submit actual emissions estimates in accordance with the submission instructions on the Department's Standard Permit Conditions web page at <http://dec.alaska.gov/air/air-permit/standard-conditions/standard-condition-i-submission-instructions/>.
- 42.2. The Permittee shall include with the assessable emissions report all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates.
- 42.3. If the stationary source has not commenced construction or operation on or before March 31st, the Permittee may submit to the Department's Anchorage office a waiver letter certified under 18 AAC 50.205 that states the stationary source's actual annual emissions for the previous calendar year are zero tpy and provides estimates for when construction or operation will commence.
- 42.4. If no estimate or waiver letter is submitted on or before March 31st of each year, emission fees for the next fiscal year will be based on the potential to emit in Condition 41.1.

[18 AAC 50.040(j)(4), 50.326(j)(1) & (3), 50.346(b)(1), 50.410, & 50.420]

43. Good Air Pollution Control Practice (GAPCP). The Permittee shall do the following for EU IDs 3 through 10:

- 43.1. perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;
- 43.2. keep records of any maintenance that would have a significant effect on emissions; the records may be kept in electronic format; and
- 43.3. keep a copy of either the manufacturer's or the operator's maintenance procedures.

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

44. 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)]

45. 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), 50.326(j)(3), & 50.346(c)]

- 45.1. 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 45.1.a or to address the results of Department inspections that found potential problems; and
 - (ii) to prevent future dust problems.

45.2. The Permittee shall report according to Condition 47.

- 46. 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)]

- 47. 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(j)(4), 50.326(j)(3) & 50.346(a)]
[40 CFR 71.6(a)(3)]

47.1. **Monitoring.** The Permittee shall monitor as follows:

- a. 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 47.
- b. 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 47; or
 - (ii) the Department notifies the Permittee that it has found a violation of Condition 47.

47.2. **Recordkeeping.** 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 47; and
- (iv) any corrective actions taken or planned for complaints attributable to emissions from the stationary source.

- 47.3. **Reporting.** The Permittee shall report as follows:
- a. With each stationary source operating report under Condition 65, the Permittee shall include a brief summary report which must include the following for the period covered by the report:
 - (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.
 - b. 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.
 - c. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 64.

48. 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 standard⁹ listed in Condition 27 or 31 (refrigerants),

- 48.1. take all reasonable steps to minimize levels of emissions that exceed the standard, and
- 48.2. report in accordance with Condition 64; 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

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

- 49.1. 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.

⁹ 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.

49.2. Include this condition in the annual certification required under Condition 66.

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

Section 6. General Source Testing and Monitoring Requirements

- 50. 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)]
- 51. Operating Conditions.** Unless otherwise specified by an applicable requirement or test method, conduct source testing
[18 AAC 50.220(b)]
- 51.1. at a point or points that characterize the actual discharge into the ambient air; and
- 51.2. 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.
- 52. Reference Test Methods.** Use the following test methods when conducting source testing for compliance with this permit:
- 52.1. 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]
- 52.2. 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]
- 52.3. 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]
- 52.4. 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)]
- 52.5. 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]

- 52.6. Source testing for emissions of PM_{2.5} and PM₁₀ 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]
- 52.7. 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]
- 53. 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)]
- 54. Test Exemption.** Compliance with Conditions 56, 57 and 58 is not required for Method 9 observations.
- [18 AAC 50.345(a)]
- 55. 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)]
- 56. Test Plans.** Except as provided in Condition 54, 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 50 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)]
- 57. Test Notification.** Except as provided in Condition 54, 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)]

58. Test Reports. Except as provided in Condition 54, 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 61. 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)]

59. Particulate Matter Calculations. In source testing for compliance with the particulate matter standards in Conditions 5 and 17.2, the three-hour average is determined using the average of three one-hour test runs.

[18 AAC 50.220(f)]

Section 7. General Recordkeeping and Reporting Requirements

Recordkeeping Requirements

60. Keep all records required by this permit for at least five years after the date of collection, including:
- 60.1. Copies of all reports and certifications submitted pursuant to this section of the permit; and
 - 60.2. 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 sampling and analyses;
 - e. the analytical techniques or methods used in the analyses;
 - f. the results of such analyses; and,
 - g. the operating conditions that existed at the time of sampling or measurement.

