DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ0265TVP04 Issue Date: PUBLIC COMMENT - July 10, 2024
Expiration Date: FIVE YEARS

The Alaska Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the Permittee, **Hilcorp North Slope, LLC**, for the operation of the **Crude Oil Topping Unit**.

The Crude Oil Topping Unit (COTU), Prudhoe Bay Operations Center (PBOC), and Main Construction Camp (MCC) are considered one stationary source for purposes of determining classification under 18 AAC 50.302, 18 AAC 50.326(a), and AS 46.14.130(b) (i.e., Title I and Title V permitting). The emissions units at PBOC and MCC currently operate under Operating Permit No. AQ0274TVP02.

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

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

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

Upon effective date of this permit, Operating Permit No. AQ0265TVP03, including all revisions, expires.

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

James R. Plosay, Manager
Air Permits Program

Table of Contents

Abbreviations and Acronyms

AAC.....Alaska Administrative Code
ADEC .....Alaska Department of Environmental Conservation
AS .....Alaska Statutes
ASTM .....American Society for Testing and Materials
BACT .....best available control technology
bbls .....U.S. petroleum barrels
bhp .....brake horsepower
CAA or The Act .Clean Air Act
CDX.....Central Data Exchange
CEDRI .....Compliance and Emissions Data Reporting Interface
CFR .....Code of Federal Regulations
CI .....compression ignition
CMS.....continuous monitoring system
CO .....carbon monoxide
dscf .....dry standard cubic foot
EPA .....US Environmental Protection Agency
EU.....emissions unit
gph .....gallons per hour
gr/dscf.....grain per dry standard cubic foot (1 pound = 7000 grains)
HAPs .....hazardous air pollutants [as defined in AS 46.14.990]
hp .....horsepower
ICE.....internal combustion engine
ID.....emissions unit identification number
kPa .....kiloPascals
kW .....kilowatts
LAER.....lowest achievable emission rate
LHV.....lower heating value
MACT .....maximum achievable control technology [as defined in 40 CFR 63]
MMBtu/hr.....million British thermal units per hour
MMscf .....million standard cubic feet
MR&R.....monitoring, recordkeeping, and reporting
NAICS.....North American Industrial Classification System
NESHAP .....National Emission Standards for Hazardous Air Pollutants [as contained in 40 CFR 61 and 63]
NH_3.....ammonia
NOx.....nitrogen oxides
NSPS .....New Source Performance Standards [as contained in 40 CFR 60]
O_2 .....oxygen
PAL .....plantwide applicability limitation
Pb .....lead
$PM_{2.5}$.....particulate matter less than or equal to a nominal 2.5 microns in diameter
PM_{10} .....particulate matter less than or equal to a nominal 10 microns in diameter
ppm .....parts per million
ppmv, ppmvd .....parts per million by volume on a dry basis
PSD .....prevention of significant deterioration
psia .....pounds per square inch (absolute)
PTE .....potential to emit
RICE .....reciprocating internal combustion engine
scf.....standard cubic feet
SIC. .....Standard Industrial Classification
SIP.....State Implementation Plan
SO_2 .....sulfur dioxide
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 North Slope, LLC 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503	
Stationary Source Name:		Crude Oil Topping Unit	
Location:		70º 15´ 17.96" North; 148º 20´ 49.83" West	
Physical Address:		Prudhoe Bay North Slope, approx. 2 mi. NNE of Deadhorse, AK Prudhoe Bay, AK	
Owners:		Hilcorp North Slope, LLC 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503	ConocoPhillips Alaska, Inc. 700 G Street (zip 99501) P.O. Box 100360 Anchorage, AK 99510-0360
		ExxonMobil Alaska Production, Inc. P.O. Box 196601 Anchorage, AK 99519-6601	Chevron USA, Inc. 1029 West 3rd Ave., Suite 150 Anchorage, AK 99501-1972
Operator:		Hilcorp North Slope, LLC 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503	
Permittee's Responsible Official:		Keith Elliott, Asset Team Lead 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503	
Designated Agent:		CT Corporation Systems 9360 Glacier Hwy, Suite 202 Juneau, AK 99801	
Stationary Source and Building Contact:		Emilie Niedermeyer, Environmental Specialist 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503 (907) 564-4332 emilie.niedermeyer@hilcorp.com	
Fee Contact:		Accounts Payable PO Box 61529 Houston, TX 77208 (713) 209-2400	
Permit Contact:		Emilie Niedermeyer, Environmental Specialist 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503 (907) 564-4332 emilie.niedermeyer@hilcorp.com	
Process Description:	SIC Code	1311 - Crude Petroleum and Natural Gas	
	NAICS Code:	211120 - Crude Petroleum Extraction	

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

Section 2. Emissions Unit Inventory and Description

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

Table A - Emissions Unit Inventory

EU ID	Emissions Unit Name	Emissions Unit Description	Fuel Type	Rating/Size	Emission Controls	Installation or Construction Date
F1	Overhead Gas Flare	McGill, air-assist	Gaseous Fuel	250,000 scf/day	None	1969 [1]
F2	Emergency Flare	McGill	Fuel Gas	9,000 scf/day (pilot/purge)	None	1969
TK1	83-F-1 Storage Tank	Residual Crude & Naphtha Storage	-	1,500 bbls (63,000 gallons)	Flare (EU ID F1)	1986
H1	Heater	Econotherm Crude Heater	Fuel Gas	22.7 MMBtu/hr (heat input; LHV)	None	1969
H2	Heater	Radco Crude Heater	Fuel Gas	22.7 MMBtu/hr (heat input; LHV)	None	1975
H4	Heater	Broach Glycol Heater	Fuel Gas	7.5 MMBtu/hr (heat input; LHV)	None	Pre-1975 [2]
E1	AC344 Standby Air Compressor	Deutz F3L912D	Liquid Fuel	51 hp	None	Pre-2005 [3]

Table Notes:

[1] The flare was modified in 1975.

[2] Estimated; actual date unknown.

[3] Estimated construction date; actual date unknown.

[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 E1, F1, F2, H1, H2, and H4 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 H1, H2, and H4, burn only gas as fuel.

a. In each operating report under Condition 69 indicate whether each of these emissions units burned only gas during the period covered by the report.

b. Report under Condition 68 if any fuel other than gas is burned in any of these emissions units.

1.2. For EU ID E1, as long as actual emissions from the emissions unit are less than the significant emissions thresholds listed in 18 AAC 50.326(e)[1] during any consecutive 12-month period, monitoring shall consist of an annual compliance certification under Condition 70 with the visible emissions standard based on reasonable inquiry. The Permittee shall report in the operating report under Condition 69 if EU ID E1 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.

1.3. For EU ID F2, 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)]

1.4. For EU ID F1, monitor, record, and report in accordance with Conditions 28.1.b through 28.1.d.

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

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

Liquid Fuel-Burning Equipment

2. Visible Emissions Monitoring. When required by Condition 1.2, or in the event of replacement[2] during the permit term, the Permittee shall observe the exhaust of EU ID E1 for visible emissions using the Method 9 Plan under Condition 2.2.

[1] EU ID E1 has actual annual emissions less than the significant emissions thresholds in 18 AAC 50.326(e) as long as the operating time is 2,400 hours or less in any consecutive 12-month period.
[2] "*Replacement*," as defined in 40 CFR 51.166(b)(32).

2.1. The Permittee may, for each unit, elect to continue the visible emissions monitoring schedule specified in Conditions 2.2.b through 2.2.e that remains in effect from a previous permit.

2.2. **Method 9 Plan.** For all observations in this plan, observe emissions unit exhaust, following 40 CFR 60, Appendix A-4, Method 9 for 18 minutes to obtain 72 consecutive 15-second opacity observations.[3]

a. First Method 9 Observation. Except as provided in Condition 2.1, observe the exhaust of EU ID E1 according to the following criteria:

(i) For any unit replaced, observe exhaust within 60 days of the newly installed emissions unit becoming fully operational.[4] Except as provided in Condition 2.2.e, after the first Method 9 observation:

(A) For EU ID E1 comply with Condition 1.2.

(ii) For EU ID E1, observe the exhaust of the emissions unit within 30 days after the end of the calendar month during which monitoring was triggered under Condition 1.2; or for an emissions unit with intermittent operations, within the first 30 days during the unit's next scheduled operation.

b. Monthly Method 9 Observations. After the first Method 9 observation conducted under Condition 2.2.a, perform observations at least once in each calendar month that the emissions unit operates.

c. Semiannual Method 9 Observations. After at least three monthly observations under Condition 2.2.b, unless a six-consecutive-minute average opacity is greater than 15 percent and one or more individual observations are greater than 20 percent, perform semiannual observations

(i) no later than seven months, but not earlier than five months, after the preceding observation; or

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

d. Annual Method 9 Observations. After at least two semiannual observations under Condition 2.2.c, unless a six-consecutive-minute average opacity is greater than 15 percent and one or more individual observations are greater than 20 percent, perform annual observations

(i) no later than 12 months, but not earlier than 10 months, after the preceding observation; or

[3] Visible emissions observations are not required during emergency operations.
[4] "*Fully operational*" means upon completion of all functionality checks and commissioning after unit installation. "*Installation*" is complete when the unit is ready for functionality checks to begin.

