DEPARTMENT OF ENVIRONMENTAL CONSERVATION AIR QUALITY OPERATING PERMIT

Permit No. AQ0094TVP04

Issue Date: PUBLIC COMMENT - April 8, 2022 Expiration Date: FIVE YEARS

The Alaska Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the Permittee, **Hilcorp Alaska**, **LLC**, for the operation of the **Kenai Gas Field Pad 14-6**.

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

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

Citations listed herein are contained within the effective version of 18 AAC 50 at permit issuance. All federal regulation citations are from those sections adopted by reference in this version of regulation in 18 AAC 50.040 unless otherwise specified.

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

Upon effective date of this permit, Operating Permit No. AQ0094TVP03, including all revisions, expires.

James R. Plosay, Manager Air Permits Program

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Abbreviations and Acronyms

AAC	Alaska Administrative Code.
ADEC	Alaska Department of Environmental Conservation
AS	Alaska Statutes
ASTM	American Society for Testing and Materials
BACT	best available control technology.
ьНр	.brake horsepower
BTEX	benzene, toluene, ethylbenzene and xylene
CAA or The Act	.Clean Air Act
CDX	.Central Data Exchange
CEDRI	Compliance and Emissions Data Reporting Interface
CFR	Code of Federal Regulations
СО	.carbon monoxide
dscf	dry standard cubic foot.
EPA	US Environmental Protection Agency
EU	emissions unit
gph	.gallons per hour
gr/dscf	grain per dry standard cubic foot (1 pound = 7000 grains)
HAPs	hazardous air pollutants [as defined in AS 46.14.990]
hp	horsepower
ID	emissions unit identification number.
kPa	.kiloPascals
kW	kilowatts
LAER	lowest achievable emission rate
MACT	maximum achievable control technology
	[as defined in 40 CFR 63]
MMBtu/hr	million British thermal units per hour
MMscf	million standard cubic feet.
MR&R	monitoring, recordkeeping, and reporting

NAICS	North American Industrial. Classification System
NESHAP	National Emission Standards for Hazardous Air Pollutants [as contained in 40 CFR 61 and 63]
NH3	.ammonia
NOx	.nitrogen oxides
NSPS	New Source Performance Standards [as contained in 40 CFR 60]
O ₂	.oxygen
PAL	.plantwide applicability limitation
Pb	.lead
PM _{2.5}	.particulate matter less than or equal to a nominal 2.5 microns in diameter
PM ₁₀	particulate matter less than or equal to a nominal 10 microns in diameter
ppm	. parts per million
ppmv, ppmvd	. parts per million by volume on a dry basis
psia	.pounds per square inch (absolute)
PSD	.prevention of significant deterioration
РТЕ	.potential to emit
SIC	. Standard Industrial Classification
SIP	. State Implementation Plan
SO ₂	.sulfur dioxide
TEG	.triethylene glycol
tph	.tons per hour
tpy	.tons per year
VOC	volatile organic compound [as defined in 40 CFR 51.100(s)]
VOL	volatile organic liquid [as defined in 40 CFR 60.111b, Subpart Kb]
vol%	.volume percent
wt%	.weight percent

Section 1. Stationary Source Information

Identification

Permittee:		Hilcorp Alaska, LLC 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503		
Stationary Source Name:		Kenai Gas Field Pad 14-6		
Location:		60° 27' North; 151° 15' West		
Physical Address:		Section 6, T4N; R11W Seward Meridian Kenai Peninsula Borough		
Owner and Operator:		Hilcorp Alaska, LLC 3800 Centerpoint Drive, 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 9360 Glacier Highway, Ste. 202 Juneau, AK 99801		
Stationary Source and Building Contact:		Bo York, Area Operations Manager 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503 (907) 777-8300 byork@hilcorp.com		
Permit Contact:		Julieanna Potter, Environmental Specialist 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503 (907) 777-84444 jupotter@hilcorp.com		
Fee Contact:		Hilcorp Alaska, LLC Accounts Payable PO Box 61529 Houston, TX 77208		
Process	SIC Code	1311 Crude Petroleum & Natural Gas		
Description:	NAICS Code:	211130 Natural Gas Extraction		

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

Section 2. Emissions Unit Inventory and Description

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

EU ID	Emissions Unit Name	Emissions Unit Description	Fuel	Rating/Size	Installation or Construction Date		
3	Compressor Drive	Solar Saturn T1200 Turbine	Fuel Gas	1,200 hp	1980		
4	Compressor Drive	Solar Saturn T1200 Turbine	Fuel Gas	1,200 hp	1981		
5	Compressor Drive	Solar Saturn T1200 Turbine	Fuel Gas	1,200 hp	1980		
11	Compressor Drive	Solar Centaur 4700 Turbine	Fuel Gas	4,700 hp	1995		
12	Compressor Drive	Solar Centaur 4700 Turbine	Fuel Gas	4,700 hp	1995		
18	Emergency Generator	Caterpillar 3406 DITA	Diesel	275 kW (369 hp)	1996		
22	Glycol Dehydrator Vent	Lakota Dehydrator Vent #1	-	52.2 MMscfd	1982		
23	Glycol Dehydrator Vent	Lakota Dehydrator Vent #2	-	52.2 MMscfd	1982		
25	Glycol Dehydrator Vent	Lakota Dehydrator Vent #4	-	52.2 MMscfd	1982		
26	Compressor Drive	Caterpillar G3412C	Fuel Gas	637 hp	2004		
	Drill Rig						
19a	Rig Boiler	Rig Boiler	Diesel	3.35 MMBtu/hr	Rotates on/off source		
19b	Rig Boiler	Rig Boiler	Diesel	3.35 MMBtu/hr	Rotates on/off source		
20	Rig Heater	Rig Heater	Diesel	2.9 MMBtu/hr	Rotates on/off source		
21	Well Test Flare	Well Test Flare	Fuel Gas	100 MMscf/yr ¹	Rotates on/off source		
27	Rig Heater	Rig Heater	Diesel	2.2 MMBtu/hr	Rotates on/off source		
28	Rig Heater	Rig Heater	Diesel	2.2 MMBtu/hr	Rotates on/off source		
29	Rig Heater	Rig Heater	Diesel	2.2 MMBtu/hr	Rotates on/off source		
30	Rig Heater	Rig Heater	Diesel	2.2 MMBtu/hr	Rotates on/off source		

Table A - Emissions Unit Inventory

Table Notes:

¹ Throughput limit from Permit to Operate 9523-AA003 – Amendment 3.

[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 3 through 5, 11, 12, 18, 19a, 19b, 20, 21, and 26 through 30 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 19a, 19b, 20, and 27 through 30, monitor, record, and report in accordance with Conditions 2 through 4.
- 1.2. For EU IDs 3 through 5, 11, 12, and 26, burn only gas as fuel. In each operating report under Condition 76, indicate whether each of these emissions units burned only gas during the period covered by the report. Report under Condition 75 if any fuel other than gas is burned in any of these emissions units.
- 1.3. For EU ID 18, as long as the emissions unit does not exceed the limit in Condition 20, monitoring shall consist of an annual compliance certification under Condition 77 for the visible emissions standard based on reasonable inquiry. Otherwise, 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 77 with the visible emissions standard based on reasonable inquiry. The Permittee shall report in the operating report under Condition 76 if EU ID 18 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 ID 21, monitor, record and report in accordance with Condition 5.
 [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 any of Conditions 1.1 and 1.3, or in the event of replacement¹ during the permit term, the Permittee shall observe the exhaust of EU IDs 18, 19a, 19b, 20, and 27 through 30 for visible emissions using the Method 9 Plan under Condition 2.2.
 - 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 the 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. <u>First Method 9 Observation</u>. Except as provided in Condition 2.1, observe the exhaust of EU IDs 18, 19a, 19b, 20, and 27 through 30 according to the following criteria:
 - Except as provided in Condition 2.2.a(ii), for any of EU IDs 19a, 19b, 20, and 27 through 30, observe exhaust within six months after the effective date of this permit.
 - (ii) 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 19a, 19b, 20, and 27 through 30, continue with the monitoring schedule of the replaced emissions unit; and
 - (B) For EU ID 18, comply with Condition 1.3.
 - (iii) For EU ID 18, observe the exhaust of the emissions unit within 30 days after the end of the calendar month during which monitoring was triggered under Condition 1.3; or for an emissions unit with intermittent operations, within the first 30 days during the unit's next scheduled operation.
 - b. <u>Monthly Method 9 Observations</u>. 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. <u>Semiannual Method 9 Observations</u>. After at least three monthly observations under Condition 2.2.b, unless a six-consecutive-minute average

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

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.

[&]quot;Installation" is complete when the unit is ready for functionality checks to begin.

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. <u>Annual Method 9 Observations</u>. 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
 - (ii) for an emissions unit with intermittent operations, during the next scheduled operation immediately following 14 months after the preceding observation.
- e. <u>Increased Method 9 Frequency</u>. 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.
- 3. Visible Emissions Recordkeeping. The Permittee shall keep records as follows:
 - 3.1. For all Method 9 Plan observations,
 - a. the observer shall record the following:
 - the name of the stationary source, emissions unit and location, emissions unit type, observer's name and affiliation, and the date on the Visible Emissions Observation Form in Section 11;
 - (ii) the time, estimated distance to the emissions location, sun location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), plume background, and operating mode (load or fuel consumption rate or best estimate if unknown) on the sheet at the time opacity observations are initiated and completed;
 - (iii) the presence or absence of an attached or detached plume and the approximate distance from the emissions outlet to the point in the plume at which the observations are made;

- (iv) opacity observations to the nearest five percent at 15-second intervals on the Visible Emission Observation Form in Section 11, and
- (v) the minimum number of observations required by the permit; each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period.
- b. To determine the six-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.

[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. Include in each operating report required under Condition 76 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.
 - 4.2. Report under Condition 75:
 - 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)]

Flares

- 5. Visible Emissions MR&R. The Permittee shall monitor, record, and report as follows:
 - 5.1. Observe flare events⁴ on EU ID 21 for visible emissions following 40 CFR 60, Appendix A-4, Method 9 for 18 minutes to obtain 72 consecutive 15-second opacity observations according to the following schedule:
 - a. Conduct an initial visible emissions observation on EU ID 21 within 12 months of the effective date of this permit.
 - b. Conduct subsequent visible emissions observations within 14 months of, but not earlier than three months after, the preceding flare event visible emissions observation.
 - c. If there are no flare events that meet the requirements of Condition 5.1.a or 5.1.b, the Permittee shall observe the next daylight flare event.
 - 5.2. Record the following information for each observed flare event:
 - a. flare EU ID number;
 - b. results of the Method 9 observations;
 - c. reason for flaring;
 - d. date, beginning and ending time of event; and
 - e. volume of gas flared.
 - 5.3. The records required by Condition 5.2 may be kept in electronic format.
 - 5.4. Monitoring of a flare event may be postponed for safety or weather reasons, or because a qualified observer is not available. If monitoring of a flare event is postponed for any of the reasons described in this condition, the Permittee shall include in the next operating report required by Condition 76 an explanation of the reason the event was not monitored.
 - 5.5. Include the following in the operating report required by Condition 76 for the period covered by that report.
 - a. copies of the records required by Condition 5.2; and

⁴ For purposes of this permit, a *"flare event*" is flaring of gas during daylight for greater than one hour as a result of scheduled release operations; i.e., maintenance or well testing activities. It does not include non-scheduled release operations, i.e. process upsets, emergency flaring, or de-minimis venting of gas incidental to normal operations.

- b. if an annual flare event observation required by Condition 5.1.a or Condition 5.1.b has not been fulfilled for the year and/or monitoring of a flare event is postponed, an explanation of the reason the event was not monitored.
- 5.6. Report under Condition 75
 - a. whenever the visible emissions standard in Condition 1 is exceeded; or
 - b. the monitoring required under Condition 5.1 is not completed, except as allowed under Condition 5.4.
- 5.7. If no flare events are monitored during a certification period, the Permittee shall certify compliance under Condition 77 with the visible emissions standard in Condition 1 based on reasonable inquiry.