[18 AAC 50.040(a)(1), 50.040(j)(4), & 50.326(j)]
[40 CFR 71.6(a)(3)(ii)(B)]

Reporting Requirements

61. **Certification.** The Permittee shall certify any permit application, report, affirmation, or compliance certification submitted to the Department and required under the permit by including the signature of a responsible official for the permitted stationary source following the statement: *“Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.”* Excess emission reports must be certified either upon submittal or with an operating report required for the same reporting period. All other reports and other documents must be certified upon submittal.
- 61.1. The Department may accept an electronic signature on an electronic application or other electronic record required by the Department if the person providing the electronic signature
- a. uses a security procedure, as defined in AS 09.80.190, that the Department has approved; and
 - b. 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)(3), & 50.346(b)(10)]

62. Submittals. Unless otherwise directed by the Department or this permit, the Permittee shall submit to the Department one certified copy of reports, compliance certifications, and/or other submittals required by this permit. The Permittee may submit the documents electronically or by hard copy.

62.1. Submit the certified copy of reports, compliance certifications, and/or other submittals in accordance with the submission instructions on the Department's Standard Permit Conditions web page at <http://dec.alaska.gov/air/air-permit/standard-conditions/standard-condition-xvii-submission-instructions/>.

[18 AAC 50.326(j)(3) & 50.346(b)(10)]

63. 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)]

64. Excess Emissions and Permit Deviation Reports. The Permittee shall report excess emissions and permit deviations as follows:

64.1. **Excess Emissions Reporting.** Except as provided in Condition 47, the Permittee shall report all emissions or operations that exceed emissions standards or limits of this permit as follows:

- a. In accordance with 18 AAC 50.240(c), as soon as possible, report
 - (i) excess 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. If a continuous or recurring excess emissions is not corrected within 48 hours of discovery, report within 72 hours of discovery unless the Department provides written permission to report under Condition 64.1.d.
- d. Report all other excess emissions not described in Conditions 64.1.a, 64.1.b, and 64.1.c within 30 days after the end of the month during which the excess emissions occurred or as part of the next routine operating report in Condition 65 for excess emissions that occurred during the period covered by the report, whichever is sooner.
- e. If requested by the Department, the Permittee shall provide a more detailed written report to follow up an excess emissions report.

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

- 64.2. **Permit Deviations Reporting.** For permit deviations that are not “excess emissions,” as defined under 18 AAC 50.990:
- a. Report according to the required deadline for failure to monitor, as specified in other applicable conditions of this permit (Conditions 4.3.b and 8.4.b).
 - b. Report all other permit deviations within 30 days after the end of the month during which the deviation occurred or as part of the next routine operating report in Condition 65 for permit deviations that occurred during the period covered by the report, whichever is sooner.

[18 AAC 50.326(j)(3) & 50.346(b)(2)]

- 64.3. **Reporting Instructions.** When reporting either excess emissions or permit deviations, the Permittee shall report using the Department’s online form for all such submittals, beginning no later than September 7, 2023. The form can be found at the Division of Air Quality’s Air Online Services (AOS) system webpage <http://dec.alaska.gov/applications/air/airtoolsweb> using the Permittee Portal option. Alternatively, upon written Department approval, the Permittee may submit the form contained in Section 13 of this permit. The Permittee must provide all information called for by the form that is used. Submit the report in accordance with the submission instructions on the Department’s Standard Permit Conditions webpage found at <http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-iii-and-iv-submission-instructions/>.

[18 AAC 50.235(a)(2), 50.240(c), 50.326(j)(3), 50.346(b)(2) & (3), & 50.270(a) through (c)]

65. **Operating Reports.** During the life of this permit¹⁰, the Permittee shall submit to the Department an operating report in accordance with Conditions 61 and 62 by May 15 for the period January 1 to March 31, by August 15 for the period April 1 to June 30, by November 15 for the period July 1 to September 30, and by February 15 for the period October 1 to December 31 of the previous year.

65.1. 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.