(ii) for an emissions unit with intermittent operations, during the next scheduled operation immediately following 14 months after the preceding observation.

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

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

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

3.1. For all Method 9 observations,

a. the observer shall record the following:

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

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

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

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

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

b. To determine the six-consecutive-minute average opacity,

(i) divide the observations recorded on the record sheet into sets of 24 consecutive observations;

(ii) sets need not be consecutive in time and in no case shall two sets overlap;

(iii) for each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24; and

(iv) record the average opacity on the sheet.

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

3.2. The records required by Condition 3.1 may be kept in electronic format.

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

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

4.1. In the first operating report required in Condition 69 under this permit term, the Permittee shall state the intention to either continue the visible emissions monitoring schedule in effect from the previous permit or reset the visible emissions monitoring schedule.

4.2. Include in each operating report required under Condition 69 for the period covered by the report:

a. for all Method 9 Plan observations:

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

(ii) a summary to include:

(A) number of days observations were made;

(B) highest six-consecutive- and 18-consecutive-minute average opacities observed; and

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

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

4.3. Report under Condition 68:

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 events[5] on EU ID F2 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 F2 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. the 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.

5.5. Include the following in the operating report required by Condition 69 for the period covered by that report:

a. copies of the records required by Condition 5.2; and

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 68

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] 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.

5.7. If no flare events are monitored during a certification period, the Permittee shall certify compliance under Condition 70 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 PM Emissions. The Permittee shall not cause or allow particulate matter emitted from EU IDs E1, F1, F2, H1, H2, and H4 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 H1, H2, and H4, the Permittee shall comply with Conditions 1.1, 1.1.a, and 1.1.b.

6.2. For EU ID E1, as long as actual emissions from the emissions unit are less than the significant emissions thresholds listed in 18 AAC 50.326(e)[6] during any consecutive 12-month period, monitoring shall consist of an annual compliance certification under Condition 70 for the particulate matter emissions standard based on reasonable inquiry. The Permittee shall report in the operating report under Condition 69 if EU ID E1 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.

6.3. For EU ID F2, 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)]

6.4. For EU ID F1, the Permittee shall comply with Condition 1.4.

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

PM MR&R

Liquid Fuel-Burning Engines

7. PM Monitoring. The Permittee shall conduct source tests on EU ID E1 to determine the concentration of PM in the exhaust of each emissions unit as follows:

7.1. If the result of any Method 9 observation conducted under Condition 2.2 for EU ID E1 is greater than the criteria of Condition 7.2.a or Condition 7.2.b, the Permittee shall, within six months of that Method 9 observation, either:

[6] EU ID E1 has actual annual emissions less than the significant emissions thresholds in 18 AAC 50.326(e) as long as the operating time is 2,400 hours or less in any consecutive 12-month period.

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 in 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 Condition 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 69, 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 68:

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)]

Sulfur Compound Emissions Standard

10. Sulfur Compound Emissions. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EU IDs E1, F1, F2, H1, H2, and H4 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

North Slope Liquid Fuel (EU ID E1)

11. Sulfur Compound Emissions MR&R. For liquid fuel from a North Slope topping plant, the Permittee shall comply with the following:

11.1. Obtain from the topping plant the results of a monthly fuel sulfur analysis;

11.2. Include in the operating report required by Condition 69 a list of the sulfur content measured for each month covered by the report; and

11.3. Report under Condition 68 if the sulfur content for any month exceeds 0.75 percent by weight ($wt\%S_{fuel}$).

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

Fuel Oil[7] (EU ID E1)

12. Sulfur Compound Emissions Monitoring and Recordkeeping. The Permittee shall monitor and keep records, as follows for liquid fuel from a third-party supplier:

12.1. Comply with either Condition 12.1.a or Condition 12.1.b:

a. For each shipment of fuel:

(i) If the fuel grade requires a sulfur content 0.5 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 ID E1 at least monthly.

12.2. Fuel testing under Condition 12.1.a or Condition 12.1.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).

12.3. 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 SO_2 emissions in parts per million (ppm) using either the SO_2 material balance calculation in Section 12 or Method 19 of 40 CFR 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a)(3).

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

13. Sulfur Compound Emissions Reporting. The Permittee shall report as follows for liquid fuel from a third-party supplier:

13.1. If SO_2 emissions calculated under Condition 12.3 exceed 500 ppm, the Permittee shall report in accordance with Condition 68. When reporting under this condition, include the calculation under Condition 12.3.

13.2. The Permittee shall include in the operating report required by Condition 69 for each month covered by the report:

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

[7] *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.

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 12.1.a or Condition 12.1.b and documentation of the method(s) used to complete the analyses; and

d. for any fuel received with a sulfur content greater than 0.75 wt%S_{fuel}, the SO_2 emissions in ppm calculated under Condition 12.3.

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

Fuel Gas (EU IDs F1, F2, H1, H2, and H4)

14. Sulfur Compound Monitoring. The Permittee shall analyze a representative sample of the fuel semiannually and upon a change in the supply of fuel to determine the H_2S content of the natural gas and refinery fuel gas 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). The Permittee may use the continuous monitoring system under Condition 29.2 for refinery fuel gas.

15. Sulfur Compound Recordkeeping. The Permittee shall keep records of the H_2S content analysis required under Condition 14.

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

16.1. Report as excess emissions, in accordance with Condition 68, whenever the fuel combusted causes sulfur compound emissions to exceed the standard of Condition 10.

16.2. Include copies of the records required by Condition 15 with the operating report required by Condition 69 for the period covered by the report. Report the H_2S concentration(s) in ppmv.

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

Insignificant Emissions Units

17. For emissions units at the stationary source that are insignificant as defined in 18 AAC 50.326(d) - (i) that are not listed in this permit, the following apply:

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

[18 AAC 50.055(a)(1)]

17.2. **Particulate Matter Standard**: The Permittee shall not cause or allow particulate matter emitted from an industrial process or fuel-burning equipment to exceed

0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.055(b)(1)]

17.3. **Sulfur Standard**: The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from an industrial process or fuel-burning equipment, to exceed 500 ppm averaged over three hours.

[18 AAC 50.055(c)]

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

a. Submit the compliance certifications of Condition 70 based on reasonable inquiry;

b. Comply with the requirements of Condition 51; and

c. Report in the operating report required by Condition 69 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 17.1, 17.2, and 17.3.

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

Section 4. Federal Requirements

40 CFR Part 60 New Source Performance Standards

Subpart A

18. New Source Performance Standards (NSPS) Subpart A Notification. Unless exempted by a specific subpart, for any affected facility[8] or existing facility[9] regulated under NSPS requirements in 40 CFR 60, the Permittee shall furnish the Administrator written notification or, if acceptable to both the Administrator[10] and the Permittee, electronic notification, as follows:

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

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

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

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

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

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

a. information describing the precise nature of the change,

b. present and proposed emission control systems,

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

d. the expected completion date of the change.

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

18.4. A notification of any proposed replacement of components of an existing facility, for which the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced, and including the following information:

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

[9] *Existing facility* means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in 40 CFR 60, 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.

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

[40 CFR 60.15(d), Subpart A]

a. the name and address of owner or operator,

b. the location of the existing facility,

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

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

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

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

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

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

19. NSPS Subpart A Startup, Shutdown, & Malfunction Requirements. Maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of any of EU IDs F1 and TK1, any malfunction of the air-pollution control equipment, or any periods during which a continuous monitoring system or monitoring device for any of EU IDs F1 and TK1 is inoperative.

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

20. NSPS Subpart A Excess Emissions and Monitoring Systems Performance Report. Submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or summary report form (see Condition 21) to the Administrator semiannually, except when the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:

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

20.1. The magnitude of excess emissions computed in accordance with Condition 27.6, any conversion factors used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period.

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

20.2. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of EU ID F1, the nature and cause of any malfunction (if known), and the corrective action taken or preventative measures adopted.

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

20.3. 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]

20.4. 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]

21. NSPS Subpart A Summary Report Form. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 (see Attachment 1) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored for EU ID F1.

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

21.1. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in Condition 20 need not be submitted unless requested by the Administrator.

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

21.2. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in Condition 20 shall both be submitted.

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

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

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

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

[18 AAC 50.040(a)(1)]

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

[40 CFR 60.8(a), Subpart A]

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

[40 CFR 60.8(b), Subpart A]

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

[40 CFR 60.8(c), Subpart A]

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

[40 CFR 60.8(d), Subpart A]

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

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

b. Safe sampling platform(s),

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

d. Utilities for sampling and testing equipment.