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

Particulate Matter (PM) Emissions Standard

6. Industrial Process and Fuel-Burning Equipment Particulate Matter. The Permittee shall not cause or allow PM emitted from EU IDs 3 through 5, 11, 12, 18, 19a, 19b, 20, 21, and 26 through 30 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)]

- 6.1. For EU IDs 19a, 19b, 20, and 27 through 30, monitor, record and report in accordance with Conditions 10 through 12.
- 6.2. For EU IDs 3 through 5, 11, 12, and 26, the Permittee shall comply with Condition 1.2.
- 6.3. For EU ID 18, as long as the emissions unit does not exceed the limit in Condition 20, monitoring shall consist of an annual compliance certification under Condition 77 for the PM emissions standard based on reasonable inquiry. Otherwise, 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 77 for the PM emissions standard based on reasonable inquiry. The Permittee shall report in the operating report under Condition 76 if EU ID 18 reaches any of the significant emissions thresholds and monitor, record, and report in accordance with Conditions 7 through 9 for the remainder of the permit term for that emissions unit.
- 6.4. For EU ID 21, the Permittee shall comply with Condition 5.

[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

- 7. **PM Monitoring**. The Permittee shall conduct source tests on EU ID 18, to determine the concentration of PM in the exhaust of each of the emissions units as follows:
 - 7.1. If the result of any Method 9 observation conducted under Condition 2.2 for EU ID 18 is greater than the criteria of Conditions 7.2.a or 7.2.b, the Permittee shall, within six months of that Method 9 observation, either:
 - a. 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 7.2; or
 - b. except as exempted under Condition 7.4, conduct a PM source test according to requirements set out in Section 6.
 - 7.2. Take corrective action or conduct a PM source test, in accordance with Condition 7.1, 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.
 - 7.3. During each one-hour PM source test run under Condition 7.1.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.
 - 7.4. The PM source test requirements in Condition 7.1.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 7.2.

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

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

8.1. Keep records of the results of any source test and visible emissions observations conducted under Condition 7.

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

9. **PM Reporting**. The Permittee shall report as follows:

- 9.1. Notify the Department of any Method 9 observation results that are greater than the threshold of either Condition 7.2.a or 7.2.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 7.2.
- 9.2. In each operating report under Condition 76, include:
 - a. a summary of the results of any PM source test and visible emissions observations conducted under Condition 7; and
 - b. copies of any visible emissions observation results greater than the thresholds of Condition 7.2, if they were not already submitted.
- 9.3. Report in accordance with Condition 75:
 - a. anytime the results of a PM source test exceed the PM emissions standard in Condition 6; or
 - b. if the requirements under Condition 7.1 were triggered and the Permittee did not comply on time with either Condition 7.1.a or 7.1.b. Report the deviation within 24 hours of the date compliance with Condition 7.1 was required.

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

Liquid Fuel-Burning Boilers and Heaters

- **10. PM Monitoring.** The Permittee shall conduct source tests on EU IDs 19a, 19b, 20, and 27 through 30 to determine the concentration of PM in the exhaust of each emissions unit as follows:
 - 10.1. If the result of any Method 9 observation conducted under Condition 2.2 for any of EU IDs 19a, 19b, 20, and 27 through 30 results in an 18-minute average opacity greater than 20 percent opacity, the Permittee shall, within six months of that Method 9 observation, either:
 - a. 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 an 18-minute average opacity of 20 percent; or

- b. except as exempted under Condition 10.3, conduct a PM source test according to the requirements in Section 6.
- 10.2. During each one-hour PM source test run under Condition 10.1, 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.
- 10.3. The PM source test requirement in Condition 10.1 is 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 10.1.

11. PM Recordkeeping. The Permittee shall keep records of the results of any source test and visible emissions observations conducted under Condition 10.

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

- 12. **PM Reporting.** The Permittee shall report as follows:
 - 12.1. Notify the Department of any Method 9 observation results that are greater than the threshold of Condition 10.1 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 the threshold in Condition 10.1.
 - 12.2. In each operating report required by Condition 76, include:
 - a. a summary of the results of any source test and visible emissions observations conducted under Condition 10; and
 - b. copies of any visible emissions observation results greater than the threshold in Condition 10.1, if they were not already submitted.
 - 12.3. Report in accordance with Condition 75 any time the results of a source test exceed the PM emission standard in Condition 6.

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

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

Sulfur Compound Emissions Standard

13. Sulfur Compound Emissions. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO₂, from EU IDs 3 through 5, 11, 12, 18, 19a, 19b, 20, 21, and 26 through 30 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 Oil⁵(EU IDs 18, 19a, 19b, 20, and 27 through 30)

- 14. Sulfur Compound Emissions Monitoring and Recordkeeping. The Permittee shall monitor and keep records, as follows:
 - 14.1. Comply with either Condition 14.1.a or Condition 14.1.b:
 - a. For each shipment of fuel:
 - (i) If the fuel grade requires a sulfur content 0.5 percent by weight (wt%S_{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 wt%S_{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 18, 19a, 19b, 20, and 27 through 30 at least monthly.
 - 14.2. Fuel testing under Condition 14.1.a or Condition 14.1.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).
 - 14.3. If a shipment of fuel contains greater than 0.75 wt%S_{fuel} or if the results of a fuel sulfur content test indicate that the fuel contains greater than 0.75 wt%S_{fuel}, the Permittee shall calculate SO₂ emissions in parts per million (ppm) using either the SO₂ 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)]

⁵ *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.

15. Sulfur Compound Emissions Reporting. The Permittee shall report as follows:

- 15.1. If SO₂ emissions calculated under Condition 14.3 exceed 500 ppm, the Permittee shall report in accordance with Condition 75. When reporting under this condition, include the calculation under Condition 14.3.
- 15.2. The Permittee shall include in the operating report required by Condition 76 for each month covered by the report:
 - 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 14.1.a or Condition 14.1.b and documentation of the method(s) used to complete the analyses; and
 - d. for any fuel received with a sulfur content greater than $0.75 \text{ wt}\%S_{\text{fuel}}$, the SO₂ emissions in ppm calculated under Condition 14.3.

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

Fuel Gas (EU IDs 3 through 5, 11, 12, 21, and 26)

16. Sulfur Compound Monitoring. The Permittee shall either

- 16.1. obtain a semiannual statement from the fuel supplier of the fuel total sulfur level in ppm; or
- 16.2. analyze a representative sample of the fuel semiannually to determine the sulfur content using either ASTM D4084, D5504, D4810, D4913, D6228 or GPA Standard 2377, or other listed method approved in 18 AAC 50.035(b)-(c) or 40 CFR 60.17 incorporated by reference in 18 AAC 50.040(a)(1).
- **17.** Sulfur Compound Recordkeeping. The Permittee shall keep records of the statement from the fuel supplier or the sulfur content analysis required under Conditions 16.1 or 16.2.
- **18.** Sulfur Compound Reporting. The Permittee shall report as follows:
 - Report as excess emissions, in accordance with Condition 75, whenever the fuel combusted causes sulfur compound emissions to exceed the standard of Condition 13.
 - 18.2. Include copies of the records required by Condition 17 with the operating report required by Condition 76 for the period covered by the report.

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

Preconstruction Permit 6 Requirements

19. Owner Requested Limits to Avoid Classification as PSD Major. The Permittee shall limit the facility emissions of nitrogen oxides to no more than 247.3 tons in any consecutive twelve-month period as follows:

[Condition 3, Construction Permit 094CP01 - Rev 1, 2/15/2013] [18 AAC 50.040(j) & 50.326(j)] [40 CFR 71.6(a)(1)]

19.1. For EU IDs 27 through 30:

[Condition 3.1, Construction Permit 094CP01 - Rev 1, 2/15/2013]

- a. Limit the maximum rated heat capacity to no more than 2.2 MMBtu/hr, each; and
- b. Limit the combined annual operating hours to no more than 2,160 hours in any consecutive twelve-month period.
- c. Submit to the Department the maximum heat input rate and location of each rig heater with the operating report required under Condition 76.
- d. Monitor and record the actual hours of use of each rig heater at a consistent time each month, and calculate and record the combined twelve-month total.
- e. Report the combined twelve-month total operating hours for rig heaters for each month in the operating report required in Condition 76.
- f. Report in accordance with Condition 75 if the limits in Conditions 19.1.a or 19.1.b are exceeded.

[Conditions 3.1a through 3.1f, Construction Permit 094CP01 - Rev 1, 2/15/2013] [40 CFR 71.6(a)(1) & 71.6(a)(3)]

19.2. For EU IDs 3 through 5, 11, 12, 19a, 19b, 20, 21, and 26:

[Condition 8, Minor Permit AQ0094MSS01, DATE]

- a. Limit NOx emissions to no more than 243.1 tons per any consecutive twelve-month period.
- b. Monitor and record the actual hours of operation of each unit at a consistent time each month, except for EU ID 21. Monitor and record the amount of gas flared in EU ID 21 at a time each month consistent with other measurements required under this condition.
- c. By the 15th of each month, calculate and record the monthly NOx emissions for the prior month using the following equation:

⁶ 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.

$$\begin{split} E_{M} &= \{ [E_{S} \times (H_{S3} + H_{S4} + H_{S5})] + [E_{C} \times (H_{C11} + H_{C12})] + [E_{H19ab} \\ &\times (H_{H19a} + H_{H19b})] + (E_{H20} \times H_{H20}) + (E_{F} \times H_{F21}) + (E_{E26} \times H_{E26}) \} \div 2000 \end{split}$$

Where:

- Ем = Monthly NOx emissions (tons); = 3.46 lb/hr⁷; Es = Actual monthly operating hours for EU ID 3; H_{S3} = Actual monthly operating hours for EU ID 4; H_{S4} = Actual monthly operating hours for EU ID 5; H_{S5} $= 21.7 \text{ lb/hr}^8;$ Ec H_{C11} = Actual monthly operating hours for EU ID 11; and H_{C12} = Actual monthly operating hours for EU ID 12 $E_{H19ab} = 0.489 \text{ lb/hr};$ H_{H19a} = Actual monthly operating hours for EU ID 19a; H_{H19b} = Actual monthly operating hours for EU ID 19b; E_{H20} = 0.314 lb/hr;H_{H20} = Actual monthly operating hours for EU ID 20; E_{F} = 68.0 lb/MMscf; H_{F21} = Actual monthly gas flared for EU ID 21; = 2.810 lb/hr; and E_{E26} HE26 = Actual monthly operating hours for EU ID 26.
- d. By the 15th of each month, calculate and record the 12-month total NOx emissions using data obtained from Condition 19.2.c.
- e. Report the 12-month total NOx emissions for each month in the operating report required in Condition 76.
- f. Report in accordance with Condition 75 if the NOx emissions calculated under Condition 19.2.d exceed the limit in Condition 19.2.a.
- g. When the 12-month rolling total NOx emissions calculated in Condition 19.2.d exceed 219 tpy, conduct a one-time NOx emission source test in accordance with Section 6 within 120 days as set out below:

[Conditions 8.1 through 8.7, Minor Permit AQ0094MSS01, DATE] [40 CFR 71.6(a)(1) & 71.6(a)(3)]

- (i) test one unit of each group of similar units (e.g., EU ID 3, 4, or 5, and EU 11 or 12);
- (ii) conduct each source test at three loads (low, mid, and high) within the normal operating range of the emission unit;

⁷ This emission factor is the highest NOx emission rate for any of EU IDs 3, 4, and 5, at any load from 1997 stack test results.

⁸ This emission factor is the highest NOx emission rate for any of EU IDs 11 and 12, at any load from 1997 stack test results.

- (iii) for each test, monitor and record the units' load and fuel consumption no less than once every five minutes using a fuel meter accurate to within 2 percent;
- (iv) obtain for the fuel used during the testing, the fuel specific high heating value (gross heat value) or analyze a representative sample of the fuel in accordance with ASTM D 240, 4809 or 2382; and
- (v) determine the load specific NOx emission factors (lb/hr), expressed as nitrogen dioxide (NO₂), using exhaust properties determined by both Method 19 and exhaust gas measurements in Methods 1-4.
- (vi) Report information obtained in Conditions 19.2.g(i) through 19.2.g(v) in the source test report required in Section 6.

[Conditions 8.7a through 8.7e and 8.8, Minor Permit AQ0094MSS01, DATE]

h. After Department approval of the source test results from source tests conducted in accordance with Condition 19.2.g, use the maximum emission factor for each unit of each group of similar units determined in Condition 19.2.g(v) in the equation under Condition 19.2.c. These emission factors shall be used starting on the date of source test approval by the Department.