65.2. When excess emissions or permit deviations that occurred during the reporting period are not included with the operating report under Condition 65.1, the Permittee shall identify

- a. the date of the excess emissions or permit deviation;
- b. the equipment involved;
- c. the permit condition affected;
- d. a description of the excess emissions or permit deviation; and

¹⁰ *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.

- e. any corrective action or preventive measures taken and the date(s) of such actions; or
- 65.3. when excess emissions or permit deviation reports have already been reported under Condition 64 during the period covered by the operating report, the Permittee shall either
- a. include a copy of those excess emissions or permit deviation reports with the operating report; or
 - b. cite the date(s) of those reports.
- 65.4. The operating report must include, for the period covered by the report, a listing of emissions monitored under Conditions 2.2.e, 6.2, and 27.2.a which trigger additional testing or monitoring, whether or not the emissions monitored exceed an emission standard. The Permittee shall include in the report.
- a. the date of the emissions;
 - b. the equipment involved;
 - c. the permit condition affected; and
 - d. the monitoring result which triggered the additional monitoring.
- 65.5. **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)]
66. **Annual Compliance Certification.** Each year by March 31, compile and submit to the Department an annual compliance certification report according to Condition 62.
- 66.1. 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.
- 66.2. **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.

66.3. In addition, submit a copy of the report directly to the Clean Air Act Compliance Manager, US EPA Region 10, ATTN: Air Toxics and Enforcement Section, Mail Stop: 20-C04, 1200 Sixth Avenue, Suite 155, Seattle, WA 98101-3188.

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

67. Emission Inventory Reporting. The Permittee shall submit to the Department reports of actual emissions for the previous calendar year, by emissions unit, of CO, NH₃, NO_x, PM₁₀, PM_{2.5}, SO₂, VOC and lead (Pb) and lead compounds, as follows:

67.1. **Every-year Inventory.** Each year by April 30, if the stationary source's potential to emit for the previous calendar year equals or exceeds:

- a. 250 tons per year (tpy) of NH₃, PM₁₀, PM_{2.5} or VOC; or
- b. 2,500 tpy of CO, NO_x or SO₂.

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

- a. For stationary sources located in Attainment and Unclassifiable Areas:
 - (i) 0.5 tpy of actual Pb, or
 - (ii) 1,000 tpy of CO; or
 - (iii) 100 tpy of SO₂, NH₃, PM₁₀, PM_{2.5}, NO_x or VOCs.
- b. For stationary sources located in Nonattainment Areas:
 - (i) 0.5 tpy of actual Pb, or
 - (ii) 1,000 tpy of CO or, when located in a CO nonattainment area, 100 tpy of CO; or
 - (iii) 100 tpy of SO₂, NH₃, PM₁₀, PM_{2.5}, NO_x, or VOC; or as specified in Conditions 67.2.b(iv) through 67.2.b(viii):
 - (iv) 70 tpy of SO₂, NH₃, PM_{2.5}, NO_x, or VOC in PM_{2.5} serious nonattainment; or
 - (v) 70 tpy of PM₁₀ in PM₁₀ serious nonattainment areas; or
 - (vi) 50 tpy of NO_x or VOC in O₃ serious nonattainment areas; or
 - (vii) 25 tpy of NO_x or VOC in O₃ severe nonattainment areas; or
 - (viii) 10 tpy of NO_x or VOC in O₃ extreme nonattainment areas.

- 67.3. For reporting under Condition 67.2, the Permittee shall report the annual emissions and the required data elements under Condition 67.4 every third year for the previous calendar year as scheduled by the EPA.¹¹
- 67.4. For each emissions unit and the stationary source, include in the report the required data elements¹² contained within the form included in the Emission Inventory Instructions available at the Department's AOS system on the Point Source Emission Inventory webpage at <http://dec.alaska.gov/Applications/Air/airtoolsweb/PointSourceEmissionInventory>
- 67.5. Submit the report in accordance with the submission instructions on the Department's Standard Permit Conditions webpage at <http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-xv-and-xvi-submission-instructions/>.