[40 CFR 60.8(e), Subpart A]

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

[40 CFR 60.8(f), Subpart A]

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

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

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

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

[40 CFR 60.8(g), Subpart A]

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

[40 CFR 60.8(h), Subpart A]

23.9. Whenever the use of multiple calibration gases is required by a test method, performance specification, or quality assurance procedure in a 40 CFR 60

standard or appendix, Method 205 of 40 CFR part 51, Appendix M, "Verification of Gas Dilution Systems for Field Instrument Calibrations," may be used.

[40 CFR 60.8(i), Subpart A]

24. NSPS Subpart A Good Air Pollution Control Practice. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate EU IDs F1 and TK1 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 EU IDs F1 and TK1.

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

25. NSPS Subpart A Credible Evidence. For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of the standards set forth in Conditions 29.1 and 30.1, 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 F1 and TK1 would have been in compliance with applicable requirements of 40 CFR Part 60 if the appropriate performance or compliance test or procedure had been performed.

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

26. NSPS Subpart A Concealment of Emissions. The Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of a standard set forth in Conditions 29.1 and 30.1. 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]

27. NSPS Subpart A Monitoring. For the Continuous Monitoring System (CMS) required under Condition 29.2:

[18 AAC 50.040(a)(1)]
[40 CFR 60.13(a) Subpart A]

27.1. The CMS shall be installed and operational prior to conducting performance tests under Condition 23. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.

[40 CFR 60.13(b), Subpart A]

27.2. Conduct a performance evaluation of the continuous emission monitoring system (CEMS) during any performance test required under Condition 23 or within 30 days thereafter in accordance with the applicable performance specification in

Appendix B of 40 CFR 60, Conduct CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.

[40 CFR 60.13(c), Subpart A]

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

[40 CFR 60.13(c)(2), Subpart A]

27.3. Check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once each operating day in accordance with a written procedure. The zero and span must, at a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification[11] in Appendix B of 40 CFR 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

[40 CFR 60.13(d)(1), Subpart A]

27.4. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under Condition 27.3, the CMS shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

[40 CFR 60.13(e), Subpart A]

a. The CMS referenced by Condition 27.2 for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

[40 CFR 60.13(e)(2), Subpart A]

27.5. The CMS shall be installed such that representative measurements of emissions or process parameters from the affected facility (EU ID F1) are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used.

[40 CFR 60.13(f), Subpart A]

27.6. Reduce data in accordance with the following:

a. Reduce all CMS data to 1-hour averages for time periods as defined in 40 CFR 60.2.

[40 CFR 60.13(h)(1), Subpart A]

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

[40 CFR 60.13(h)(2), Subpart A]

[11] The applicable performance specification (PS) is PS 7. In accordance with PS 7, the CEMS calibration must not drift or deviate from the reference value of the calibration gas or reference source by more than 5 percent of the established span value for 6 out of 7 test days (e.g., the established span value is 300 ppm for Subpart J fuel gas combustion devices).

(i) Except as provided under Condition 27.6.b(iii), for a full operating hour (any clock hour with 60 minutes of unit operation), at least four valid data points are required to calculate the hourly average, i.e., one data point in each of the 15-minute quadrants of the hour.

(ii) Except as provided under Condition 27.6.b(iii), for a partial operating hour (any clock hour with less than 60 minutes of unit operation), at least one valid data point in each 15-minute quadrant of the hour in which the unit operates is required to calculate the hourly average.

(iii) For any operating hour in which required maintenance or quality-assurance activities are performed:

[40 CFR 60.13(h)(2)(i) through (iii), Subpart A]

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

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

[40 CFR 60.13(h)(2)(iii)(A) & (B), Subpart A]

(iv) If a daily calibration error check is failed during any operating hour, all data for that hour shall be invalidated, unless a subsequent calibration error test is passed in the same hour and the requirements of Condition 27.6.b(iii) are met, based solely on valid data recorded after the successful calibration.

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

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

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

[40 CFR 60.13(h)(2)(iv) through (vi) & (ix), Subpart A]

c. All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in the applicable subpart. After conversion into units of the standard, the data may be rounded to the same number of significant digits used in the applicable subpart to specify the emission limit.

[40 CFR 60.13(h)(3), Subpart A]

28. NSPS Subpart A General Control Device Requirements. For EU ID F1, the Permittee shall comply with the following:

[18 AAC 50.040(a)(1), 50.040(j)(4), & 50.326(j)]

28.1. Flares shall be designed for and operated with no visible emissions as determined by the methods specified in Condition 28.1.b(ii), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

[40 CFR 60.18(c)(1), Subpart A]
[40 CFR 71.6(a)(1)]

a. The opacity standards set forth in Condition 28.1 apply at all times except during periods of startup, shutdown, and malfunction.

[40 CFR 60.11(c), Subpart A]

b. **Monitoring**. The Permittee shall observe EU ID F1 for at least 5 consecutive minutes during daylight hours at least once in every calendar month EU ID F1 operates, other than December.

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

(i) Observations may be made via remote video camera monitoring from the control room if an operator cannot see the flare through a window or does not go outside to make direct observations.

[40 CFR 71.6(c)(6)]

(ii) If visible emissions are observed at any time during EU ID F1 normal operations, Method 22 of Appendix A to 40 CFR 60 shall be used to determine the compliance of flares with the visible emission provisions of Condition 28.1. The observation period is 2 hours and shall be used according to Method 22. If visible emissions are noted for a total of more than 5 minutes during the Method 22 observation:

[40 CFR 60.18(f)(1), Subpart A]

(A) Initiate corrective actions to eliminate visible emissions from EU ID F1 within 24 hours of the Method 22 observation; and

(B) After completing the corrective actions, conduct another 2-hour Method 22 observation.

(iii) If visible emissions are noted during the observations of Condition 28.1.b, observe EU ID F1 following 40 CFR 60 Appendix A, Method 9 for 18 minutes to obtain 72 consecutive 15-second opacity observations. The Method 9 readings must be started as soon as possible, but within 24 hours of the observation under Condition 28.1.b to assess compliance with Condition 1. The 24-hour clock is stopped only while corrective actions are occurring.

[40 CFR 71.6(c)(6)]

c. **Recordkeeping**.

(i) For each observation required by Conditions 28.1.b, 28.1.b(ii), and 28.1.b(ii)(B), record the following information in a written log:

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

(A) From Table A, the ID of the emissions unit observed;

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

(C) For observations conducted under

(1) Condition 28.1.b, whether visible emissions are present or absent, or

(2) Conditions 28.1.b(ii) and 28.1.b(ii)(B), the accumulated time visible emissions are present;

(D) A description of the background to the flare during the observation;

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

(F) A description of any corrective actions taken to reduce visible emissions.

(ii) For each observation required by Condition 28.1.b(iii),

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

(A) The observer shall record as specified in Condition 3.1.a.

(B) Six-minute average opacities shall be determined as specified in Condition 3.1.b.

(C) Calculate and record the highest 6-minute average opacity.

d. **Reporting**. For EU ID F1, the Permittee shall report as follows:

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

(i) Report in accordance with Condition 68:

[40 CFR 71.6(c)(6)]

(A) For failure to conduct monitoring or recordkeeping required under Conditions 28.1.b and 28.1.c.

(B) Any time the limit in Condition 28.1 is exceeded, in accordance with Condition 28.1.a.

(C) Any time the limit in Condition 1 is exceeded.

(ii) Submit with the operating report required in Condition 69 copies of the records required under Conditions 28.1.c(i) and 28.1.c(ii).

[40 CFR 71.6(c)(6)]

28.2. Flares shall be operated with a flame present at all times, as determined by the methods specified in Condition 28.2.a.

[40 CFR 60.18(c)(2), Subpart A]
[40 CFR 71.6(a)(1)]

a. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

[40 CFR 60.18(f)(2), Subpart A]
[40 CFR 71.6(a)(3)(i)]

28.3. The Permittee shall adhere to the heat content specifications in Condition 28.3.a and the maximum tip velocity specifications in Condition 28.3.b.

[40 CFR 60.18(c)(3), Subpart A]
[40 CFR 71.6(a)(1)]

a. Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater. The net heating value of the gas being combusted shall be determined by the methods specified in Condition 28.6.

[40 CFR 60.18(c)(3)(ii), Subpart A]

b. Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, V_{max}, as determined by the methods specified in Conditions 28.7 and 28.8.

[40 CFR 60.18(c)(5), Subpart A]

c. The Permittee shall maintain records of:

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

(i) The net heating value of the gas vented to EU ID F1,

(ii) V_{max} for EU ID F1, and

(iii) The actual exit velocity for EU ID F1.

d. The Permittee shall report in accordance with Condition 68:

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

(i) any time the net heating value of the gas combusted by EU ID F1 is less than 300 Btu/scf , and

(ii) any time the actual exit velocity for EU ID F1 is equal to or greater than V_{max} for EU ID F1.