[Condition 8.9, Minor Permit AQ0094MSS01, DATE] [40 CFR 71.6(a)(3) & 71.6(c)(6)]

20. PSD Avoidance Limit. Limit EU ID 18 to no more than 100 hours of operation per consecutive 12-month period.

[Condition 6.c, Permit to Operate 9523-AA003 – Amendment 4, 1/16/1996] [18 AAC 50.040(j) & 50.326(j)] [40 CFR 71.6(a)(1)]

20.1. Maintain a monthly log for EU ID 18 showing the number of operating hours each month and each consecutive 12-month period.

[40 CFR 71.6(a)(3)]

21. PSD Avoidance Limit. Permittee shall not vent or fire more than 100 million standard cubic feet of natural gas per year through EU ID 21.

[Condition 9.a, Permit to Operate 9523-AA003 – Amendment 3, 11/24/1995] [18 AAC 50.040(j) & 50.326(j)] [40 CFR 71.6(a)(1)]

21.1. Maintain a monthly log for EU ID 21 showing the total number of million cubic feet of gas fired and vented each month and each consecutive 12-month period.

[40 CFR 71.6(a)(3)]

- **22.** Submit copies of the records required in Conditions 20.1 and 21.1 in the operating report required in Condition 76.
- **23.** Report in accordance with Condition 75 whenever a limit in Condition 20 or 21 is exceeded.

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

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

Stationary Source-Wide Specific Requirements

24. Hazardous Air Pollutants (HAPs) Emissions Controls. The Permittee shall maintain and operate emission control systems (Jatco BTEX condenser) for EU IDs 22, 23, and 25 to limit stationary source-wide total HAP emissions to less than 10 TPY of any single HAP and less than 25 TPY in the aggregate of two or more HAPs.

> [Condition 15, Operating Permit 94TVP01, 12/16/2002] [18 AAC 50.040(j) & 50.326(j)] [40 CFR 71.6(a)(1)]

- 24.1. Maintain records of the 12-month rolling hours of operation of control devices for each of EU IDs 22, 23, and 25.
- 24.2. Maintain records of the 12-month rolling gas throughput rate for each of EU IDs 22, 23, and 25.
- 24.3. Calculate rolling 12-month HAP emissions from EU IDs 22, 23, and 25 using GRIGLYCalc Version 4.0 or higher. Emissions shall be calculated based on the gas throughput specified in 40 CFR 63.760(a)(1). The Permittee may take into account emissions reductions from control devices for EU IDs 22, 23, and 25 for the periods of time that the control devices were in operation, provided the Permittee is in compliance with Condition 24. In the operating report required under Condition 76, report the stationary source-wide 12-month rolling HAP emissions for each month during the reporting period.
- 24.4. Maintain an operation and maintenance schedule for emissions control equipment for EU IDs 22, 23, and 25. The operation and maintenance schedule shall be made available to the Department upon request.
- 24.5. Report in accordance with Condition 75, if an emission limit in Condition 24 is exceeded.

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

Insignificant Emissions Units

- **25.** 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:
 - 25.1. **Visible Emissions Standard**: The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from an industrial process, fuel-burning equipment, or an incinerator to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

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

25.2. **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)]

25.3. **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.

- 25.4. General MR&R for Insignificant Emissions Units. The Permittee shall comply with the following:
 - a. Submit the compliance certifications of Condition 77 based on reasonable inquiry;
 - b. Comply with the requirements of Condition 58; and
 - c. Report in the operating report required by Condition 76 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.
 - d. No other monitoring, recordkeeping or reporting is required for insignificant emissions units to demonstrate compliance with the emissions standards under Conditions 25.1, 25.2, and 25.3.

[18 AAC 50.040(j)(3), 50.32(j)(3), & 50.346(b)(4)] [40 CFR 71.6(a)(1) & (3)]

Section 4. Federal Requirements

40 CFR Part 60 New Source Performance Standards

Subpart A

26. New Source Performance Standards (NSPS) Subpart A Notification. Unless exempted by a specific subpart, for any affected facility⁹ or existing facility¹⁰ regulated under NSPS requirements in 40 CFR 60, the Permittee shall furnish the Administrator written notification or, if acceptable to both the Administrator¹¹ 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]

26.1. 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 massproduced facilities which are purchased in completed form.

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

26.2. 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]

- 26.3. 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]

26.4. 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:

⁹ Affected facility means, with reference to a stationary source, any apparatus to which a standard applies, as defined in 40 CFR 60.2.

¹⁰ *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.

¹¹ 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.
- 27. 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 3 through 5, 11, and 12, any malfunction of the air-pollution control equipment, or any periods during which a continuous monitoring system or monitoring device for EU IDs 3 through 5, 11, and 12 is inoperative.

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

28. NSPS Subpart A Excess Emissions and Monitoring Systems Performance Report. For EU IDs 3 through 5, 11, and 12, submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or summary report form (see Condition 29) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:

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

- 28.1. 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]
- 28.2. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of EU IDs 3 through 5, 11, and 12; 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]

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

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

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

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

29. 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]

29.1. 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 28 need not be submitted unless requested by the Administrator.

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

29.2. 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 28 shall both be submitted.

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

30. 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]

31. 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)]

31.1. Except as specified in paragraphs (a)(1),(a)(2), (a)(3), and (a)(4) of 40 CFR 60.8, at such 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]

31.2. 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]

31.3. 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 of the applicable emission limit unless otherwise specified in the applicable standard.

[40 CFR 60.8(c), Subpart A]

31.4. 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]

- 31.5. 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.

31.6. 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]

31.7. 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]

31.8. 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]

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]

^{[40} CFR 60.8(e), Subpart A]

32. NSPS Subpart A Good Air Pollution Control Practice. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate EU IDs 3 through 5, 11, and 12 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 3 through 5, 11, and 12.

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

33. 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 35, 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 3 through 5, 11, and 12 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]

34. 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 35. 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

35. NSPS Subpart GG Applicability. For EU IDs 3 through 5, 11, and 12, 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 60.332(d), Subpart GG]

NSPS Subpart GG Standard for NOx

35.1. The Permittee shall not allow the exhaust gas concentration of NOx from each of EU IDs 11 and 12 to exceed 150 ppm (by volume at 15 percent oxygen and on a dry basis).

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

35.2. Stationary gas turbines are exempt from Condition 35.1 when being fired with an emergency fuel.

[40 CFR 71.6(a)(1)]

[40 CFR 60.332(k), Subpart GG]

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

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

a. **Periodic Testing.** For each turbine subject to Condition 35.1:

[40 CFR 71.6(a)(3)]

- whose latest emissions source test results were certified as less than or equal to 90 percent of the NOx limit in Condition 35.1, the Permittee shall conduct a NOx source test within 5 years of the latest performance test.
- (ii) whose latest emissions source test results were certified as greater than 90 percent of the NOx limit in Condition 35.1, the Permittee shall conduct a NOx source test annually until two consecutive tests show results certified at less than or equal to 90 percent of the NOx limit in Condition 35.1.
- b. For NOx source testing, comply with the following:

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

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

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

- (ii) Sampling traverse points are to be selected following Method 20 or Method 1, (non-particulate procedures) and sampled for equal time intervals. The sampling shall be performed with a traversing singlehole 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 35.3.b(ii), the owner or operator may test at fewer points than are specified in Method 1 or Method 20 if the conditions of 40 CFR 60.335(a)(5)(i) and (ii) are met.
- (iv) Other acceptable alternative reference methods and procedures are given in 40 CFR 60.335(c).

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

(v) Each test run required under Condition 35.3.b(vi) shall be at least 21 minutes.

(vi) The owner or operator shall determine compliance with the applicable nitrogen oxides emission limitation in Condition 35.1 and shall meet the performance test requirements of 40 CFR 60.8 as follows:

[40 CFR 60.335(b), Subpart GG]

- (A) For each run of the performance test, the mean nitrogen oxides emission concentration (NO_{Xo}) corrected to 15 percent O_2 shall be corrected to ISO standard conditions using the equation in 40 CFR 60.335(b)(1).
- (B) The 3-run performance test required must be performed within 5 percent at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. If the turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel. Notwithstanding these requirements, performance testing is not required for any emergency fuel (as defined in 40 CFR 60.331).

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

c. **Substituting Test Data.** The Permittee may perform emissions source testing on only one of a group of similarly configured turbines to satisfy the requirements of Condition 35.3.a if:

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

- (i) the Permittee demonstrates that test results are less than or equal to 90 percent of the emission limit in Condition 35.1 and are projected under Condition 35.3.d to be less than or equal to 90 percent of the limit at maximum load; and
- (ii) the Permittee identifies in a source test plan under Condition 67
 - (A) the turbine to be tested;
 - (B) the other turbines in the group that are to be represented by the test; and
 - (C) why the turbine to be tested is representative, including that each turbine in the group
 - (1) is located at a stationary source operated and maintained by the Permittee;
 - (2) is tested under close to identical ambient conditions;
 - (3) is the same make and model and has identical injectors and combustor; and

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

d. Load. Comply with the following:

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

- (i) In the source test plan state whether or not the test is scheduled when maximum NOx emissions are expected.
- (ii) If the highest operating rate during the source test is less than the maximum load of the tested turbine or another turbine represented by the test data, for each such turbine 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 35.3.b to predict the highest load at which emissions will comply with the limit in Condition 35.1.
- (iii) The Permittee shall not operate any turbine represented by the test data at loads for which the Permittee's demonstration predicts that emissions will exceed the limit of Condition 35.1;
- (iv) Comply with a written finding prepared by the Department that
 - (A) the information is inadequate for the Department to reasonably conclude that compliance is assured at any load greater than the test load, and that the Permittee must not exceed the test load,
 - (B) the highest load at which the information is adequate for the Department to reasonably conclude that compliance assured is less than maximum load, and the Permittee must not exceed the highest load at which compliance is predicted, or
 - (C) the Permittee must retest during a period of greater expected demand on the turbine.
- (v) The Permittee may revise a load limit by submitting results of a more recent test done at a higher load, and, if necessary, the accompanying information and demonstration described in Condition 35.3.d(ii); the new limit is subject to any new Department finding under Condition 35.3.d(iv).
- (vi) In order to perform an emission test required by Conditions 35.3.a and 35.3.b, the Permittee may operate a turbine at a higher load than that prescribed by Conditions 35.3.d(ii) through 35.3.d(iv).

- (vii) For the purposes of Conditions 35.3 through 35.5, maximum load means the hourly average load that is the smallest of
 - (A) 100 percent of manufacturer's design capacity of the gas turbine at ISO standard day conditions;
 - (B) the highest load allowed by an enforceable condition that applies to the turbine; or
 - (C) the highest load possible considering permanent physical restraints on the turbine or the equipment which it powers.

35.4. NOx Recordkeeping. The Permittee shall keep records as follows:

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[18 AAC 50.040(j) & 50.326(j)(4)]
[40 CFR 71.6(a)(3)(ii)]
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- a. Comply with the following for each turbine for which a demonstration under Condition 35.3.d(ii) does not show compliance with the limit of Condition 35.1 at maximum load.
 - 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 35.4.a shall be hourly or otherwise as approved by the Department.
 - (iii) Within one month after submitting a demonstration under Condition 35.3.d(ii)(B) that predicts that the highest load at which emissions will comply is less than maximum load, or within one month of a Department finding under Condition 35.3.d(iv), whichever is earlier, the Permittee shall propose to the Department how they will measure load or load surrogates, and shall propose and comply with a schedule for installing any necessary equipment and beginning monitoring. The Permittee shall comply with any subsequent Department direction on the load monitoring methods, equipment, or schedule.
- 35.5. NOx Reporting. The Permittee shall report as follows:

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[18 AAC 50.040(j) & 50.326(j)(4)]
[40 CFR 71.6(a)(3)(iii)]
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- a. In each operating report under Condition 76 the Permittee shall list for each turbine tested or represented by testing at less than maximum load and for which the Permittee must limit load under Conditions 35.3.d(ii) through 35.3.d(v)
 - (i) the load limit;
 - (ii) the turbine identification; and

- (iii) the highest load recorded under Condition 35.4.a during the period covered by the operating report.
- b. Report under Condition 75 if
 - (i) a test result exceeds the emission standard;
 - (ii) testing required under Condition 35.3.b is not performed, or
 - (iii) a turbine was operated at a load exceeding that allowed by Conditions 35.3.d(iii) and 35.3.d(iv); exceeding a load limit is deemed a single violation rather than multiple violations of both monitoring and the underlying emission limit.