[18 AAC 50.040(j)(4), 50.200, 50.326(j)(3), & 50.346(b)(8)]
[40 CFR 51.15, 51.30(a)(1) & (b)(1), & Appendix A to 40 CFR 51 Subpart A]

68. Consistency of Reporting Methodologies. Regardless of permit classification, as of September 7, 2022, all stationary sources operating in the state shall report actual emissions to the Department, either upon request or to meet individual permit requirements, in order for the state to meet federal reporting requirements under 40 CFR Part 51, Subpart A.

- 68.1. For the purposes of reporting actual or assessable emissions under any requirement of this permit, the Permittee shall use consistent pollutant-specific emission factors and calculation methods for all reporting requirements.

[18 AAC 50.040(j)(4), 50.200, 50.326(j)(3), & 50.275]
[40 CFR 51.15, 51.30(a)(1) & (b)(1), & Appendix A to 40 CFR 51 Subpart A]

69. NSPS and NESHAP Reports. The Permittee shall comply with the following:

- 69.1. **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 65 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 the Department 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)]

¹¹ The calendar years for which reports are required are based on the triennial reporting schedule in 40 CFR 51.30(b)(1), which requires states to report emissions data to the EPA for inventory years 2011, 2014, 2017, 2020, and every 3rd year thereafter. Therefore, the Department requires Permittees to report emissions data for the same inventory years by April 30 of the following year (e.g., triennial emission inventory report for 2020 is due April 30, 2021, triennial emission inventory report for 2023 is due April 30, 2024, etc.).

¹² The required data elements to be reported to the EPA are outlined in 40 CFR 51.15 and Tables 2a and 2b to Appendix A of 40 CFR 51 Subpart A.

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

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

Section 8. Permit Changes and Renewal

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

70.1. The Permittee shall provide a copy of each application for modification or renewal of this permit, including any compliance plan, or application addenda, at the time the application or addendum is submitted to the Department;

70.2. The information shall be submitted to the Part 70 Operating Permit Program, US EPA Region 10, Air Permits and Toxics Branch, Mail Stop: 15-H13, 1200 Sixth Avenue, Suite 155, Seattle, WA 98101-3188;

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

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

[18 AAC 50.040(j)(7), 50.326(a) & (j)(3), & 50.346(b)(7)]
[40 CFR 71.10(d)(1)]

71. 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)]

72. 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 Clean Air Act, may be made without a permit revision, provided that the following requirements are met:

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

72.2. 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;

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

72.4. 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)]

73. Operational Flexibility. CAA Section 502(b)(10)¹³ 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.

73.1. For each such change, the notification required by Condition 73 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.

73.2. The permit shield described in 40 CFR 71.6(f) shall not apply to any change made pursuant to Condition 73.

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

74. Permit Renewal. To renew this permit, the Permittee shall submit to the Department¹⁴ 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)]

¹³ 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.

¹⁴ 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

75. Compliance with permit terms and conditions is considered to be compliance with those requirements that are
- 75.1. included and specifically identified in the permit; or
 - 75.2. determined in writing in the permit to be inapplicable.
- [18 AAC 50.326(j)(3) & 50.345(a) & (b)]
76. 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
- 76.1. an enforcement action;
 - 76.2. permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or
 - 76.3. denial of an operating permit renewal application.
- [18 AAC 50.040(j), 50.326(j) & 50.345(a) & (c)]
77. 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)]
78. 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)]
79. 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
- 79.1. enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;
 - 79.2. have access to and copy any records required by the permit;
 - 79.3. inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and
 - 79.4. 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)]

- 80.** 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.

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

- 81.1. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section; or
- 81.2. 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)]