28.4. Owners or operators of flares used to comply with the provisions of NSPS Subpart A shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.

[40 CFR 60.18(d), Subpart A]

28.5. Flares used to comply with provisions of NSPS Subpart A shall be operated at all times when emissions may be vented to them.

[40 CFR 60.18(e), Subpart A]

28.6. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

[40 CFR 60.18(f)(3), Subpart A]
[40 CFR 71.6(a)(3)(i)]

$$H_T = K \sum_{i=1}^{n} C_i H_i$$

Where:

H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;

K = Constant, 1.740×10^{-7} (1/ppm)(g mole/scm)(MJ/kcal) where the standard temperature for (g mole/scm) is 20° C;

C_i = Concentration of sample component *i* in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 or 90 (Reapproved 1994) (Incorporated by reference as specified in 40 CFR 60.17); and

H_i = Net heat of combustion of sample component *i*, kcal/g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in 40 CFR 60.17) if published values are not available or cannot be calculated.

28.7. The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.

[40 CFR 60.18(f)(4), Subpart A]
[40 CFR 71.6(a)(3)(i)]

28.8. The maximum permitted velocity, V_{max}, for air-assisted flares shall be determined by the following equation.

[40 CFR 60.18(f)(6), Subpart A]
[40 CFR 71.6(a)(3)(i)]

$$V_{max} = 8.706 + 0.7084(H_T)$$

Where:

V_{max} = Maximum permitted velocity, m/sec

8.706 = Constant

0.7084 = Constant

H_T = The net heating value as determined in Condition 28.6.

Subpart J

29. NSPS Subpart J Applicability. For EU ID F1, comply with the following applicable requirements of NSPS Subpart J.

[18 AAC 50.040(a)(2)(J), 50.040(j)(4), & 50.326(j)]
[40 CFR 71.6(a)(1)]
[40 CFR 60.100(a), Subpart J]

NSPS Subpart J Standards for Sulfur Oxides

29.1. The Permittee shall not burn in any fuel gas combustion device any fuel gas that contains hydrogen sulfide (H_2S) in excess of 230 mg/dscm (0.10 gr/dscf; 162 ppmv). The combustion in a flare of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions is exempt from this condition.

[40 CFR 60.104(a)(1), Subpart J]
[40 CFR 71.6(a)(1)]

NSPS Subpart J Monitoring

29.2. Continuous monitoring systems shall be installed, calibrated, maintained, and operated by the owner or operator subject to the provisions of NSPS Subpart J as follows:

[40 CFR 60.105(a), Subpart J]
[40 CFR 71.6(a)(3)(i)]

a. For fuel gas combustion devices subject to Condition 29.1, an instrument for continuously monitoring and recording the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

[40 CFR 60.105(a)(4), Subpart J]

(i) The span value for this instrument is 425 mg/dscm H_2S.

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

(iii) The performance evaluations for this H_2S monitor under Condition 27.2 shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

(iv) The owner or operator of a fuel gas combustion device is not required to comply with Condition 29.2.a for fuel gas streams that are exempt under Condition 29.1 and fuel gas streams combusted in a fuel gas combustion device that are inherently low in sulfur content. Fuel gas streams meeting the requirement in Condition 29.2.a(iv)(A) will be considered inherently low in sulfur content. If the composition of a fuel gas stream changes such that it is no longer exempt under Condition 29.1, the owner or operator must begin continuous monitoring under Condition 29.2.a within 15 days of the change.

[40 CFR 60.105(a)(4)(i) through (iv), Subpart J]

(A) Pilot gas for heaters and flares.

[40 CFR 60.105(a)(4)(iv)(A), Subpart J]

29.3. For the purpose of reports under Condition 20, periods of excess emissions that shall be determined and reported are defined as all rolling 3-hour periods during which the average[12] concentration of H_2S as measured by the H_2S continuous monitoring system under Condition 29.2.a exceeds 230 mg/dscm (0.10 gr/dscf; 162 ppmv).

[40 CFR 60.105(e) & 60.105(e)(3)(ii), Subpart J]

NSPS Subpart J Test Methods and Procedures

29.4. In conducting the performance tests required in Condition 23, the owner or operator shall use as reference methods and procedures the test methods in Appendix A of 40 CFR 60 or other methods and procedures as specified in Condition 29.5, except as provided in Condition 23.2.

[40 CFR 60.106(a), Subpart J]

29.5. The owner or operator shall determine compliance with the H_2S standard in Condition 29.1 as follows: Method 11, 15, 15A, or 16 shall be used to determine the H_2S concentration. The gases entering the sampling train should be at about atmospheric pressure. If the pressure in the refinery fuel gas lines is relatively high, a flow control valve may be used to reduce the pressure. If the line pressure is high enough to operate the sampling train without a vacuum pump, the pump may be eliminated from the sampling train. The sample shall be drawn from a point near the centroid of the fuel gas line.

[40 CFR 60.106(e)(1), Subpart J]

[12] All averages shall be determined as the arithmetic average of the applicable 1-hour averages, e.g., the rolling 3-hour average shall be determined as the arithmetic average of three contiguous 1-hour averages.

a. For Method 11, the sampling time and sample volume shall be at least 10 minutes and 0.010 dscm (0.35 dscf). Two samples of equal sampling times shall be taken at about 1-hour intervals. The arithmetic average of these two samples shall constitute a run. For most fuel gases, sampling times exceeding 20 minutes may result in depletion of the collection solution, although fuel gases containing low concentrations of H_2S may necessitate sampling for longer periods of time.

b. For Method 15 or 16, at least three injects over a 1-hour period shall constitute a run.

c. For Method 15A, a 1-hour sample shall constitute a run.

[40 CFR 60.106(e)(1)(i) through (iii), Subpart J]

NSPS Subpart J Recordkeeping Requirements

29.6. For each fuel gas stream combusted in a fuel gas combustion device subject to Condition 29.1, if an owner or operator determines that the exemption listed in Condition 29.2.a(iv)(A) applies to that fuel gas stream, the owner or operator shall maintain records of the specific exemption chosen for each fuel gas stream.

[40 CFR 60.107(e), Subpart J]
[40 CFR 71.6(a)(3)(ii)]

Subpart Kb

30. NSPS Subpart Kb Applicability. For EU ID TK1, the Permittee shall comply with the following applicable requirements of NSPS Subpart Kb.

[18 AAC 50.040(a)(2)(M), 50.040(j)(4), & 50.326(j)]
[40 CFR 71.6(a)(1)]
[40 CFR 60.110b(a), Subpart Kb]

NSPS Subpart Kb Standard for VOC and Monitoring

30.1. Equip EU ID TK1 with a closed vent system and control device meeting the following specifications:

[40 CFR 60.112b(a) & (a)(3), Subpart Kb]

a. The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in Condition 30.1.a(i).

[40 CFR 60.112b(a)(3)(i), Subpart Kb]

(i) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:

[40 CFR 60.485(b)(1), Subpart VV]

(A) Zero air (less than 10 ppm of hydrocarbon in air); and

(B) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

[40 CFR 60.485(b)(1)(i) & (ii), Subpart VV]

b. The control device (EU ID F1) shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. EU ID F1 shall meet the specifications described in the general control device requirements (Conditions 28.1, 28.2, 28.3.a, 28.3.b, 28.4, and 28.5) of the General Provisions.

[40 CFR 60.112b(a)(3)(ii), Subpart Kb]

30.2. Conduct annual VOC leak checks of the closed vent system by visible, olfactory, and audible inspections and conduct Method 21 monitoring in accordance with Condition 30.1.a(i) whenever an annual leak check indicates leakage.

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

NSPS Subpart Kb Testing and Procedures

30.3. The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in Condition 30.1 shall meet the requirements as specified in the general control device requirements, Conditions 28.1.b(ii), 28.2.a, and 28.5 through 28.8.

[40 CFR 60.113b(d), Subpart Kb]

NSPS Subpart Kb Reporting and Recordkeeping

30.4. The owner or operator of each storage vessel as specified in Condition 30.1 shall keep records and furnish reports as follows:

[40 CFR 60.115b, Subpart Kb]

a. After installing a closed vent system and flare to comply with Condition 30.1, the owner or operator shall meet the following requirements.

[40 CFR 60.115b(d), Subpart Kb]

(i) Records shall be kept of all periods of operation during which the flare pilot flame is absent.

(ii) Semiannual reports of all periods recorded under Condition 30.4.a(i) in which the pilot flame was absent shall be furnished to the Administrator.

[40 CFR 60.115b(d)(2) & (3), Subpart Kb]

30.5. Keep readily accessible records showing the dimension of EU ID TK1 and an analysis showing the capacity of EU ID TK1. These records will be kept for the life of the source.