[40 CFR 71.6(c)(6)]

NSPS Subpart GG Standard for SO2

35.6. The Permittee shall not burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw).

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

35.7. SO₂ MR&R. The Permittee shall comply with the following:

[40 CFR 71.6(a)(3)]

- Monitor the total sulfur content of the fuel being fired in the turbine, except as provided in Condition 35.7.b. The sulfur content of the fuel must be determined using total sulfur methods described in Condition 35.7.e. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084-82, 94, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86, which measure the major sulfur compounds may be used. [40 CFR 60.334(h)(1), Subpart GG]
- b. Notwithstanding the provisions of Condition 35.7.a, the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u), regardless of whether an existing custom schedule approved by the administrator for Subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:

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

 (i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or (ii) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of Appendix D to 40 CFR 75 is required.

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

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

[40 CFR 60.334(i), Subpart GG]

- (i) **Gaseous fuel**. For owners and operators that elect not to demonstrate sulfur content using options in Condition 35.7.b, and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined and recorded once per unit operating day.
- (ii) Custom schedules. Notwithstanding the requirements of Condition 35.7.c(i), operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in 40 CFR 60.334(i)(3)(i) and (i)(3)(ii), custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in Condition 35.6.

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

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

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

d. For each affected unit that elects to periodically determine the fuel sulfur content under NSPS Subpart GG, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with Condition 28. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under Condition 28, periods of excess emissions and monitor downtime that shall be reported are defined as follows:

[40 CFR 60.334(j), Subpart GG]

(i) **Sulfur dioxide**. If the owner or operator is required to monitor the sulfur content of the fuel under Condition 35.7.a:

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

- (A) For samples of gaseous fuel, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 weight percent and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.
- (B) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours, and ends on the date and hour of the next valid sample.

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

(ii) Emergency fuel. Each period during which an exemption provided in Condition 35.2 is in effect shall be included in the report required in Condition 28. For each period, the type, reasons, and duration of the firing of the emergency fuel shall be reported.

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

- e. Analyze samples for the total sulfur content of the fuel using ASTM D1072-80, 90 (Reapproved 1994); D3246-81, 92, 96; D4468-85 (Reapproved 2000); or D6667-01. The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the prior approval of the Administrator.
- f. The fuel analyses required under Condition 35.7.e may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

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

Subpart OOOOa

36. The Permittee shall comply with the following applicable requirements in 40 CFR 60 Subpart OOOOa for those pads that have triggered applicability under Subpart OOOOa.

[18 AAC 50.040(a)(2)(ZZ), 50.040(j)(4) & 50.326(j)] [40 CFR 71.6(a)(1)] [40 CFR 60.5365a, Subpart OOOOa]

36.1. You must be in compliance with the standards of NSPS Subpart OOOOa no later than August 2, 2016 or upon startup, whichever is later.

36.2. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. The provisions for exemption from compliance during periods of startup, shutdown and malfunctions provided for in 40 CFR 60.8(c) do not apply to NSPS Subpart OOOOa.

[40 CFR 71.6(a)(1)] [40 CFR 60.5370a(a) & (b), Subpart OOOOa]

NSPS Subpart OOOOa Fugitive Emissions VOC Standards

36.3. For the collection of fugitive emissions components at a well site, as defined in 40 CFR 60.5430a, you must reduce VOC emissions by complying with the requirements of Conditions 36.3.a through 36.3.j.

[40 CFR 71.6(a)(1)] [40 CFR 60.5397a, Subpart OOOOa]

a. You must comply with Condition 36.3.a(i), unless your affected facility under 40 CFR 60.5365a(i) (i.e., the collection of fugitive emissions components at a well site) meets the conditions specified in either Condition 36.3.a(i)(A) or 36.3.a(i)(B). If your affected facility under 40 CFR 60.5365a(i) (i.e., the collection of fugitive emissions components at a well site) meets the condition specified in either Condition 36.3.a(i)(A) or 36.3.a(i)(B). If your affected facility under 40 CFR 60.5365a(i) (i.e., the collection of fugitive emissions components at a well site) meets the conditions specified in either Condition 36.3.a(i)(A) or 36.3.a(i)(B), you must comply with either Condition 36.3.a(i) or 36.3.a(i).

(i) You must monitor all fugitive emission components, as defined in 40 CFR 60.5430a, in accordance with Conditions 36.3.b through 36.3.g. You must repair all sources of fugitive emissions in accordance with Condition 36.3.h. You must keep records in accordance with Condition 36.3.i and report in accordance with Condition 36.3.j. For purposes of this condition, fugitive emissions are defined as any visible emission from a fugitive emissions component observed using optical gas imaging or an instrument reading of 500 parts per million (ppm) or greater using Method 21 of appendix A-7 to 40 CFR 60. [40 CFR 60.5397a(a)(1), Subpart OOOOa]

^{[40} CFR 60.5397a(a), Subpart OOOOa]
- First 30-day production. For the collection of fugitive (A) emissions components at a well site, where the total production of the well site is at or below 15 barrels of oil equivalent (boe) per day for the first 30 days of production, according to Condition 36.6, you must comply with the provisions of either Condition 36.3.a(i) or 36.3.a(ii). Except as provided in this condition, the calculation must be performed within 45 days of the end of the first 30 days of production. To convert gas production to equivalent barrels of oil, divide the cubic feet of gas produced by 6,000. For well sites that commenced construction, reconstruction, or modification between October 15, 2019, and November 16, 2020, the owner or operator may use the records of the first 30 days of production after becoming subject to NSPS Subpart OOOOa, if available, to determine if the total well site production is at or below 15 boe per day, provided this determination is completed by December 14, 2020.
- (B) Well site production decline. For the collection of fugitive emissions components at a well site, where, at any time, the total production of the well site is at or below 15 boe per day based on a rolling 12-month average, you must comply with the provisions of either Condition 36.3.a(i) or 36.3.a(ii). To convert gas production to equivalent barrels of oil, divide the cubic feet of gas produced by 6,000.

[40 CFR 60.5397a(a)(1)(i) & (ii), Subpart OOOOa]

(ii) You must maintain the total production for the well site at or below 15 boe per day based on a rolling 12-month average, according to Condition 36.5, comply with the reporting requirements in Condition 36.7.b(iii), and the recordkeeping requirements in Condition 36.8.a(ii), until such time that you perform any of the actions in Conditions 36.3.a(ii)(A) through 36.3.a(ii)(E). If any of the actions listed in Conditions 36.3.a(ii)(A) through 36.3.a(ii)(E) occur, you must comply with Condition 36.3.a(ii).

[40 CFR 60.5397a(a)(2), Subpart OOOOa]

- (A) A new well is drilled at the well site;
- (B) A well at the well site is hydraulically fractured;
- (C) A well at the well site is hydraulically refractured;
- (D) A well at the well site is stimulated in any manner for the purpose of increasing production, including well workovers; or
- (E) A well at the well site is shut-in for the purpose of increasing production from the well.

[40 CFR 60.5397a(a)(2)(i) through (v), Subpart OOOOa]

(iii) You must determine the total production for the well site for the first 30 days after any of the actions listed in Conditions 36.3.a(ii)(A) through 36.3.a(ii)(E) is completed, according to Condition 36.6, comply with Condition 36.3.a(iii)(A) or 36.3.a(iii)(B), the reporting requirements in Condition 36.7.b(iii), and the recordkeeping requirements in Condition 36.8.a(iii).

[40 CFR 60.5397a(a)(3), Subpart OOOOa]

- (A) If the total production for the well site is at or below 15 boe per day for the first 30 days after the action is completed, according to Condition 36.6, you must either continue to comply with Condition 36.3.a(ii) or comply with Condition 36.3.a(i).
- (B) If the total production for the well site is greater than 15 boe per day for the first 30 days after the action is completed, according to Condition 36.6, you must comply with Condition 36.3.a(i) and conduct an initial monitoring survey for the collection of fugitive emissions components at the well site in accordance with the same schedule as for modified well sites as specified in Condition 36.3.f.

[40 CFR 60.5397a(a)(3)(i) & (ii), Subpart OOOOa]

- b. You must develop an emissions monitoring plan that covers the collection of fugitive emissions components at well sites within each company-defined area in accordance with Conditions 36.3.c and 36.3.d.
- c. Fugitive emissions monitoring plans must include the elements specified in Conditions 36.3.c(i) through 36.3.c(viii), at a minimum.

[40 CFR 60.5397a(b) & (c), Subpart OOOOa]

- (i) Frequency for conducting surveys. Surveys must be conducted at least as frequently as required by Conditions 36.3.f and 36.3.g.
- (ii) Technique for determining fugitive emissions (i.e., Method 21 of appendix A-7 to this part or optical gas imaging meeting the requirements in 40 CFR 60.5397a(c)(7)(i) through (vii)).
- (iii) Manufacturer and model number of fugitive emissions detection equipment to be used.
- (iv) Procedures and timeframes for identifying and repairing fugitive emissions components from which fugitive emissions are detected, including timeframes for fugitive emission components that are unsafe to repair. Your repair schedule must meet the requirements of Condition 36.3.h at a minimum.
- (v) Procedures and timeframes for verifying fugitive emission component repairs.
- (vi) Records that will be kept and the length of time records will be kept.

- (vii) If you are using optical gas imaging, your plan must also include the elements specified in 40 CFR 60.5397a(c)(7)(i) through (vii).
- (viii) If you are using Method 21 of appendix A-7 of 40 CFR 60, your plan must also include the elements specified in 40 CFR 60.5397(c)(8)(i) through (iii). For the purposes of complying with the fugitive emissions monitoring program using Method 21 of appendix A-7 of 40 CFR 60 a fugitive emission is defined as an instrument reading of 500 ppm or greater.

[40 CFR 60.5397a(c)(1) through (8), Subpart OOOOa]

d. Each fugitive emissions monitoring plan must include the elements specified in Conditions 36.3.d(i) through 36.3.d(iii), at a minimum, as applicable.

[40 CFR 60.5397a(d), Subpart OOOOa]

- (i) If you are using optical gas imaging, your plan must include procedures to ensure that all fugitive emissions components are monitored during each survey. Example procedures include, but are not limited to, a sitemap with an observation path, a written narrative of where the fugitive emissions components are located and how they will be monitored, or an inventory of fugitive emissions components.
- (ii) If you are using Method 21 of appendix A-7 of 40 CFR 60, your plan must include a list of fugitive emissions components to be monitored and method for determining the location of fugitive emissions components to be monitored in the field (e.g., tagging, identification on a process and instrumentation diagram, etc.).
- (iii) Your fugitive emissions monitoring plan must include the written plan developed for all of the fugitive emissions components designated as difficult-to-monitor in accordance with Condition 36.3.g(ii), and the written plan for fugitive emissions components designated as unsafeto-monitor in accordance with Condition 36.3.g(iii).

[40 CFR 60.5397a(d)(1) through (3), Subpart OOOOa]

e. Each monitoring survey shall observe each fugitive emissions component, as defined in 40 CFR 60.5430a, for fugitive emissions.

[40 CFR 60.5397a(e), Subpart OOOOa]

f. You must conduct an initial monitoring survey within 90 days of the startup of production, as defined in 40 CFR 60.5430a, for each collection of fugitive emissions components at a new well site or by June 3, 2017, whichever is later. For a modified collection of fugitive emissions components at a well site, the initial monitoring survey must be conducted within 90 days of the startup of production for each collection of fugitive emissions components after the modification or by June 3, 2017, whichever is later.

[40 CFR 60.5397a(f)(1), Subpart OOOOa]

g. A monitoring survey of each collection of fugitive emissions components at a well site must be performed at the frequencies specified in Condition 36.3.g(i), with the exceptions noted in Conditions 36.3.g(ii) through 36.3.g(iv).

[40 CFR 60.5397a(g), Subpart OOOOa]

(i) Except as provided in this condition, a monitoring survey of each collection of fugitive emissions components at a well site must be conducted at least semiannually after the initial survey. Consecutive semiannual monitoring surveys must be conducted at least 4 months apart and no more than 7 months apart.