82. 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
1 & 2	40 CFR 60.332(a)(1)	Standard applies to Electric Utility Stationary Gas Turbines, as defined in subpart. These units are not Electric Utility Stationary Gas Turbines as defined in Subpart GG.
1 & 2	40 CFR 60.334(a), (b) and (d) 40 CFR 60.335(b)(4)	Applies only to affected turbines equipped with water injection to control emissions of NOx. These emissions units are not equipped with water injection to control emissions of NOx.
1 & 2	40 CFR 60.334(e) and (f)	Applies only to affected turbines that commence construction after July 8, 2004. Emissions units commenced construction prior to that date.
1 & 2	40 CFR 60.334(g)	Applies only to affected turbines subject to the continuous monitoring requirements of 40 CFR 60.334(a), (d), or (f).
1 & 2	40 CFR 60.334(h)(2)	Hilcorp has not claimed an allowance for fuel bound nitrogen to calculate the applicable NOx emission limit under 40 CFR 60.332.
1 through 7	40 CFR 60 Subpart KKKK	Construction, modification, or reconstruction of each turbine commenced prior to the applicability date of February 18, 2005.
1 through 7	40 CFR 63 Subpart YYYY	Stationary source is not a major source of HAP.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
3 through 7	40 CFR 60 Subpart GG	Commenced construction prior to effective date of subpart (10/3/77).
8 through 10	40 CFR 60 Subpart D	Heat input capacity below threshold (250 MMBtu/hr); and unit not classified as a Fossil-Fuel-Fired Steam Generator, as defined in subpart.
8 through 10	40 CFR 60 Subpart Da	Heat input capacity below threshold (250 MMBtu/hr); commenced construction prior to effective date of subpart; and unit not classified as an Electric Utility Steam Generating Unit, as defined in subpart.
8 through 10	40 CFR 60 Subpart Db	Heat input capacity below threshold (100 MMBtu/hr); and commenced construction prior to effective date of subpart.
8 through 10	40 CFR 60 Subpart Dc	Heat input capacity below threshold (10 MMBtu/hr); and commenced construction prior to effective date of subpart.
8 through 10	40 CFR 63 Subpart DDDDD	Stationary source is not a major source of HAP.
8 through 10	40 CFR 63 Subpart JJJJJ	The heaters at the stationary source are not boilers as defined in the rule at 40 CFR 63.11237.
13b, 14a, & 15 through 18	40 C.F. R. 60 Subpart IIII	These engines were manufactured prior to the April 1, 2006 applicability date of this rule (see 40 CFR 60.4200(a)(2)(i)) and have not been modified or reconstructed after July 11, 2005 (see 40 CFR 60.4200(a)(3)).
13b & 14a	40 CFR 63, Subpart ZZZZ, Tables 2a and 2c	There are no requirements in Tables 2a or 2c of Subpart ZZZZ that apply to these engines because they are existing emergency CI RICE located at an area source of HAP emissions.
15 through 18	40 CFR 63, Subpart ZZZZ, Tables 2a and 2c	There are no requirements in Tables 2a or 2c of Subpart ZZZZ that apply to this engine because it is a black start CI RICE located at an area source of HAP emissions.
13b & 14a	40 CFR 63, Subpart ZZZZ, Table 2b	The requirements of Table 2b of Subpart ZZZZ do not apply because there are no CO emission limitations in Table 2d that apply to emergency CI RICE.
15 through 18	40 CFR 63, Subpart ZZZZ, Table 2b	There are no requirements in Table 2b of Subpart ZZZZ that apply to existing CI stationary RICE rated less than or equal to 500 bhp.
13b & 14a	40 CFR 63, Subpart ZZZZ, Table 2d – CO Emission Limitations	There are no CO emission limits in Table 2d that apply to emergency CI RICE.
15 through 18	40 CFR 63, Subpart ZZZZ, Table 2d – CO Emission Limitations	There are no CO emission limits in Table 2d that apply to black start CI RICE.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
13b, 14a, & 15 through 18	40 CFR 63.6600, 63.6601, 63.6602, 63.6610, and 63.6611	The stationary source is not a major source of HAP emissions.
13b & 14a	40 CFR 63.6604	The existing emergency stationary CI RICE (GNED-17-0101 and GNED-17-0102) do not meet the operating criteria specified in 40 CFR 63.6604(b).
15 through 18	40 CFR 63.6604	The fuel requirement in 40 CFR 63.6604 does not apply to black start stationary CI RICE. [40 CFR 63.6604(a), (b), (c)]
13b & 14a	40 CFR 63.6612	There are no requirements in either Table 4 or Table 5 of Subpart ZZZZ that apply to these engines because there are no emission limitations that apply to existing emergency CI RICE located at an area source of HAP emissions. [Subpart ZZZZ, Table 2d].
15 through 18	40 CFR 63.6612	There are no requirements in either Table 4 or Table 5 of Subpart ZZZZ that apply to this engine because there are no emission limitations that apply to existing black start CI RICE located at an area source of HAP emissions. [Subpart ZZZZ, Table 2d]
13b & 14a	40 CFR 63.6615, 63.6620, and Subpart ZZZZ Table 3 and Table 4	There are no performance testing requirements that apply to these engines because there are no emission limitations that apply to existing emergency CI RICE located at an area source of HAP emissions. [Subpart ZZZZ, Table 2d]
15 through 18	40 CFR 63.6615, 63.6620, and Subpart ZZZZ Table 3 and Table 4	There are no performance testing requirements that apply to this engine because there are no emission limitations that apply to existing black start CI RICE located at an area source of HAP emissions. [Subpart ZZZZ, Table 2d]
13b & 14a	40 CFR 63.6625(a) and (b)	These requirements do not apply because there are no emission and operating limitations that apply to existing emergency CI RICE located at an area source of HAP emissions.
15 through 18	40 CFR 63.6625(a) and (b)	These requirements do not apply because there are no emission and operating limitations that apply to existing black start CI RICE located at an area source of HAP emissions.