[40 CFR 60.116b(a) & (b), Subpart Kb]

40 CFR Part 61 National Emission Standards for Hazardous Air Pollutants

Subparts A & M

31. **Asbestos NESHAP**. Comply with the applicable requirements set forth in 40 CFR 61.145 and 61.150 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]

Subpart FF

32. The Permittee shall comply with the following requirements of NESHAP Subpart FF:

[18 AAC 50.040(b)(2)(E), 50.040(j), & 50.326(j)]
[40 CFR 61.340, Subpart FF]

32.1. If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr), then the owner or operator shall:

[40 CFR 61.355(a)(5), Subpart FF]

a. Comply with the recordkeeping requirements in Conditions 32.2 and 32.3 and reporting requirements in Condition 32.4; and

b. Repeat the determination of total annual benzene quantity from facility waste whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more.

[40 CFR 61.355(a)(5)(i) & (ii), Subpart FF]

32.2. Each record shall be maintained in a readily accessible location at the facility site for a period not less than five years from the date the information is recorded unless otherwise specified.

[40 CFR 61.356(a), Subpart FF]

32.3. Each owner or operator shall maintain records that identify each waste stream at the facility subject to NESHAP Subpart FF, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with NESHAP Subpart FF. In addition the owner or operator shall maintain the following records:

[40 CFR 61.356(b), Subpart FF]

a. For each waste stream not controlled for benzene emissions in accordance with NESHAP Subpart FF, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

[40 CFR 61.356(b)(1), Subpart FF]

32.4. If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr), then the owner or operator shall submit to the Administrator a report that updates the information listed in 40 CFR 61.357(a)(1) through (a)(3) whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more.

[40 CFR 61.357(b), Subpart FF]

40 CFR Part 63 National Emission Standards for Hazardous Air Pollutants

Subpart A

33. For EU ID E1, 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(c)(1), 50.040(j), & 50.326(j)]
[40 CFR 71.6(a)(1)]
[40 CFR 63.6665 & Table 8, Subpart ZZZZ]

Subpart ZZZZ

34. NESHAP Subpart ZZZZ Applicability. For EU ID E1, 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 Management Practices

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

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

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

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

34.2. Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in Condition 34.1.a.

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

34.3. 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]

NESHAP Subpart ZZZZ General Requirements

34.4. You must be in compliance with the emission limitations, operating limitations, and other requirements in NESHAP Subpart ZZZZ that apply to you at all times.

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

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

NESHAP Subpart ZZZZ Requirements for Demonstration of Continuous Compliance with Management Practices

34.6. Demonstrate continuous compliance with each requirement in Condition 34.1 by:

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

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

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

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

NESHAP Subpart ZZZZ Reporting Requirements

34.7. Report in the operating report required by Condition 69 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)(iii)]
[40 CFR 63.6640(e), Subpart ZZZZ]

34.8. Report all deviations as defined in NESHAP Subpart ZZZZ in the operating report required by Condition 69.

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

NESHAP Subpart ZZZZ Recordkeeping Requirements

34.9. Keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan.

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

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

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

34.12. 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)(ii)]
[40 CFR 63.6660(a) through (c), Subpart ZZZZ]

40 CFR Part 82 Protection of Stratospheric Ozone

Subparts F, G, & H

35. Subpart F – Recycling and Emissions Reduction. Comply with the applicable standards for recycling and emission reduction of refrigerants in 40 CFR 82 Subpart F. Applicable requirements include 40 CFR 82.154, 82.156, 82.161, and 82.166.

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

36. 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]

37. Subpart H – Halon Emissions Reduction. Comply with the applicable prohibitions in 40 CFR 82.270.

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

NESHAP Applicability Determination Requirements

38. 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)]

38.1. 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]

39. 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)]

40. 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

41. 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)]

42. The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and re-issuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

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

43. 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)]

44. **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]

45. **Assessable Emissions.** For each period from July 1 through the following June 30, the Permittee shall pay to the Department an annual emission fee based on the stationary source's assessable emissions, as determined by the Department under 18 AAC 50.410. The Department will assess fees per ton of each air pollutant that the stationary source emits or has the potential to emit. The quantity for which fees will be assessed is the lesser of the stationary source's

45.1. potential to emit of 154.96 tpy; or

45.2. 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]

46. **Assessable Emission Estimates.** The Permittee shall comply as follows:

46.1. No later than March 31st of each year, the Permittee may submit an estimate of the stationary source's assessable emissions as determined in Condition 45.2. Submit actual emissions estimates in accordance with the submission instructions on the Department's Standard Permit Conditions web page at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-condition-i-submission-instructions/.

46.2. The Permittee shall include with the assessable emissions report all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates.

46.3. If no estimate is submitted on or before March 31st of each year, emission fees for the next fiscal year will be based on the potential to emit in Condition 45.1.

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

47. Good Air Pollution Control Practice (GAPCP). The Permittee shall do the following for EU IDs F2, H1, H2, and H4:

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

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

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

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

48. 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)]

49. 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)]

49.1. 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 49.1.a or to address the results of Department inspections that found potential problems; and

(ii) to prevent future dust problems.

49.2. The Permittee shall report according to Condition 51.

50. 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)]

51. 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)(4) & 50.346(a)]
[40 CFR 71.6(a)(3)]

51.1. **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 51.

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 51; or

(ii) the Department notifies the Permittee that it has found a violation of Condition 51.

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

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

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

c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 51; and

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

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

a. With each operating report under Condition 69, 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 68.

52. Technology-Based Emission Standard. If an unavoidable emergency, malfunction (as defined in 18 AAC 50.235(d)), or non-routine repair (as defined in 18 AAC 50.990(64)), causes emissions in excess of a technology-based emission standard[13] listed in Condition 28.1, 29.1, 30.1, or 35 (refrigerants),

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

52.2. report in accordance with Condition 68; the report must include information on the steps taken to mitigate emissions and corrective measures taken or to be taken.

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

Open Burning Requirements

53. Open Burning. The Permittee shall not conduct open burning at the stationary source, except as allowed by an open burn permit issued to the Permittee by the Department.

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

[13] As defined in 18 AAC 50.990(106), the term "*technology-based emission standard*" means a best available control technology (BACT) standard; a lowest achievable emission rate (LAER) standard; a maximum achievable control technology (MACT) standard established under 40 CFR 63, Subpart B, adopted by reference in 18 AAC 50.040(c); a standard adopted by reference in 18 AAC 50.040(a) or (c); and any other similar standard for which the stringency of the standard is based on determinations of what is technologically feasible, considering relevant factors.

Section 6. General Source Testing and Monitoring Requirements

54. 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)]

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

[18 AAC 50.220(b)]

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

55.2. 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.

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

56.1. 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]

56.2. 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]

56.3. 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]

56.4. 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)]

56.5. 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]

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

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

56.7. 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]

57. 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)]

58. Test Exemption. Compliance with Conditions 60, 61 and 62 is not required for Method 9 Plan (Condition 2.2) observations.

[18 AAC 50.345(a)]

59. 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)]

60. Test Plans. Except as provided in Condition 58, 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 54 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)]

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

62. Test Reports. Except as provided in Condition 58, 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 65. 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)]

63. Particulate Matter Calculations. In source testing for compliance with the particulate matter standards in Conditions 6 and 17.2, the three-hour average is determined using the average of three one-hour test runs.

[18 AAC 50.220(f)]

Section 7. General Recordkeeping and Reporting Requirements

Recordkeeping Requirements

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

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

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

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

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

c. the date(s) analyses were performed;

d. the company or entity that performed the sampling and analyses;

e. the analytical techniques or methods used in the analyses;

f. the results of such analyses; and,

g. the operating conditions that existed at the time of sampling or measurement.

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

Reporting Requirements

65. Certification. The Permittee shall certify any permit application, report, affirmation, or compliance certification submitted to the Department and required under the permit by including the signature of a responsible official for the permitted stationary source following the statement: *"Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete."* Excess emission reports must be certified either upon submittal or with an operating report required for the same reporting period. All other reports and other documents must be certified upon submittal.

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

a. uses a security procedure, as defined in AS 09.80.190, that the Department has approved; and

b. accepts or agrees to be bound by an electronic record executed or adopted with that signature.

[18 AAC 50.345(a) & (j), 50.205, 50.326(j)(3), & 50.346(b)(10)]

66. 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.

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

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

67. 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)]

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

68.1. **Excess Emissions Reporting**. Except as provided in Condition 51, 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 68.1.d.

d. Report all other excess emissions not described in Conditions 68.1.a, 68.1.b, and 68.1.c within 30 days after the end of the month during which the excess emissions occurred or as part of the next routine operating report in Condition 69 for excess emissions that occurred during the period covered by the report, whichever is sooner.

e. If requested by the Department, the Permittee shall provide a more detailed written report to follow up an excess emissions report.