[40 CFR 60.5397a(g)(1), Subpart OOOOa]

- (ii) Fugitive emissions components that cannot be monitored without elevating the monitoring personnel more than 2 meters above the surface may be designated as difficult-to-monitor. Fugitive emissions components that are designated difficult-to-monitor must meet the specifications of Conditions 36.3.g(ii)(A) through 36.3.g(ii)(D).
 [40 CFR 60.5397a(g)(3), Subpart OOOOa]
 - (A) A written plan must be developed for all of the fugitive emissions components designated difficult-to-monitor. This written plan must be incorporated into the fugitive emissions monitoring plan required by Conditions 36.3.b, 36.3.c, and 36.3.d.
 - (B) The plan must include the identification and location of each fugitive emissions component designated as difficult-to-monitor.
 - (C) The plan must include an explanation of why each fugitive emissions component designated as difficult-to-monitor is difficult-to-monitor.
 - (D) The plan must include a schedule for monitoring the difficultto-monitor fugitive emissions components at least once per calendar year.

[40 CFR 60.5397a(g)(3)(i) through (iv), Subpart OOOOa]

 (iii) Fugitive emissions components that cannot be monitored because monitoring personnel would be exposed to immediate danger while conducting a monitoring survey may be designated as unsafe-tomonitor. Fugitive emissions components that are designated unsafe-tomonitor must meet the specifications of Conditions 36.3.g(iii)(A) through 36.3.g(iii)(D).

[40 CFR 60.5397a(g)(4), Subpart OOOOa]

- A written plan must be developed for all of the fugitive (A) emissions components designated unsafe-to-monitor. This written plan must be incorporated into the fugitive emissions monitoring plan required by Conditions 36.3.b, 36.3.c, and 36.3.d. **(B)** The plan must include the identification and location of each fugitive emissions component designated as unsafe-to-monitor. (C) The plan must include an explanation of why each fugitive emissions component designated as unsafe-to-monitor is unsafe-to-monitor. (D) The plan must include a schedule for monitoring the fugitive emissions components designated as unsafe-to-monitor. [40 CFR 60.5397a(g)(4)(i) through (iv), Subpart OOOOa] (iv) You are no longer required to comply with the requirements of Condition 36.3.g(i) when the owner or operator removes all major production and processing equipment, as defined in 40 CFR 60.5430a, such that the well site becomes a wellhead only well site. If any major production and processing equipment is subsequently added to the well site, then the owner or operator must comply with the requirements in Conditions 36.3.f and 36.3.g(i). [40 CFR 60.5397a(g)(5), Subpart OOOOa]
- h. Each identified source of fugitive emissions shall be repaired, as defined in 40 CFR 60.5430a, in accordance with Conditions 36.3.h(i) and 36.3.h(ii).

[40 CFR 60.5397a(h), Subpart OOOOa]

- (i) A first attempt at repair shall be made no later than 30 calendar days after detection of the fugitive emissions.
- (ii) Repair shall be completed as soon as practicable, but no later than 30 calendar days after the first attempt at repair as required in Condition 36.3.h(i).
- (iii) If the repair is technically infeasible, would require a vent blowdown, a well shutdown or well shut-in, or would be unsafe to repair during operation of the unit, the repair must be completed during the next scheduled well shutdown, scheduled well shut-in, after a scheduled vent blowdown, or within 2 years, whichever is earliest. For purposes of this condition, a vent blowdown is the opening of one or more blowdown valves to depressurize major production and processing equipment, other than a storage vessel.

(iv) Each identified source of fugitive emissions must be resurveyed to complete repair according to the requirements in Conditions 36.3.h(iv)(A) through 36.3.h(iv)(D), to ensure that there are no fugitive emissions.

[40 CFR 60.5397a(h)(1) through (4), Subpart OOOOa]

- (A) The operator may resurvey the fugitive emissions components to verify repair using either Method 21 of appendix A-7 of 40 CFR 60 or optical gas imaging.
- (B) For each repair that cannot be made during the monitoring survey when the fugitive emissions are initially found, a digital photograph must be taken of that component or the component must be tagged during the monitoring survey when the fugitives were initially found for identification purposes and subsequent repair. The digital photograph must include the date that the photograph was taken and must clearly identify the component by location within the site (e.g., the latitude and longitude of the component or by other descriptive landmarks visible in the picture).
- (C) Operators that use Method 21 of appendix A-7 of 40 CFR 60 to resurvey the repaired fugitive emissions components are subject to the resurvey provisions specified in Conditions 36.3.h(iv)(C)(1) and 36.3.h(iv)(C)(2).

[40 CFR 60.5397a(h)(4)(i) through (iii), Subpart OOOOa]

- (1) A fugitive emissions component is repaired when the Method 21 instrument indicates a concentration of less than 500 ppm above background or when no soap bubbles are observed when the alternative screening procedures specified in section 8.3.3 of Method 21 of appendix A-7 of 40 CFR 60 are used.
- (2) Operators must use the Method 21 monitoring requirements specified in 40 CFR 60.5397a(c)(8)(ii) or the alternative screening procedures specified in section 8.3.3 of Method 21 of appendix A-7 of 40 CFR 60.

[40 CFR 60.5397a(h)(4)(iii)(A) & (B), Subpart OOOOa]

(D) Operators that use optical gas imaging to resurvey the repaired fugitive emissions components, are subject to the resurvey provisions specified in Conditions 36.3.h(iv)(D)(1) and 36.3.h(iv)(D)(2).

[40 CFR 60.5397a(h)(4)(iv), Subpart OOOOa]

- (1) A fugitive emissions component is repaired when the optical gas imaging instrument shows no indication of visible emissions.
- (2) Operators must use the optical gas imaging monitoring requirements specified in Condition 36.3.c(vii).

[40 CFR 60.5397a(h)(4)(iv)(A) & (B), Subpart OOOOa]

- i. Records for each monitoring survey shall be maintained as specified Condition 36.8.a.
- Annual reports shall be submitted for each collection of fugitive emissions components at a well site that include the information specified in Condition 36.7.b. Multiple collection of fugitive emissions components at a well site may be included in a single annual report.

[40 CFR 60.5397a(i) & (j), Subpart OOOOa]

NSPS Subpart OOOOa Continuous Compliance Requirements

36.4. For each collection of fugitive emissions components at a well site, you must demonstrate continuous compliance with the fugitive emission standards specified in Condition 36.3.a(i) according to Conditions 36.4.a through 36.4.d.

[40 CFR 71.6(a)(3)] [40 CFR 60.5415a(h), Subpart OOOOa]

- a. You must conduct periodic monitoring surveys as required in Condition 36.3.g.
- b. You must repair each identified source of fugitive emissions as required in Condition 36.3.h.
- c. You must maintain records as specified in Condition 36.8.a.
- d. You must submit annual reports for collection of fugitive emissions components at a well site as required in Conditions 36.7.a and 36.7.b.

[40 CFR 60.5415a(h)(1) through (4), Subpart OOOOa]

36.5. For each collection of fugitive emissions components at a well site complying with Condition 36.3.a(ii), you must demonstrate continuous compliance according to Conditions 36.5.a through 36.5.d. You must perform the calculations shown in Conditions 36.5.a through 36.5.d within 45 days of the end of each month. The rolling 12-month average of the total well site production determined according to Condition 36.5.d must be at or below 15 boe per day.

[40 CFR 60.5415a(i), Subpart OOOOa]

- a. Begin with the most recent 12-month average.
- b. Determine the daily combined oil and natural gas production of each individual well at the well site for the month. To convert gas production to equivalent barrels of oil, divide the cubic feet of gas produced by 6,000.

- c. Sum the daily production for each individual well at the well site and divide by the number of days in the month. This is the average daily total well site production for the month.
- d. Use the result determined in Condition 36.5.c and average with the daily total well site production values determined for each of the preceding 11 months to calculate the rolling 12-month average of the total well site production.

[40 CFR 60.5415a(i)(1) through (4), Subpart OOOOa]

36.6. To demonstrate that the well site produced at or below 15 boe per day for the first 30 days after startup of production as specified in Condition 36.3.a(iii), you must calculate the daily production for each individual well at the well site during the first 30 days of production after completing any action listed in Conditions 36.3.a(ii)(A) through 36.3.a(ii)(E) and sum the individual well production values to obtain the total well site production. The calculation must be performed within 45 days of the end of the first 30 days of production after completing any action listed in Conditions 36.3.a(ii)(A) through 36.3.a(ii)(A) through 36.3.a(ii)(E). To convert gas production to equivalent barrels of oil, divide cubic feet of gas produced by 6,000.

[40 CFR 60.5415a(j), Subpart OOOOa]

NSPS Subpart OOOOa Notification, Reporting, and Recordkeeping Requirements

36.7. *Reporting requirements.* You must submit annual reports containing the information specified in Conditions 36.7.a and 36.7.b. You must submit annual reports following the procedure specified in Condition 36.7.c. The initial annual report is due no later than 90 days after the end of the initial compliance period as determined according to 40 CFR 60.5410a. Subsequent annual reports are due no later than same date each year as the initial annual report. If you own or operate more than one affected facility, you may submit one report for multiple affected facilities provided the report contains all of the information required as specified in Conditions 36.7.a and 36.7.b. Annual reports may coincide with title V reports as long as all the required elements of the annual report are included. You may arrange with the Administrator a common schedule on which reports required by 40 CFR 60 may be submitted as long as the schedule does not extend the reporting period.

[40 CFR 71.6(a)(3)] [40 CFR 60.5420a(b), Subpart OOOOa]

a. The general information specified in Conditions 36.7.a(i) through 36.7.a(iv) is required for all reports.

[40 CFR 60.5420a(b)(1), Subpart OOOOa]

- (i) The company name, facility site name associated with the affected facility, U.S. Well ID or U.S. Well ID associated with the affected facility, if applicable, and address of the affected facility. If an address is not available for the site, include a description of the site location and provide the latitude and longitude coordinates of the site in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983.
 - (ii) An identification of each affected facility being included in the annual report.
 - (iii) Beginning and ending dates of the reporting period.
 - (iv) A certification by a certifying official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[40 CFR 60.5420a(b)(1)(i) through (iv), Subpart OOOOa]

b. For the collection of fugitive emissions components at each well site, report the information specified in Conditions 36.7.b(i) through 36.7.b(vi), as applicable.

[40 CFR 60.5420a(b)(7), Subpart OOOOa]

- (i) Designation of the type of site (i.e., well site or compressor station) at which the collection of fugitive emissions components is located.
- (ii) For each collection of fugitive emissions components at a well site that became an affected facility during the reporting period, you must include the date of the startup of production or the date of the first day of production after modification.
- (iii) For each collection of fugitive emissions components at a well site that meets the conditions specified in either Condition 36.3.a(i)(A) or 36.3.a(i)(B), you must specify the well site is a low production well site and submit the total production for the well site.
- (iv) For each collection of fugitive emissions components at a well site where during the reporting period you complete the removal of all major production and processing equipment such that the well site contains only one or more wellheads, you must include the date of the change to status as a wellhead only well site.
- (v) For each collection of fugitive emissions components at a well site where you previously reported under Condition 36.7.b(iii) the removal of all major production and processing equipment and during the reporting period major production and processing equipment is added back to the well site, the date that the first piece of major production and processing equipment is added back to the well site.

[40 CFR 60.5420a(b)(7)(i)(D), Subpart OOOOa]

(vi) For each fugitive emissions monitoring survey performed during the annual reporting period, the information specified in Conditions 36.7.b(vi)(A) through 36.7.b(vi)(G).

[40 CFR 60.5420a(b)(7)(ii), Subpart OOOOa]

- (A) Date of the survey.
- (B) Monitoring instrument used.
- (C) Any deviations from the monitoring plan elements under Conditions 36.3.c(i), 36.3.c(ii), and 36.3.c(vii) and 40 CFR 60.5397a(c)(8)(i) or a statement that there were no deviations from these elements of the monitoring plan.
- (D) Number and type of components for which fugitive emissions were detected.
- (E) Number and type of fugitive emissions components that were not repaired as required in Condition 36.3.h.
- (F) Number and type of fugitive emission components (including designation as difficult-to-monitor or unsafe-to-monitor, if applicable) on delay of repair and explanation for each delay of repair.
- (G) Date of planned shutdown(s) that occurred during the reporting period if there are any components that have been placed on delay of repair.