15 through 18	40 CFR 63.6625(f)	This requirement does not apply to black start engines.
13b & 14a	40 CFR 63.6625(g)	This requirement does not apply to emergency engines.
15 through 18	40 CFR 63.6625(g)	This requirement does not apply to black start engines.
13b & 14a	40 CFR 63.6630 and Table 5	These requirements do not apply because there are no emission limitations or operating limitations that apply to existing emergency CI RICE located at an area source of HAP emissions.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
15 through 18	40 CFR 63.6630 and Table 5	These requirements do not apply because there are no emission limitations or operating limitations that apply to existing black start CI RICE located at an area source of HAP emissions.
13b, 14a, & 15 through 18	40 C.F.R 63.6635	These requirements apply only to CI RICE subject to emissions or operating limitations. There are no emissions or operating limitations that apply to these engines.
15 through 18	40 CFR 63.6640(f)	This engine is not an emergency engine; therefore, 40 CFR 63.6640(f) does not apply.
13b, 14a, & 15 through 18	40 CFR 63.6645(a); 63.8(e), (f)(4) and (f)(6); 63.9(b) through (e), (g) and (h)	Per 40 CFR 63.6645(a)(5), existing stationary RICE that are not subject to any numerical emission standards are not subject to the notification requirements of these sections.
13b, 14a, & 15 through 18	40 CFR 63.6645(b) through (e)	The stationary source is not a major source of HAP emissions.
13b & 14a	40 CFR 63.6645(h)	There are no performance testing or other initial compliance demonstration requirements that apply to these engines because there are no emission limitations or operating limitations that apply to existing emergency CI RICE located at an area source of HAP emissions.
15 through 18	40 CFR 63.6645(h)	There are no performance testing or other initial compliance demonstration requirements that apply to this engine because there are no emission limitations or operating limitations that apply to existing black start CI RICE located at an area source of HAP emissions.
13b, 14a, & 15 through 18	40 CFR 63.6640(b) and §63.6650(a) – (e)	Compliance status reporting requirements only apply to CI RICE subject to numerical emissions or operating limitations. There are no emissions or operating limits that apply to these engines.
13b, 14a, & 15 through 18	40 CFR 63.6625(c), 63.6650(g), and 63.6655(c)	These requirements only apply to “new” or “reconstructed” stationary RICE which fire landfill gas or digester gas. These engines are existing CI RICE fired exclusively on liquid fuel.
13b & 14a	40 CFR 63.6650(h)	These engines are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and do not operate for the purpose specified in §63.6640(f)(4)(ii).
15 through 18	40 CFR 63.6650(h)	This engine is not an emergency engine.
13b, 14a, & 15 through 18	40 CFR 63.6655(a), (b), and (d)	There are no emissions or operating limits that apply to these engines.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
15 through 18	40 CFR 63.6655(f)	This engine is not an emergency engine.
13b, 14a, & 15 through 18	40 CFR 63.6645(g) and 63.7	There are no performance testing requirements that apply to these engines because there are no emission limitations that apply to the engines.
Stationary source-wide	40 CFR 60 Subpart OOOO	Permittee does not operate at this stationary source any affected facilities listed in 40 CFR 60.5365.
Stationary source-wide	40 CFR 60, Subpart OOOOa	Permittee does not operate at this stationary source any affected facilities listed in 40 CFR 60.5365a.
Stationary source-wide	40 CFR 61 Subpart J	No process components in benzene service, as defined by subpart (10 percent benzene by weight).
Stationary source-wide	40 CFR 61 Subpart V	No process components in volatile hazardous air pollutant (VHAP) service, as defined by subpart (greater than or equal to 10 percent VHAP by weight). [40 CFR 61.240 and 61.241]
Stationary source-wide	40 CFR 61 Subpart Y	Stationary source does not operate storage vessels in benzene service. [40 CFR 61.270]
Stationary source-wide	40 CFR 61 Subpart BB	Stationary source does not conduct benzene transfer operations. [40 CFR 61.300(a)]
Stationary source-wide	40 CFR 61 Subpart FF	Stationary source is not a chemical manufacturing plant, coke by-product recovery plant, or petroleum refinery and is not regulated by subpart. [40 CFR 61.340]
Stationary source-wide	40 CFR 63 Subpart B	Stationary source is not a major source of HAPs.
Stationary source-wide	40 CFR 63 Subpart T	Stationary source does not operate halogenated solvent cleaning machines.
Stationary source-wide	40 CFR 63 Subpart HH	Stationary source does not produce oil or natural gas.
Stationary source-wide	40 CFR 63 Subpart HHH	Stationary source is not a natural gas transmission or storage facility.
Stationary source-wide	40 C.F.R 63 Subpart EEEE	Stationary source is not a major source of HAP and does not distribute organic liquids.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
Stationary source-wide	40 CFR 64	No pollutant-specific emissions unit at this stationary source uses a control device to achieve compliance with any emission limitation or standard.
Stationary source-wide	40 CFR 82.1 Subpart A	Stationary source does not produce, transform, destroy, import, or export Class 1 or Group I or II substances or products.
Stationary source-wide	40 CFR 82.30 Subpart B	Stationary source does not service motor vehicle air conditioners.
Stationary source-wide	40 CFR 82.164 Subpart F	Stationary source does not sell reclaimed refrigerant.
Mobile internal combustion engines	18 AAC 50.055(a)(1), 50.055(b)(1), and 50.055(c)	Nonroad (mobile) internal combustion engines are not included in the definition of fuel burning equipment (18 AAC 50.990).