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

68.2. **Permit Deviations Reporting**. For permit deviations that are not "excess emissions," as defined under 18 AAC 50.990:

a. Report according to the required deadline for failure to monitor, as specified in other applicable conditions of this permit (Conditions 4.3.b and 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 69 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)]

68.3. **Reporting Instructions**. When reporting either excess emissions or permit deviations, the Permittee shall report using the Department's online form for all such submittals. The form can be found at the Division of Air Quality's Air Online Services (AOS) system webpage http://dec.alaska.gov/applications/air/airtoolsweb using the Permittee Portal option. Alternatively, upon written Department approval, the Permittee may submit the form contained in Section 13 of this permit. The Permittee must provide all information called for by the form that is used. Submit the report in accordance with the submission instructions on the Department's Standard Permit Conditions webpage found at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-iii-and-iv-submission-instructions/.

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

69. Operating Reports. During the life of this permit[14], the Permittee shall submit to the Department an operating report in accordance with Conditions 65 and 66 by May 15 for the period January 1 to March 31, by August 15 for the period April 1 to June 30, by November 15 for the period July 1 to September 30, and by February 15 for the period October 1 to December 31 of the previous year.

69.1. 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.

69.2. When excess emissions or permit deviations that occurred during the reporting period are not included with the operating report under Condition 69.1, 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

[14] *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

69.3. when excess emissions or permit deviation reports have already been submitted under Condition 68 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.

69.4. The operating report must include, for the period covered by the report, a listing of emissions monitored under Conditions 2.2.e, 7.2, and 28.1.b 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.

69.5. **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)]

70. Annual Compliance Certification. Each year by March 31, compile and submit to the Department an annual compliance certification report according to Condition 66.

70.1. 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.

70.2. **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.

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

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

71. Emission Inventory Reporting. The Permittee shall submit to the Department reports of actual emissions for the previous calendar year, by emissions unit, of CO, NH_3, NOx, PM_{10}, $PM_{2.5}$, SO_2, VOC and lead (Pb) and lead compounds, as follows:

71.1. **Every-year Inventory**. Each year by April 30, if the stationary source's (COTU, PBOC, and MCC combined) potential to emit for the previous calendar year equals or exceeds:

a. 250 tons per year (tpy) of NH_3, PM_{10}, $PM_{2.5}$ or VOC; or

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

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

a. 0.5 tpy of actual Pb; or

b. 1,000 tpy of CO; or

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

71.3. For reporting under Condition 71.2, the Permittee shall report the annual emissions and the required data elements under Condition 71.4 every third year for the previous calendar year as scheduled by the EPA.[15]

71.4. For each emissions unit and the stationary source, include in the report the required data elements[16] contained within the form included in the Emission Inventory Instructions available at the Department's AOS system on the Point Source Emission Inventory webpage at http://dec.alaska.gov/Applications/Air/airtoolsweb/PointSourceEmissionInventory

71.5. Submit the report in accordance with the submission instructions on the Department's Standard Permit Conditions webpage at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-xv-and-xvi-submission-instructions/.

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

[15] 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.).

[16] 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.

72. Consistency of Reporting Methodologies. The Permittee shall report actual emissions to the Department, either upon request or to meet individual permit requirements, in order for the state to meet federal reporting requirements under 40 CFR Part 51, Subpart A.

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

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

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

73.1. **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 69 for the period covered by the report, a copy of any NSPS and NESHAPs reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10. For reports previously submitted to the Department or submitted through CDX/CEDRI, state in the operating report the date and a brief description of each of the reports submitted during the reporting period.

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

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

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

Section 8. Permit Changes and Renewal

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

74.1. 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;

74.2. The information shall be submitted as follows, which is in EPA's order of preference for receiving air permitting documents: (1) to the EPA's CDX and CEDRI online reporting system accessible via cdx.epa.gov, (2) as an email attachment to the EPA's air permits mailbox (R10_Air_Permits@epa.gov), or (3) as a hardcopy by mail (only if absolutely necessary) to the Part 70 Operating Permit Program, US EPA Region 10, Air Permits and Toxics Branch, Mail Stop: 15-H13, 1200 Sixth Avenue, Suite 155, Seattle, WA 98101-3188;

74.3. 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

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

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

75. Emissions Trading. No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 CFR 71.6(a)(8)]

76. 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:

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

76.2. 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;

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

76.4. 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)]

77. Operational Flexibility. CAA Section 502(b)(10)[17] 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.

77.1. For each such change, the notification required by Condition 77 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.

77.2. The permit shield described in 40 CFR 71.6(f) shall not apply to any change made pursuant to Condition 77.

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

78. Permit Renewal. To renew this permit, the Permittee shall submit to the Department[18] 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)]

[17] 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.

[18] Submit permit applications to the Permit Intake Clerk email address at dec.aq.airreports@alaska.gov. If email is unavailable, submit one certified paper copy 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

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

79.1. included and specifically identified in the permit; or

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

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

80. 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

80.1. an enforcement action;

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

80.3. denial of an operating permit renewal application.

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

81. 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)]

82. 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)]

83. 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

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

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

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

83.4. 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)]

84. 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.

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

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

85.2. 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)]

86. 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, the Permittee shall comply with such requirements on a timely basis. The Permittee shall also provide appropriate notification, and apply for a construction permit and/or an operating permit revision, as necessary.