[40 CFR 60.5420a(b)(7)(ii)(A) through (G), Subpart OOOOa]

You must submit reports to the EPA via CEDRI, except as outlined in this c. condition. (CEDRI can be accessed through the EPA's CDX (https://cdx.epa.gov/).) The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as CBI. Anything submitted using CEDRI cannot later be claimed CBI. You must use the appropriate electronic report in CEDRI for NSPS Subpart OOOOa or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-air-emissions/cedri/). If the reporting form specific to NSPS Subpart OOOOa is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in 40 CFR 60.4. Once the form has been available in CEDRI for at least 90 calendar days, you must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim, submit a

complete report generated using the appropriate form in CEDRI or an alternate electronic file consistent with the XML schema listed on the EPA's CEDRI website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium shall be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Fuels and Incineration Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via CEDRI. All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

[40 CFR 60.5420a(b)(11), Subpart OOOOa]

- d. If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in 40 CFR 60.5420a(b)(13)(i) through (vii).
- e. If you are required to electronically submit a report through CEDRI in the EPA's CDX, the owner or operator may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in 40 CFR 60.5420a(b)(14)(i) through (v).

[40 CFR 60.5420a(b)(13) & (14), Subpart OOOOa]

36.8. *Recordkeeping requirements.* You must maintain the records identified as specified in Condition 30 and in Condition 36.8.a. All records required by NSPS Subpart OOOOa must be maintained either onsite or at the nearest local field office for at least 5 years. Any records required to be maintained by NSPS Subpart OOOOa that are submitted electronically via the EPA's CDX may be maintained in electronic format.

[40 CFR 71.6(a)(3)(ii)] [40 CFR 60.5420a(c), Subpart OOOOa]

a. For each collection of fugitive emissions components at a well site, maintain the records identified in Conditions 36.8.a(i) through 36.8.a(vii).

[40 CFR 60.5420a(c)(15), Subpart OOOOa]

(i) The date of the startup of production or the date of the first day of production after modification for each collection of fugitive emissions components at a well site.

- (ii) For each collection of fugitive emissions components at a well site complying with Condition 36.3.a(ii), you must maintain records of the daily production and calculations demonstrating that the rolling 12month average is at or below 15 boe per day no later than 12 months before complying with Condition 36.3.a(ii).
- (iii) For each collection of fugitive emissions components at a well site complying with Condition 36.3.a(iii)(A), you must keep records of daily production and calculations for the first 30 days after completion of any action listed in Conditions 36.3.a(ii)(A) through 36.3.a(ii)(E) demonstrating that total production from the well site is at or below 15 boe per day, or maintain records demonstrating the rolling 12-month average total production for the well site is at or below 15 boe per day.
- (iv) For each collection of fugitive emissions components at a well site complying with Condition 36.3.a(iii)(B), you must keep the records specified in Conditions 36.8.a(i), 36.8.a(vi), and 36.8.a(vii).
- (v) For each collection of fugitive emissions components at a well site where you complete the removal of all major production and processing equipment such that the well site contains only one or more wellheads, record the date the well site completes the removal of all major production and processing equipment from the well site, and, if the well site is still producing, record the well ID or separate tank battery ID receiving the production from the well site. If major production and processing equipment is subsequently added back to the well site, record the date that the first piece of major production and processing equipment is added back to the well site.
- (vi) The fugitive emissions monitoring plan as required in Conditions 36.3.b, 36.3.c, and 36.3.d.
- (vii) The records of each monitoring survey as specified in Conditions 36.8.a(vii)(A) through 36.8.a(vii)(I).

[40 CFR 60.5420a(c)(15)(i) through (vii), Subpart OOOOa]

- (A) Date of the survey.
- (B) Beginning and end time of the survey.
- (C) Name of operator(s), training, and experience of the operator(s) performing the survey.
- (D) Monitoring instrument used.
- (E) Fugitive emissions component identification when Method 21 of appendix A-7 of 40 CFR 60 is used to perform the monitoring survey.

- (F) Ambient temperature, sky conditions, and maximum wind speed at the time of the survey.
- (G) Any deviations from the monitoring plan or a statement that there were no deviations from the monitoring plan.
- (H) Records of calibrations for the instrument used during the monitoring survey.
- (I) Documentation of each fugitive emission detected during the monitoring survey, including the information specified in 40 CFR 60.5420a(c)(15)(vii)(I)(1) through (8).

[40 CFR 60.5420a(c)(15)(vii)(A) through (I), Subpart OOOOa]

36.9. Table 3 to NSPS Subpart OOOOa shows which parts of the General Provisions in 40 CFR 60.1 through 60.19 apply to you.

[40 CFR 71.6(a)(1)] [40 CFR 60.5425a, Subpart OOOOa]

40 CFR Part 61 National Emission Standards for Hazardous Air Pollutants

Subparts A & M

37. 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

38. For EU IDs 22, 23, and 25, comply with the applicable requirements of 40 CFR 63 Subpart A in accordance with the provisions for applicability of Subpart A in NESHAP Subpart HH, Table 2.

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

39. For EU IDs 18 and 26, 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 HH

40. NESHAP Subpart HH Applicability. For EU IDs 22, 23, and 25, comply with the following applicable requirements of NESHAP Subpart HH.

[18 AAC 50.040(c)(13), 50.040(j), & 50.326(j)]

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

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

[40 CFR 71.6(a)(1) & (a)(3)(ii)] [40 CFR 63.760(a)(1)(ii), Subpart HH]

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

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

NESHAP Subpart HH General Standards

40.3. All reports required under NESHAP Subpart HH shall be sent to the Administrator at the appropriate address listed in 40 CFR 63.13. Reports may be submitted on electronic media.

[40 CFR 71.6(a)(3)] [40 CFR 63.764(b), Subpart HH]

40.4. Except as specified in Condition 40.5, the owner or operator shall comply with Conditions 40.4.a through 40.4.c.

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

- a. Determine the optimum glycol circulation rate using the equation under 40 CFR 63.764(d)(2)(i).
- b. Operate the triethylene glycol (TEG) dehydration unit such that the actual glycol circulation rate does not exceed the optimum glycol circulation rate determined in accordance with Condition 40.4.a. If the TEG dehydration unit is unable to meet the sales gas specification for moisture content using the glycol circulation rate determined in accordance with Condition 40.4.a, the owner or operator must calculate an alternate circulation rate using GRIGLYCalcTM, Version 3.0 or higher. The owner or operator must document why the TEG dehydration unit must be operated using the alternate circulation rate and submit this documentation with the initial notification in accordance with 40 CFR 63.775(c)(7).

c. Maintain a record of the determination specified in Condition 40.4.b in accordance with the requirements in 40 CFR 63.774(f) and submit the Initial Notification in accordance with the requirements in 40 CFR 63.775(c)(7). If operating conditions change and a modification to the optimum glycol circulation rate is required, the owner or operator shall prepare a new determination in accordance with Condition 40.4.a or 40.4.b and submit the information specified under 40 CFR 63.775(c)(7)(ii) through (v).

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

40.5. Exemptions. The owner or operator is exempt from the requirements of Condition 40.4 if the criteria listed in Condition 40.5.a or 40.5.b are met, except that the records of the determination of these criteria must be maintained as required in Condition 40.9.

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

- a. The actual annual average flowrate of natural gas to the glycol dehydration unit is less than 85 thousand standard cubic meters per day, as determined by the procedures specified in Condition 40.7; or
- b. The actual average emissions of benzene from the glycol dehydration unit process vent to the atmosphere are less than 0.90 megagram per year, as determined by the procedures specified in Condition 40.8.

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

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

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

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

40.7. The determination of actual flowrate of natural gas to a glycol dehydration unit shall be made using the procedures of either Condition 40.7.a or 40.7.b.

[40 CFR 71.6(a)(3)] [40 CFR 63.772(b)(1), Subpart HH]

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

- b. The owner or operator shall document, to the Administrator's satisfaction, the actual annual average natural gas flowrate to the glycol dehydration unit.
 [40 CFR 63.772(b)(1)(i) & (ii), Subpart HH]
- 40.8. The determination of actual average benzene or BTEX emissions from a glycol dehydration unit shall be made using the procedures of either Condition 40.8.a or 40.8.b. Emissions shall be determined either uncontrolled, or with federally enforceable controls in place.

[40 CFR 71.6(a)(3)] [40 CFR 63.772(b)(2), Subpart HH]

- a. The owner or operator shall determine actual average benzene or BTEX emissions using the model GRIGLYCalcTM, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalcTM Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1); or
- b. The owner or operator shall determine an average mass rate of benzene or BTEX emissions in kilograms per hour through direct measurement using the methods in 40 CFR 63.772(a)(1)(i) or (ii), or an alternative method according to 40 CFR 63.7(f). Annual emissions in kilograms per year shall be determined by multiplying the mass rate by the number of hours the unit is operated per year. This result shall be converted to megagrams per year.

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

NESHAP Subpart HH Recordkeeping Requirements

40.9. An owner or operator of a glycol dehydration unit that meets the exemption criteria in Condition 40.5.a or 40.5.b shall maintain the records specified in Condition 40.9.a or 40.9.b, as appropriate, for that glycol dehydration unit.

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

- a. The actual annual average natural gas throughput (in terms of natural gas flowrate to the glycol dehydration unit per day) as determined in accordance with Condition 40.7, or
- b. The actual average benzene emissions (in terms of benzene emissions per year) as determined in accordance with Condition 40.8.

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

Subpart ZZZZ

41. NESHAP Subpart ZZZZ Applicability. For EU IDs 18 and 26, 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

41.1. For EU ID 18, 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]

41.2. For EU ID 26, 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 2,160 hours of operation or annually, whichever comes first;
- b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and
- c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.

[Table 2d, Item 8; NESHAP Subpart ZZZZ]

41.3. Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Conditions 41.1.a and 41.2.a.

[40 CFR 71.6(a)(3)] [Table 2d, NESHAP Subpart ZZZZ] 41.4. If an emergency engine 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 41.1, 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, NESHAP Subpart ZZZZ]

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

[40 CFR 71.6(a)(1)] [40 CFR 63.6625(h), Subpart ZZZZ]

41.6. For EU ID 26, an existing non-emergency SI 4SLB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that meets the definition of remote stationary RICE in 40 CFR 63.6675 as of October 19, 2013, you must evaluate the status of the stationary RICE every 12 months. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in 40 CFR 63.6675, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation.

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

NESHAP Subpart ZZZZ Fuel Requirements

41.7. If EU ID 18 operates for the purpose specified in Condition 41.12.c(i), you must use diesel fuel that meets the requirements in 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

[40 CFR 71.6(a)(1)] [40 CFR 63.6604(b), Subpart ZZZZ]

NESHAP Subpart ZZZZ General Requirements

41.8. You must be in compliance with the requirements under Condition 41 at all times.

41.9. 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 Monitoring Requirements

41.10. For EU ID 18, 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]

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

41.11. For EU IDs 18 and 26, demonstrate continuous compliance with each requirement in Conditions 41.1 and 41.2 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]

41.12. For EU ID 18, you must operate the emergency stationary RICE according to the requirements in Conditions 41.12.a through 41.12.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 41.12.a through 41.12.c, is prohibited. If you do not operate the engine according to the requirements in Conditions 41.12.a through 41.12.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)(1)] [40 CFR 63.6640(f), Subpart ZZZZ]

- a. There is no time limit on the use of emergency stationary RICE in emergency situations.
- You may operate your emergency stationary RICE for the purpose specified in Condition 41.12.b(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition 41.12.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)(iii), 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 41.12.b. Except as provided in Condition 41.12.c(i), the 50 hours per year for non-emergency situations cannot be used to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

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

 (i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the conditions of 40 CFR 63.6640(f)(4)(ii)(A) through (E) are met.

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

NESHAP Subpart ZZZZ Reporting Requirements

41.13. 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]

41.14. Report all deviations as defined in NESHAP Subpart ZZZZ in the operating report required by Condition 76.

[40 CFR 71.6(a)(3)]

[40 CFR 63.6650(f), Subpart ZZZZ]

41.15. If EU ID 18 operates for the purpose specified in Condition 41.12.c(i), you must submit an annual report according to the requirements in Conditions 41.15.a through 41.15.c.

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

- a. The report must contain the information in 40 CFR 63.6650(h)(1)(i) through (ix).
- b. Annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
- c. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 CFR 63.13.