[18 AAC 50.326(j)]
 [40 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
Emission Unit Location			Sec	0	15	30	45
			Min				Comments
City	State	Zip		1			
Phone # (Key Contact)		Stationary Source ID Number		2			
Process Equipment		Operating Mode		3			
Control Equipment		Operating Mode		4			
Describe Emission Point/Location				5			
Height above ground level	Height relative to observer	Clinometer Reading		6			
Distance From Observer		Direction From Observer		7			
Start	End	Start	End	8			
Describe Emissions & Color					9		
Start	End				10		
Visible Water Vapor Present? If yes, determine approximate distance from the stack exit to where the plume was read					11		
No	Yes			12			
Point in Plume at Which Opacity Was Determined					13		
Describe Plume Background		Background Color		14			
Start	Start				15		
End	End				16		
Sky Conditions:					17		
Start	End				18		
Wind Speed		Wind Direction From		19			
Start	End	Start	End	20			
Ambient Temperature		Wet Bulb Temp	RH percent	21			
SOURCE LAYOUT SKETCH: 1 Stack or Point Being Read 2 Wind Direction From					22		
3 Observer Location 4 Sun Location 5 North Arrow 6 Other Stacks					23		
					24		
					25		
					26		
					27		
					28		
					29		
					30		
Range of Opacity							
Minimum						Maximum	
I have received a copy of these opacity observations			Print Observer's Name				
Print Name:			Observer's Signature		Date		
Signature:					Observer's Affiliation:		
Title		Date		Certifying Organization		Date	
				Certified By:			
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%:			Highest 18-Consecutive -Minute Average Opacity %(engines and turbines only)				
In compliance with six-minute opacity limit? (Yes or No)							
Average Opacity Summary:							
Set Number	Time		Opacity		Sum	Average	Comments
	Start	End					