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

Table B - Permit Shields Granted

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
F1	40 CFR 60.102; 60.103; 60.104(a)(2), (b)-(d); 60.105(a)(1)-(2); 60.105(a)(5)-(a)(13), (c), (d), (e)(1)-(2), (4); 60.107(a)-(d); 60.108	Standards and requirements apply to fluid catalytic cracking (FCC) unit catalyst regenerators or Claus sulfur recovery plants. Topping unit does not operate FCC unit catalyst regenerators or Claus sulfur recovery plant.
F1	40 CFR 60.105(a)(3), (e)(3)(i)	In place of the SO_2 monitor in §60.105(a)(3), fuel gas H_2S content is monitored continuously, as provided in §60.105(a)(4).
F1	40 CFR 60.7(a)(1) and (3) 40 CFR 60.115b(d)(1)	Obsolete requirements - completed as required.
F1	40 CFR 60 Subpart Ja	The stationary source commenced construction, reconstruction or modification prior to May 14, 2007.
F1	40 CFR 60.18(c)(4) & (f)(5)	The Overhead Gas flare at the COTU is not steam-assisted or non-assisted. This flare is air assisted.
F2	40 CFR 60.18	This flare is not a control device used to comply with applicable subparts of 40 CFR 60 and 40 CFR 61.
F2	40 CFR 60 Subpart J	This unit does not combust “fuel gas” as defined in the subpart [§60.101(d)] and, therefore, does not meet the definition of a “fuel gas combustion device” outlined in §60.101(g).
F2	40 CFR 64	This unit does not use a control device to achieve compliance with any emission limitation or standard.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
H1, H2, H4	40 CFR 60 Subpart D	Heat input capacity below threshold (250 MMBtu/hr); and unit not classified as a Fossil-Fuel-Fired Steam Generator, as defined in subpart.
H1, H2, H4	40 CFR 60 Subpart Da	Heat input capacity below threshold (250 MMBtu/hr); and unit not classified as an Electric Utility Steam Generating Unit, as defined in subpart.
H1, H2, H4	40 CFR 60 Subpart Db	Heat input capacity below threshold (100 MMBtu/hr); and unit commenced construction prior to effective date of subpart (June 19, 1984).
H1, H2	40 CFR 60 Subpart Dc	This unit commenced construction prior to effective date of subpart (June 9, 1989).
H4	40 CFR 60 Subpart Dc	Heat input capacity below threshold (10 MMBtu/hr).
H1, H2, H4	40 CFR 60 Subpart J	This unit does not combust "fuel gas" as defined in the subpart [§60.101(d)] and, therefore, does not meet the definition of a "fuel gas combustion device" outlined in §60.101(g).
H1, H2, H4	40 CFR 63 Subpart DDDDD	The Crude Oil Topping Unit is not a major source of hazardous air pollutants.
H1, H2, H4	40 CFR 63 Subpart JJJJJJ	This heater is not a boiler as defined in the rule at 40 CFR 63.11237.
H1, H2, H4	40 CFR 64	This unit does not use a control device to achieve compliance with any emission limitation or standard.
E1	40 CFR 60, Subpart IIII	Construction, modification, or reconstruction of the IC engine commenced prior to the applicability date of July 11, 2005.
E1	40 CFR 63.6600, 63.6601, 63.6602, 63.6610, 63.6611; Subpart ZZZZ	Stationary source is not a major source of HAP emissions.
E1	40 CFR 63 Subpart ZZZZ Tables 2a and 2c	There are no requirements in Tables 2a or 2c of Subpart ZZZZ that apply to the engine because it is an existing CI RICE located at an area source of HAP emissions.
E1	40 CFR 63, Subpart ZZZZ, Table 2b	There are no requirements in Table 2b of Subpart ZZZZ that apply to existing stationary CI ICE rated less than or equal to 500 bhp.
E1	40 CFR 63 Subpart ZZZZ Table 2d – CO Emission Limitations	There are no CO emission limits in Table 2d that apply to engines rated less than or equal to 300 hp.
E1	40 CFR 63.6604, Subpart ZZZZ	The requirement to comply with 40 CFR 1090.305 does not apply to existing non-emergency engines with a site rating of less than or equal to 300 hp.
E1	40 CFR 63.6612, Subpart ZZZZ	There are no requirements in either Table 4 or Table 5 of Subpart ZZZZ that apply to the engine because there are no emission limitations that apply to existing non-emergency engines with a site rating of less than or equal to 300 hp located at an area source of HAP emissions per 40 CFR 63.6603 and Table 2d of Subpart ZZZZ.
E1	40 CFR 63.6625(f), 63.6640(f), & 63.6650(h)	This engine is not an emergency engine.
E1	40 CFR 63.6625(g)	This requirement does not apply to non-emergency engines with a site rating of <300 bhp.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
E1	40 CFR 63.6630 & Table 5, Subpart ZZZZ	These requirements apply only to CI RICE subject to emissions or operational limits. There are no emissions or operational limits that apply to the engine.
E1	40 CFR 63.6635, Subpart ZZZZ	These requirements apply only to CI RICE subject to emissions or operational limits. There are no emissions or operational limits that apply to the engine.
E1	40 CFR 63.6645(a), Subpart ZZZZ 40 CFR 63.8(e), (f)(4) & (f)(6), Subpart A 40 CFR 63.9(b) – (e), (g) & (h), Subpart A	Per 40 CFR 63.6645(a)(5), existing CI RICE that are not subject to any numerical emission standards are not subject to the notification requirements of these sections.
E1	40 CFR 63.6645(b) – (f), Subpart ZZZZ	Stationary source is not a major source of HAP emissions.
E1	40 CFR 63.6645(h), Subpart ZZZZ	These requirements apply only to CI RICE subject to emissions or operational limits. There are no emissions or operational limits that apply to the engine.
E1	40 CFR 63.6640(b) & §63.6650(a) - (e), Subpart ZZZZ	Compliance status reporting requirements only apply to CI RICE subject to numerical emissions or operational limits. There are no emissions or operational limits that apply to the engine.
E1	40 CFR 63.6650(g), Subpart ZZZZ	Reporting requirement only applies to "new" or reconstructed stationary RICE which fire landfill gas or digester gas. This engine is fired exclusively on liquid fuel.
E1	40 CFR 63.6655(a) – (d), Subpart ZZZZ	There are no emissions or operating limits that apply to the engine. Additionally, the engine does not fire landfill or digester gas and a CEMS or CPMS is not required.
E1	40 CFR 63.6655(f), Subpart ZZZZ	This engine is not an emergency engine and is not required to limit hours of operation per 40 CFR 63.6640(f).
E1	40 CFR 63.6645(g), Subpart ZZZZ 40 CFR 63.7, Subpart A	There are no performance testing requirements that apply to this engine because there are no emission limits that apply.
TK1	40 CFR 60 Subpart K	Commenced construction after effective date of subpart (6/11/73 - 5/19/78).
TK1	40 CFR 60 Subpart Ka	Commenced construction after 7/23/1984.
TK1	40 CFR 60.113b(c) & 60.115b(c), Subpart Kb	Vessel equipped with a flare control device is exempt from these requirements. [ref. 40 CFR 60.113b(c) & §60.115b(c)] Vapors from this tank are vented directly to, and controlled by, the Overhead Gas Flare (F1).
TK1	40 CFR 60.115b(d)(1), Subpart Kb	One-time requirement – completed as required.
TK1	40 CFR 60.116b(c) & (d), Subpart Kb	Vessel equipped with a closed vent system and control device meeting the specifications of 40 CFR 60.112b is exempt from the monitoring provisions of 40 CFR 60.116b(c) and (d) [ref. 40 CFR 60.116b(g)].
TK1	40 CFR 63 Subpart OO	Provisions only apply to tanks affected by 40 CFR 60, 61, or 63 that specifically reference 40 CFR 63 Subpart OO.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
TK1	40 CFR 63 Subpart SS	Provisions only apply to tanks affected by 40 CFR 60, 61, or 63 that specifically reference 40 CFR 63 Subpart SS.
TK1	40 CFR 64	This unit does not have potential pre-control device emissions of an applicable regulated air pollutant equal to or greater than 100 tpy (criteria pollutants), 10 tpy any hazardous air pollutant (HAP), or 25 tpy all HAP combined.
Stationary Source-Wide	40 CFR 60 Subpart VV 40 CFR 60 Subpart VVa	The stationary source is not in the synthetic organic chemicals manufacturing industry.
Stationary Source-Wide	40 CFR 60 Subpart GGG 40 CFR 60 Subpart GGGa	The Crude Oil Topping Unit is an "existing facility" with respect to Subparts GGG and GGGa having commenced construction prior to January 4, 1983, and having not undergone any reconstruction or modification after that date.
Stationary Source-Wide	40 CFR 60 Subpart NNN	The crude oil distillation unit at the Crude Oil Topping Unit is not part of a process unit that produces any of the chemicals listed in 40 CFR 60.667 as a product, co-product, by-product, or intermediate. The distillation unit produces mixed hydrocarbon streams. Furthermore, the COTU commenced construction prior to December 30, 1983, and has not undergone any reconstruction or modification after that date. Therefore, Subpart NNN does not apply as provided by §60.660.
Stationary Source-Wide	40 CFR 60 Subpart OOOO 40 CFR 60 Subpart OOOOa	The Crude Oil Topping Unit is engaged in distillation of crude oil to produce liquid distillate fuels and is a "petroleum refinery" as defined in 40 CFR 60 Subpart J (§60.101) and Subpart Ja (§60.101a). The COTU is not within the crude oil and natural gas production source category as defined in 40 CFR 60.5430 (Subpart OOOO) and §60.5430a (Subpart OOOOa). Therefore, the crude oil and natural gas production NSPS standards are not relevant to the COTU.
Stationary Source-Wide	40 CFR 61 Subpart J	No process components in benzene service, as defined by subpart (10 percent benzene by weight).
Stationary Source-Wide	40 CFR 61.143 Subpart M	Stationary source roadways are not exposed to asbestos tailings or asbestos containing waste.
Stationary Source-Wide	40 CFR 61.146 Subpart M	Stationary source does not spray apply asbestos containing materials.
Stationary Source-Wide	40 CFR 61.148 Subpart M	Stationary source does not install or reinstall, on any stationary source component, insulation material containing commercial asbestos.
Stationary Source-Wide	40 CFR 61.152 Subpart M	Stationary source does not use air cleaning equipment.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
Stationary Source-Wide	40 CFR 61 Subpart V	Stationary source does not operate equipment in volatile hazardous air pollutant (VHAP) service (i.e., greater than or equal to 10% VHAP by weight).
Stationary Source-Wide	40 CFR 61 Subpart Y	Stationary source does not operate storage vessels in benzene service.
Stationary Source-Wide	40 CFR 61 Subpart BB	Stationary source does not conduct benzene transfer operations.
Stationary Source-Wide	40 CFR 61.342 through 61.354 Subpart FF	The total annual benzene quantity from stationary source waste is less than 1.0 megagram per year (Mg/yr) as stated in ARCO Alaska, Inc. letters dated January 4, 1991 and April 5, 1993. Only the test methods and procedures of §61.355 and reporting and recordkeeping requirements of §§61.356 and 61.357 apply.
Stationary Source-Wide	40 CFR 63 Subpart HH	Subpart HH does not apply to any stationary source that does not contain an affected source, as specified in 40 CFR 63.760(b), as provided by 40 CFR 63.760(d). The Crude Oil Topping Unit does not contain an affected source.
Stationary Source-Wide	40 CFR 63 Subpart EEEE	The Crude Oil Topping Unit is not a major source of hazardous air pollutants.
Stationary Source-Wide	40 CFR 68	The only regulated substances present in any process above the threshold quantities are naturally occurring hydrocarbon mixtures. Those are exempt from 40 CFR 68.
Stationary Source-Wide	40 CFR 82.160	Stationary source does not contract equipment testing organizations to certify recovery and recycling equipment.
Stationary Source-Wide	40 CFR 82.164	Stationary source does not sell reclaimed refrigerant.
Stationary Source-Wide	40 CFR 82, Subpart F, Appendix C	Stationary source is not a third party entity that certifies recovery equipment.
Stationary Source-Wide	40 CFR 82, Subpart F, Appendix D	Stationary source does not have a technician certification program.
Stationary Source-Wide	40 CFR 82.174(a) Subpart G	Stationary source does not manufacture substitute chemicals or products for ozone-depleting compounds.
Stationary Source-Wide	40 CFR 82.270(a) Subpart H	Stationary source does not manufacture halon.