[40 CFR 63.6650(h)(1) through (3), Subpart ZZZZ]

NESHAP Subpart ZZZZ Recordkeeping Requirements

- 41.16. You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan.
- 41.17. For EU ID 18, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in Condition 41.12.c(i), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

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

- 41.18. Your records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).
- 41.19. 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.
- 41.20. You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

[40 CFR 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

42. 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]

43. 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]

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

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

NESHAP Applicability Determination Requirements

45. 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)]

45.1. 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]

46. 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)]

47. 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

48. 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)]

49. 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.

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[18 AAC 50.326(j)(3), 50.345(a) & (f)]
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- **50.** 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)]
- **51.** 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]

- 52. 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 in quantities 10 tons per year or greater. The quantity for which fees will be assessed is the lesser of the stationary source's
 - 52.1. potential to emit of 475 tpy; or
 - 52.2. 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]

53. Assessable Emission Estimates. The Permittee shall comply as follows:

- 53.1. No later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions, as determined in Condition 1.2. 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-isubmission-instructions/.
- 53.2. The Permittee shall include with the assessable emissions report all the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates.
- 53.3. 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.
- 53.4. If no estimate or waiver letter is submitted on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit in Condition 52.1.

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

- **54.** Good Air Pollution Control Practice. The Permittee shall do the following for EU IDs 19a, 19b, 20, 21, and 27 through 30:
 - 54.1. Perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;
 - 54.2. Keep records of any maintenance that would have a significant effect on emissions; the records may be kept in electronic format; and
 - 54.3. Keep a copy of either the manufacturer's or the operator's maintenance procedures.

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

55. 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)]

56. 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)]

56.1. 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 56.1.a or to address the results of Department inspections that found potential problems; and
 - (ii) to prevent future dust problems.
- 56.2. The Permittee shall report according to Condition 58.
- **57. 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)]

58. 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 50.040(j)(4), 50.110, 50.326(j)(3) & 50.346(a)] [40 CFR 71.6(a)(3)]

- 58.1. **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 58.
 - 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 58; or
 - (ii) the Department notifies the Permittee that it has found a violation of Condition 58.
- 58.2. **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 58; and

- (iv) any corrective actions taken or planned for complaints attributable to emissions from the stationary source.
- 58.3. **Reporting**. The Permittee shall report as follows:
 - a. With each operating report under Condition 76, 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 75.
- **59.** 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 standard¹² listed in Condition 35 or 42 (refrigerants),
 - 59.1. take all reasonable steps to minimize levels of emissions that exceed the standard, and
 - 59.2. report in accordance with Condition 75; 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)]

¹² 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.

Open Burning Requirements

- **60. Open Burning.** If open burning is conducted at this stationary source, comply with the requirements of 18 AAC 50.065.
 - 60.1. 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.
 - 60.2. Include this condition in the annual certification required under Condition 77.

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

Section 6. General Source Testing and Monitoring Requirements

61. **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)]

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

[18 AAC 50.220(b)]

- 62.1. at a point or points that characterize the actual discharge into the ambient air; and
- 62.2. 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.
- **63. Reference Test Methods.** Use the following test methods when conducting source testing for compliance with this permit:
 - 63.1. 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]

63.2. 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]

63.3. 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]

63.4. 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)]

63.5. 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] 63.6. 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]

63.7. 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]

64. 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)]

65. Test Exemption. Compliance with Conditions 67, 68 and 69 is not required for Method 9 Plan (Condition 2.2) observations.

[18 AAC 50.345(a)]

66. 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)]

67. Test Plans. Except as provided in Condition 65, 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 61 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)]

68. Test Notification. Except as provided in Condition 65, 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)]

69. Test Reports. Except as provided in Condition 65, 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 72. 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)]

70. Particulate Matter Calculations. In source testing for compliance with the particulate matter standards in Conditions 6 and 25.2, 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

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

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

- 71.1. Copies of all reports and certifications submitted pursuant to this section of the permit; and
- 71.2. Records of all monitoring required by this permit, and information about the monitoring including:
 - a. calibration and maintenance records, original strip chart or computer-based recordings for continuous monitoring instrumentation;
 - b. the date, place, and time of sampling or measurements;
 - c. the date(s) analyses were performed;
 - d. the company or entity that performed the analyses;
 - e. the analytical techniques or methods used;
 - f. the results of such analyses; and,
 - g. the operating conditions as existing at the time of sampling or measurement.

Reporting Requirements

- 72. 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 emissions 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.
 - 72.1. 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 50.205, 50.326(j)(3), 50.345(a) & (j), & 50.346(b)(10)]

- **73. 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.
 - 73.1. 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 <u>http://dec.alaska.gov/air/air-permit/standard-conditions/standard-condition-xvii-submission-instructions/</u>.

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

74. 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)]

- **75.** Excess Emissions and Permit Deviation Reports. The Permittee shall report excess emissions and permit deviations as follows:
 - 75.1. **Excess Emissions Reporting**. Except as provided in Condition 58, 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 75.1.d.
 - d. Report all other excess emissions not described in Conditions 75.1.a, 75.1.b, and 75.1.c within 30 days after the end of the month during which the emissions occurred, or as part of the next routine operating report in Condition 76 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 as requested to follow up an excess emissions report.

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

- 75.2. **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 4.2.b and 9.3.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 76 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)]

- 75.3. Notification Form. When reporting either excess emissions or permit deviations, the Permittee shall report using either the Department's online form, which can be found at the Division of Air Quality's Air Online Services (AOS) system webpage Permittee Portal option, http://dec.alaska.gov/applications/air/airtoolsweb, or, if the Permittee prefers, the form contained in Section 13 of this permit. The Permittee must provide all information called for by the form that is used. 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-iii-and-iv-submission-instructions/. [18 AAC 50.235(a)(2), 50.240(c), 50.326(j)(3), & 50.346(b)(2) & (3)]
- **76. Operating Reports.** During the life of this permit¹³, the Permittee shall submit to the Department an operating report in accordance with Conditions 72 and 73 by August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year.
 - 76.1. 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.
 - 76.2. When excess emissions or permit deviations that occurred during the reporting period are not included with the operating report under Condition 76.1, 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

¹³ *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
- 76.3. when excess emissions or permit deviations have already been submitted under Condition 75 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.
- 76.4. The operating report must include, for the period covered by the report, a listing of emissions monitored under Conditions 2.2.e, 7.2, 10.1, and 35.3.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.
- 76.5. **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)]

- 77. Annual Compliance Certification. Each year by March 31, compile and submit to the Department an annual compliance certification report according to Condition 73.
 - 77.1. 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;
 - 77.2. **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.

77.3. In addition, submit a copy of the report directly to the 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)]

- **78.** 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, NOx, PM₁₀, PM_{2.5}, SO₂, VOCs and lead (Pb) and lead compounds, as follows:
 - 78.1. **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 tpy of NH_3 , PM_{10} , $PM_{2.5}$ or VOC; or
 - b. 2,500 tpy of CO, NOx or SO₂.
 - 78.2. **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}, NOx or VOC.
 - 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}, NOx, or VOC; or as specified in Conditions 78.2.b(iv) through 78.2.b(viii);
 - (iv) 70 tpy of SO₂, NH₃, PM_{2.5}, NOx, or VOC in PM_{2.5} serious nonattainment; or
 - (v) 70 tpy of PM_{10} in PM_{10} serious nonattainment areas; or
 - (vi) 50 tpy of NOx or VOC in O3 serious nonattainment areas; or
 - (vii) 25 tpy of NOx or VOC in O3 severe nonattainment areas; or
 - (viii) 10 tpy of NOx or VOC O3 extreme nonattainment areas.

- 78.3. For reporting under Condition 78.2, the Permittee shall report the annual emissions and the required data elements under Condition 78.4 every third year for the previous calendar year as scheduled by the EPA.¹⁴
- 78.4. For each emissions unit and the stationary source, include in the report the required data elements¹⁵ contained within the form included in the Emission Inventory Instructions available at the Department's Air Online Services (AOS) system on the Point Source Emission Inventory webpage at http://dec.alaska.gov/Applications/Air/airtoolsweb/PointSourceEmissionInventory
- 78.5. Submit the report in accordance with the submission instructions on the Department's Standard Permit Conditions webpage at <u>http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-xv-and-xvi-submission-instructions/</u>.

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

- 79. NSPS and NESHAP Reports. The Permittee shall comply with the following:
 - 79.1. 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 76 for the period covered by the report, a copy of any NSPS and NESHAPs reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10. For reports previously submitted to ADEC or submitted through CDX/CEDRI, state in the operating report the date and a brief description of each of the reports submitted during the reporting period.

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

79.2. 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)]

¹⁴ 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.).

¹⁵ 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.
Section 8. Permit Changes and Renewal

- **80. Permit Applications and Submittals.** The Permittee shall comply with the following requirements for submitting application information to the EPA:
 - 80.1. 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;
 - 80.2. The information shall be submitted to the Air Permits and Toxics Branch, US EPA Region 10, Mail Stop: 15-H13, 1200 Sixth Avenue, Suite 155, Seattle, WA 98101-3188.
 - 80.3. 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
 - 80.4. The Permittee shall maintain records as necessary to demonstrate compliance with this condition.

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

81. 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)(7), 50.326(a) & (j)(3), and 50.346(b)(7)] [40 CFR 71.6(a)(8)]

- 82. Off Permit Changes. Changes that are not addressed or prohibited by this permit, other than those subject to the requirements of 40 CFR Part 72 through 78 or those that are modifications under any provision of Title I of the Act, may be made without a permit revision, provided that the following requirements are met:
 - 82.1. Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition;
 - 82.2. 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;
 - 82.3. The change shall not qualify for the shield under 40 CFR 71.6(f);
 - 82.4. 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)]

- **83.** Operational Flexibility. CAA Section 502(b)(10)¹⁶ 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.
 - 83.1. For each such change, the notification required by Condition 83 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.
 - 83.2. The permit shield described in 40 CFR 71.6(f) shall not apply to any change made pursuant to Condition 83.

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

84. Permit Renewal. To renew this permit, the Permittee shall submit to the Department¹⁷ 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)]

¹⁶ 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.

¹⁷ 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

- **85.** Compliance with permit terms and conditions is considered to be compliance with those requirements that are
 - 85.1. included and specifically identified in the permit; or
 - 85.2. determined in writing in the permit to be inapplicable.

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

- **86.** 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
 - 86.1. an enforcement action;
 - 86.2. permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or
 - 86.3. denial of an operating permit renewal application.

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

87. 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)]

88. 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)]

- **89.** 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
 - 89.1. enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;
 - 89.2. have access to and copy any records required by the permit;
 - 89.3. inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and
 - 89.4. 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)]

90. 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.

- 91. Nothing in this permit shall alter or affect the following:
 - 91.1. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section; or
 - 91.2. 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)]

92. 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)]

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
3, 4, 5	40 CFR 60.332(a), Subpart GG	EU IDs 3, 4, and 5 were constructed before October 3, 1982, and therefore not subject to 40 CFR 60.332(a) per 40 CFR 60.332(e).
11, 12	40 CFR 60.332(a)(1), Subpart GG	EU IDs 11 and 12 are <100 MMBtu/hr rated stationary gas turbines. Therefore, they are not required to comply with this paragraph under 40 CFR 60.332(b).
3, 4, 5, 11, 12	40 CFR 60.334(a)-(g) and (h)(1)-(2), Subpart GG	40 CFR 60.334(a) and (b) apply only to stationary combustion turbines that use water injection or NOx control. (60.334(c) - (g)) are optional monitoring methods that Hilcorp does not conduct. (60.334(h)(1) - Hilcorp) has demonstrated that the fuel fired in these units meets the definition of natural gas as defined in 40 CFR 60.334(u). (60.334(h)(2) - Hilcorp) does not claim an allowance for bound nitrogen. Therefore, nitrogen monitoring is not required.
3, 4, 5, 11, 12	40 CFR 60, Subpart KKKK	EU IDs 3, 4, and 5 were constructed, modified, or reconstructed prior to February 18, 2005, and have not been reconstructed after this date. This shield applies only to EU IDs 3, 4, and 5 as currently installed. Subsequent modification or reconstruction removes this shield.
18	40 CFR 60, Subpart IIII	EU ID 18 commenced construction prior to July 11, 2005.