Section 12. SO₂ Material Balance Calculation¹⁵

If a fuel shipment contains more than 0.75 percent sulfur by weight, calculate the three-hour exhaust concentration of SO₂ using the following equations:

$$\begin{aligned}
 \text{A. } &= 31,200 \times (\text{wt}\%S_{\text{fuel}}) = 31,200 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{B. } &= 0.148 \times (\text{wt}\%S_{\text{fuel}}) = 0.148 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{C. } &= 0.396 \times (\text{wt}\%C_{\text{fuel}}) = 0.396 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{D. } &= 0.933 \times (\text{wt}\%H_{\text{fuel}}) = 0.933 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{E. } &= \text{B} + \text{C} + \text{D} = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{F. } &= 20.9 - (\text{vol}\%_{\text{dry}}O_{2, \text{exhaust}}) = 20.9 - \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{G. } &= (\text{vol}\%_{\text{dry}}O_{2, \text{exhaust}}) \div \text{F} = \underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{H. } &= 1 + \text{G} = 1 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{I. } &= \text{E} \times \text{H} = \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{SO}_2 \text{ concentration} &= \text{A} \div \text{I} = \underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ ppm}
 \end{aligned}$$

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

The fuel weight percent of sulfur (**wt%S_{fuel}**) 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)]

¹⁵ Revised as of November 7, 2020

Section 13. ADEC Notification Form¹⁶

Central Power Station	AQ0186TVP04
Stationary Source (Facility) Name	Air Quality Permit Number
Hilcorp North Slope, LLC	
Company Name	

When did you discover the Excess Emissions/Permit Deviation?

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

When did the event/deviation occur?

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

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

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

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

- Excess Emissions – Complete Section 1 and Certify
Note: All “excess emissions” are also “permit deviations.” However, use only Section 1 for events that involve excess emissions.
- Deviation from Permit Condition – Complete Section 2 and Certify
Note: Use only Section 2 for permit deviations that do not involve excess emissions.
- Deviations from COBC¹⁷, CO¹⁸, or Settlement Agreement – Complete Section 2 and Certify

¹⁶ Revised as of July 22, 2020.
¹⁷ Compliance Order By Consent
¹⁸ Compliance Order

Section 1. Excess Emissions

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

(b) **Cause of Event** (Check one that applies. Complete a separate form for each event, as applicable.):

- 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. Attach supporting information if necessary.

(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 Marine Vessel Opacity
 Flaring Other _____

(f) **Corrective Actions:**

Describe actions taken to restore the system to normal operation and to minimize or eliminate chances of a recurrence. Attach supporting information if necessary.

(g) **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 all boxes that apply per event. Complete a separate form for each event, as applicable.)

- Emissions Unit-Specific Requirements
- Stationary Source-Wide Specific Requirements
- Monitoring/Recordkeeping/Reporting Requirements
- General Source Test Requirements
- Compliance Certification Requirements
- Standard/Generally Applicable Requirements
- Insignificant Emissions Unit Requirements
- Other: _____

(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. Attach supporting information if necessary.

(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). Read and sign the certification in the bottom of the form above. (See Condition 61.)*

Beginning September 7, 2023, Excess Emissions and Permit Deviations must be submitted through the AOS Permittee Portal at <http://dec.alaska.gov/applications/air/airtoolsweb/>.

This Notification Form may only be used to satisfy the reporting requirements if the Department has approved alternative reporting options in writing prior to submittal.

[18 AAC 50.346(b)(3)]

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*): SO₂ NO_x TRS H₂S 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: a. Startup/shutdown _____ b. Control equipment problems _____ c. Process problems _____ d. Other known causes _____ e. Unknown causes _____ 2. Total duration of excess emissions _____ 3. Total duration of excess emissions x (100) / [Total source operating time] % ²	1. CMS downtime in reporting period due to: a. Monitor equipment malfunctions _____ b. Non-Monitor equipment malfunctions _____ c. Quality assurance calibration _____ d. Other known causes _____ e. Unknown causes _____ 2. Total CMS Downtime _____ 3. [Total CMS Downtime] x (100) / [Total 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: _____