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

Section 11. Visible Emissions Observation Form

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

- Source Name: full company name, parent company or division or subsidiary information, if necessary.
- Address: street (not mailing or home office) address of facility where visible emissions observation is being made.
- Phone (Key Contact): number for appropriate contact.
- Stationary Source ID Number: number from NEDS, agency file, etc.
- Process Equipment, Operating Mode: brief description of process equipment (include type of facility) and operating rate, % capacity, and/or mode (e.g. charging, tapping, shutdown).
- Control Equipment, Operating Mode: specify type of control device(s) and % utilization, control efficiency.
- Describe Emission Point: for identification purposes, stack or emission point appearance, location, and geometry; and whether emissions are confined (have a specifically designed outlet) or unconfined (fugitive).
- Height Above Ground Level: stack or emission point height relative to ground level; can use engineering drawings, Abney level, or clinometer.
- Height Relative to Observer: indicate height of emission point relative to the observation point.
- Distance from Observer: distance to emission point; can use rangefinder or map.
- Direction from Observer: direction plume is traveling from observer.
- Describe Emissions and Color: include physical characteristics, plume behavior (e.g., looping, lacy, condensing, fumigating, secondary particle formation, distance plume visible, etc.), and color of emissions (gray, brown, white, red, black, etc.). Note color changes in comments section.
- Visible Water Vapor Present?: check "yes" if visible water vapor is present.
- If Present, note in the Comments column whether the plume is "attached" if water droplet plume forms prior to exiting stack, or "detached" if water droplet plume forms after exiting stack.
- Point in Plume at Which Opacity was Determined: describe physical location in plume where readings were made (e.g., 1 ft above stack exit or 10 ft. after dissipation of water plume).
- Describe Plume Background: object plume is read against, include texture and atmospheric conditions (e.g., hazy).
- Background Color: sky blue, gray-white, new leaf green, etc.
- Sky Conditions: indicate color of clouds and cloud cover by percentage or by description (clear, scattered, broken, overcast).
- Wind Speed: record wind speed; can use Beaufort wind scale or hand-held anemometer to estimate.
- Wind Direction From: direction from which wind is blowing; can use compass to estimate to eight points.
- Ambient Temperature: in degrees Fahrenheit or Celsius.
- Wet Bulb Temperature: can be measured using a sling psychrometer
- RH Percent: relative humidity measured using a sling psychrometer; use local US Weather Bureau measurements only if nearby.
- Source Layout Sketch: include wind direction, sun position, associated stacks, roads, and other landmarks to fully identify location of emission point and observer position.
- Draw North Arrow: to determine, point line of sight in direction of emission point, place compass beside circle, and draw in arrow parallel to compass needle.
- Sun's Location: point line of sight in direction of emission point, move pen upright along sun location line, mark location of sun when pen's shadow crosses the observer's position.
- Observation Date: date observations conducted.
- Start Time, End Time: beginning and end times of observation period (e.g., 1635 or 4:35 p.m.).
- Data Set: percent opacity to nearest 5%; enter from left to right starting in left column. Use a second (third, etc.) form, if readings continue beyond 30 minutes. Use dash (-) for readings not made; explain in adjacent comments section.
- Comments: note changing observation conditions, plume characteristics, and/or reasons for missed readings.
- Range of Opacity: note highest and lowest opacity number.
- Observer's Name: print in full.
- Observer's Signature, Date: sign and date after performing VE observation.
- Organization: observer's employer.
- Certified By, Date: name of "smoke school" certifying observer and date of most recent certification.

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

Page No.____________

Stationary Source Name	Type of Emission Unit		
Emission Unit Location			
City	State	Zip	
Phone # (Key Contact)	Stationary Source ID Number		
Process Equipment	Operating Mode		
Control Equipment	Operating Mode		
Describe Emission Point/Location			
Height above ground level	Height relative to observer	Clinometer Reading	
Distance From Observer Start End	Direction From Observer Start End		
Describe Emissions & Color Start	End		
Visible Water Vapor Present? If yes, determine approximate distance from the stack exit to where the plume was read No Yes			
Point in Plume at Which Opacity Was Determined			
Describe Plume Background Start End	Background Color Start End		
Sky Conditions: Start	End		
Wind Speed Start End	Wind Direction From Start End		
Ambient Temperature	Wet Bulb Temp	RH percent	
SOURCE LAYOUT SKETCH: 1 Stack or Point Being Read 2 Wind Direction From 3 Observer Location 4 Sun Location 5 North Arrow 6 Other Stacks			

Observation Date			Start Time		End Time
Sec / Min	0	15	30	45	Comments
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Range of Opacity
Minimum Maximum

I have received a copy of these opacity observations Print Name: Signature:		Print Observer's Name	
		Observer's Signature	Date Observer's Affiliation:
Title	Date	Certifying Organization Certified By:	Date

Data Reduction:

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

Average Opacity Summary:

Set Number	Time			Opacity		Comments
	Start	End		Sum	Average	

Section 12. SO_2 Material Balance Calculation[19]

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

A. = 31,200 x (**wt%S_{fuel}**) = 31,200 x _____ = _____

B. = 0.148 x (**wt%S_{fuel}**) = 0.148 x _____ = _____

C. = 0.396 x (**wt%C_{fuel}**) = 0.396 x _____ = _____

D. = 0.933 x (**wt%H_{fuel}**) = 0.933 x _____ = _____

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

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

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

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

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

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

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

The fuel weight percent of sulfur is obtained pursuant to Condition 12. The fuel weight percents of carbon and hydrogen are obtained from the fuel refiner.

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

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

[18 AAC 50.346(c)]

[19] Revised as of November 7, 2020

Section 13. ADEC Notification Form[20]

Crude Oil Topping Unit — **Stationary Source (Facility) Name**

AQ0265TVP04 — **Air Quality Permit Number**

Hilcorp North Slope, LLC — **Company Name**

When did you discover the Excess Emissions/Permit Deviation?

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

When did the event/deviation occur?

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

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

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

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

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

☐ Excess Emissions – Complete Section 1 and Certify

Note: All "excess emissions" are also "permit deviations." However, use only Section 1 for events that involve excess emissions.

☐ Deviation from Permit Condition – Complete Section 2 and Certify

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

☐ Deviations from COBC[21], CO[22], or Settlement Agreement – Complete Section 2 and Certify

[20] Revised as of July 22, 2020.
[21] Compliance Order By Consent
[22] Compliance Order

Section 1. Excess Emissions

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

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

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

☐ Control Equipment Failure ☐ Schedule Maintenance/Equipment Adjustment

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

(c) **Description**
Describe briefly what happened and the cause. Include the parameters/operating conditions exceeded, limits, monitoring data and exceedance. Attach supporting information if necessary.

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

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

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

☐ Opacity _____ % ☐ Venting _____ gas/scf ☐ Control Equipment Down

☐ Fugitive Emissions ☐ Emission Limit Exceeded ☐ Marine Vessel Opacity

☐ Flaring ☐ Other _____

(f) **Corrective Actions:**

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

(g) **Unavoidable Emissions:**

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

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

Certify Report (<u>go to end of form</u>)

Section 2. Permit Deviations

(a) **Permit Deviation Type:** (Check all boxes that apply per event. Complete a separate form for each event, as applicable.)

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

(b) **Emissions Units Involved:**

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

EU ID	EU Name	Permit Condition/ Potential Deviation

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

Describe briefly what happened and the cause. Include the parameters/operating conditions and the potential deviation. Attach supporting information if necessary.

(d) **Corrective Actions:**

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

Certification:

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

Printed Name: _____ Title: _____ Date: _____

Signature: _____ Phone Number: _____

NOTE: *This document must be certified in accordance with 18 AAC 50.345(j). Read and sign the certification in the bottom of the form above. (See Condition 65.)*

Excess Emissions and Permit Deviations must be submitted through the AOS Permittee Portal at http://dec.alaska.gov/applications/air/airtoolsweb/.

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

[18 AAC 50.346(b)(3)]

Attachment 1 - 40 CFR 60 Subpart A Summary Report
Gaseous and Opacity Excess Emission and Monitoring System Performance

[Note: This form is referenced in 40 C.F.R. 60.7, Subpart A-General Provisions]

Pollutant *(Circle One)*: SO_2 NO_X TRS H_2S CO Opacity

Reporting period dates: From _____ to _____

Company:
Emission Limitation: _____

Address: _____

Monitor Manufacturer: _____

Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total source operating time in reporting period [1]: _____

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

[1] For opacity, record all times in minutes. For gases, record all times in hours.
[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 C.F.R. 60.7(c) shall be submitted.

Note: On a separate page, describe any changes since last quarter in CMS, process or controls.

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

Name: _____

Signature: _____ *Date*: _____

Title: _____