Table B - Permit Shields Granted

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
26	40 CFR 60 Subpart JJJJ	EU ID 26 commenced construction prior to June 12, 2006.
Stationary Source- wide	40 CFR 61 Subpart J	Facility does not contain any equipment in benzene service.
Stationary Source- wide	40 CFR 61 Subpart V	Per 40 CFR 61.240(b), a facility must be subject to a specific subpart of 40 CFR 61 to be subject to this subpart.
3, 4, 5, 11, 12	40 CFR 63, Subpart YYYY	Stationary source is not a major source of HAP emissions.
22, 23, 25	40 CFR 63 Subpart HH, §63.765	The non-applicability of 40 CFR 63.765 is indicated under §63.765(a).
22, 23, 25	40 CFR 63 Subpart HH, §§63.766, 63.769	Kenai Gas Field Pad 14-6 is not a Major Source of HAP emissions.
22, 23, 25	40 CFR 63 Subpart HH, §§63.771 and 63.773	No control of emissions is required by the Subpart for area sources.
22, 23, 25	40 CFR 63.775(b)	40 CFR 63.775(b) only applies to major sources. Kenai Gas Field Pad 14-6 is not a major source of HAPs.
22, 23, 25	40 CFR 63.775(e)	§63.775(e) only applies to major sources or areasources within urban areas as defined under SubpartHH. See §63.775(e) and (e)(3).
22, 23, 25	40 CFR 63.775(f)	§63.775(f) does not apply to area sources not subject to any control requirements.
18, 26	40 CFR 63 Subpart ZZZZ, §§63.6600, 63.6601, 63.6602, 63.6610, 63.6611	Kenai Gas Field Pad 14-6 is an area source of HAP emissions.
18	40 CFR 63 Subpart ZZZZ, §§63.6603(b) – (f), 63.6604(a), Table 2d: Items 1 – 3, and 6 – 11, and Table 2b	EU ID 18 is an emergency generator. These provisions apply only to nonemergency generators.
26	40 CFR 63 Subpart ZZZZ, §§63.6603(b) – (e), 63.6604, Table 2d: Items 1 – 4, 63.6625(g), 63.6625(i)	EU ID 26 is not a CI engine.
26	40 CFR 63 Subpart ZZZZ, §§63.6612, 63.6615, 63.6620, 63.6625(a) – (e), and (g), 63.6640(c), 63.6645(h), Table 2d: Items 5 – 7 and 9 – 13, Table 4, and Table 5	EU ID 26 meets the definition of remote under 40 CFR 63.6675.
26	40 CFR 63 Subpart ZZZZ, §63.6625(a)	EU ID 26 does not use a CEMS.
26	40 CFR 63 Subpart ZZZZ, §63.6630(a) – (d)	EU ID 26 is not subject to any requirements in Tables 1b, 2b, 4, and 5.
26	40 CFR 63 Subpart ZZZZ, §63.6630(e)	EU ID 26 meets the definition of remote under 40 CFR 63.6675.
18	40 CFR 63 Subpart ZZZZ, §§63.6612, 63.6615, 63.6620, 63.6625(a) – (d), 63.6630, 63.6635, and 63.6640(b) – (d)	EU ID 18 is only subject to the work practices of the Subpart and not any emission limitations. Thus no source testing, CEMS monitoring, or use of any emissions measurement device is required and neither is the associated recordkeeping and reporting.
18	40 CFR 63 Subpart ZZZZ, §63.6645(a)	Requirements do not apply to existing RICE not subject to a numerical emission standard, per 40 CFR 63.6645(a)(5).
18	40 CFR 63 Subpart ZZZZ, §§63.6645(b) – (i)	RICE is emergency RICE and not subject to numerical emissions standards.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
18	40 CFR 63 Subpart ZZZZ, §63.6650(a) – (e) and (g)	Reporting requirements only apply to CI RICE subject to emission or operating limits. Existing CI RICE are subject only to work or management practices.
26	40 CFR 63 Subpart ZZZZ, §63.6640(f)	EU ID 26 is not an emergency RICE.
26	40 CFR 63 Subpart ZZZZ, §63.6645(b) - (f), (i)	EU ID 26 is not at a major source of HAPs and is not a CI RICE.
26	40 CFR 63 Subpart ZZZZ, §63.6645(g) and (h)	EU ID 26 is not required to conduct a performance test or other initial compliance demonstration.
26	40 CFR 63 Subpart ZZZZ, §§63.6635, 63.6640(b), 63.6650(d), and 63.6655(a), (b), & (d)	EU ID 26 is not subject to any emission or operating limitations.
26	40 CFR 63 Subpart ZZZZ, §63.6650(a), (b), & (e)	EU ID 26 is not required to submit any reports in Table 7.
26	40 CFR 63 Subpart ZZZZ, §63.6650(g) and (h)	EU ID 26 does not fire landfill gas and is not an emergency RICE.
18	40 CFR 63 Subpart ZZZZ, §63.6655(a), (b), and (d).	Emergency CI RICE are not subject to emission or operating limitation. Prescribed records and reports are not required.
18	40 CFR 63 Subpart ZZZZ, §63.6655(c)	These recordkeeping requirements only apply to RICE burning landfill or digester gas.
19a, 19b	40 CFR 63 Subpart JJJJJJ	EU IDs 19a and 19b are temporary boilers and per 40 CFR 63.11195(h) are exempt from the requirements of this subpart.
19a, 19b, 20, 27 through 30	40 CFR 63 Subpart DDDDD	Stationary source is not a major source of HAPs.
Stationary Source- wide	40 CFR 82 Subpart B	Motor vehicles are not serviced at the facility.

[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.

	А	ALASKA	DEPARTMENT S PROGRAM	of envi - Visibl	RONMI E EMIS	ENTAL	CONSE 6 OBSE	RVATIO	ON DN FORM
Stationary Source Name	Type of Em	ission Unit		Observa	tion Da	te	Start T	īme	End Time
				Sec	0	15	30	45	Comments
Emission Unit Location				Min 1					
City State		Zip		2					
Phone # (Key Contact)	Stationary	Source ID N	lumber	3					
Process Equipment	Operating N	lode		4					
Control Equipment	Operating N	lode		5					
Describe Emission Point/Location	n			6					
Height above ground level Height relative	ve to observer	Clinometer R	eading	7					
Distance From Observer	Direction F	rom Observ	er	8					
Describe Emissions & Color	Start	Enu		a					
Start	End			5					
visible water vapor Present? If yes, de	w here the plu	rimate distant me w as read	e from the	10					
NO Yes	Was Datam	ainod		11					
Describe Diverse Deschargered				12					
Start	Start			13					
End Sky Conditions:	End			10					
Start	End			14					
Wind Speed	Wind Direc	tion From		15					
Start End Ambient Temperature	Start Wet Bulb T	End emp	RH percent	16					
SOURCE LAYOUT SKETCH: 1 Stack or	Point Being Re	ad 2 Wind D	rection From	17					
3 Observer Location 4 Sun Location	on 5 North	Arrow 6 C	ther Stacks	18					
				19					
				20					
				20					
				21					
				22					
				23					
				24					
				25					
				26					
				27					
				28					
				29					
				30					
				Range o	f Opaci	ty	•	•	Mavimum
				wiinimun					
I have received a copy of these of Print Name:	pacity observ	ations		Print Ob	server's	Name			
Signature:				Observe	r's Sigr	ature			Date
Title	Data			Cortifuin	a Oraci	vization			Observer's Affiliation:
nue -	Date			Certified	g Orgal By:	n∠ation			Date
				Data Redi	uction:				<u>.</u>
Duration of Observation Period (min	utes):			Duration	Require	d by Pe	rmit (mii	nutes):	
Number of Observations:	20%:			Highest S	Sıx–Mir	ute Av	erage O _l	pacity (%	o):
In compliance with six-minute opaci	ty limit? (Yes	or No)		Highest	18-Cons	ecutive	-Minute	e Averag	ge Opacity (%)(engines and turbines only)
			Avera	ige Opaci	ty Sum	nary:			
Set Number	Ti	ne		Sm	Opa m	ity Ave	rage		• · · ·
	Start	End					·		Comments

Section 12. SO₂ Material Balance Calculation

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:



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

The fuel weight percent (wt%) of sulfur is obtained pursuant to Condition 14. The fuel weight percents of carbon and hydrogen are obtained from the fuel refiner.

The volume percent of oxygen in the exhaust (**vol%d**ry**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%odryO2**, exhaust = 3.00%, then enter 3.00, not 0.03.

[18 AAC 50.346(c)]

Section 13. ADEC Notification Form¹⁸

Kenai Gas Field Pad 14-6	AQ0094TVP04
Stationary Source (Facility) Name	Air Quality Permit Number.
Hilcorp Alaska, LLC	_
Company Name	
When did you discover the Excess Emissions/Permit	Deviation?
Date: / / Tin	ne:
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) ordays
(total # of hrs, min, or days, if intermittent then include emissions/deviation)	only the duration of the actual
Reason for notification (Please check only 1 box and	go to the corresponding section.):
Excess Emissions - Complete Section 1 and Cer Note: All "excess emissions" are also "permit deviat events that involve excess emissions.	tify tions." However, use only Section 1 for
Deviation from Permit Conditions - Complete S	Section 2 and Certify

Note: Use only Section 2 for permit deviations that do not involve excess emissions.

Deviation from COBC¹⁹, CO²⁰, or Settlement Agreement - Complete Section 2 and Certify

¹⁸ Revised as of July 22, 2020.

¹⁹ Compliance Order By Consent

²⁰ Compliance Order

Section 1. Excess Emissions

(a)	Was the exceedance	ermittent	or	Continuous
(b)	Cause of Event (Check one that applies applicable.):	s. Complete a s	separate	form for each event, as
	Start Up/Shut Down	Natural Ca	use (we	ather/earthquake/flood)
	Control Equipment Failure	Scheduled	Mainter	nance/Equipment Adjustments
	Bad fuel/coal/gas	Upset Con	dition	
	Other			
$\langle \rangle$				

(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 (EU) Involved:

Identify the emissions units involved in the event, using the same identification number and name <u>as in the permit</u>. 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 all that apply and provide the value requested, if any):

Opacity	_%
---------	----

Control Equipment Down

Emission Limit Exceeded

Uventing (gas/scf) Fugitive Emissions

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	
Do you intend to assert the affirmative defense of 18 AAC 50.235?	YES	

Certify Report (go to end of form)

□NO □NO

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 (EU) Involved:

Identify the emissions units involved in the event, using the same identification number and name <u>as in the permit</u>. List the corresponding permit condition 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. Attach supporting information if necessary.

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 72.)

Submit this report 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-conditions-iii-and-iv-submission-instructions/.

If submitted online, report must be submitted by an authorized E-signer for the stationary source (according to Condition 72).

[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	l in 40 C.F.I	R. 60.7, Sub	part A-Gei	neral Provis	ions]		
Pollutant (Circle One):	SO_2	NO_X	TRS	H_2S	CO	Opacity	
Reporting period dates:	From				_ to		
Company: Emission Limitation: _							
Address:							
Monitor Manufacturer:							
Model No.:							
Date of Latest CMS Cer	tification	or Audit					
Process Unit(s) Descript	tion:						
Total source operating t	ime in rej	porting pe	riod ¹ :				
Emission Data Summa	nry ¹				CMS	Performance Summary ¹	
1. Duration of excess e	missions	in reporti	ng period	due to:	1. CN	AS downtime in reporting period due to:	
a. Startup/shutdown					a. N	Monitor equipment malfunctions	
b. Control equipment	problems				b. 1	Non-Monitor equipment malfunctions	
c. Process problems					c. (Quality assurance calibration	
d. Other known cause	s	•••••			d. (Other known causes	
e. Unknown causes					e. l	Jnknown causes	
2. Total duration of exc	ess emiss	sions			2. To	tal CMS Downtime	
3. Total duration of exc	ess emis	sions x (1	00) / [To	otal	3. [T	otal CMS Downtime] x (100) / [Total source	
source operating time].				<u>%</u> 2	opera	ting time]	_ % ²
			(F		cord all t	imes in hours	
¹ For opacity, recor ² For the reporting j time or the total C form and the exce	rd all time period: If CMS down rss emissi	the total ntime is 5 on report	duration percent describe	of excess or greater d in 40 C	emissio r of the to .F.R. 60.	ns is 1 percent or greater of the total operating otal operating time, both the summary report 7(c) shall be submitted.	

I certify that the information contained in this report is true, accurate, and complete.

Name: _____

Signature: _____ *Date:* _____

Title: