

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ1527TVP01

Issue Date: PUBLIC COMMENT - September 17, 2019

Expiration Date: FIVE YEARS

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

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

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

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

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

James R. Plosay, Manager
Air Permits Program

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Abbreviations and Acronyms

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

Section 1. Stationary Source Information

Identification

Permittee:	Hilcorp Alaska, LLC 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503	
Stationary Source Name:	Milne Point L-Pad	
Location:	70° 29' 48.1812" North; 149° 38' 7.224" West	
Physical Address:	Milne Point Unit	
Owner and Operator:	Hilcorp Alaska, LLC 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503	
Permittee's Responsible Official:	David S. Wilkins, Senior Vice President 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503	
Designated Agent:	CT Corporation Systems 9360 Glacier Hwy, Suite 202 Juneau, AK 99801	
Stationary Source and Building Contact:	Chad Helgeson/ Area Operations Manager 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503 (907) 777-8300 chelgeson@hilcorp.com	
Fee Contact:	Hilcorp Alaska, LLC Accounts Payable P.O. Box 61529 Houston, TX 77208	
Permit Contact:	Julieanna Potter/Environmental Specialist 3800 Centerpoint Drive, Suite 1400 Anchorage, AK 99503 (907) 777-8444 jupotter@hilcorp.com	
Process Description:	SIC Code	1311 Crude Petroleum and Natural Gas
	NAICS Code:	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	Rating/Size	Construction Date
1	Turbine	Solar Titan 130	Diesel/ Fuel Gas	100 MMBtu/hr (15 MW)	2018
2	Turbine	Solar Titan 130	Diesel/ Fuel Gas	100 MMBtu/hr (15 MW)	2018
3	Turbine	Solar Titan 130	Diesel/ Fuel Gas	100 MMBtu/hr (15 MW)	2018
4	Emergency Generator	Caterpillar C15 DITA	Diesel	762 bhp (516 kW)	2008

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

Section 3. State Requirements

Visible Emissions Standard

- 1. Industrial Process and Fuel-Burning Equipment Visible Emissions.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EU IDs 1 through 4 listed in Table A to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

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

1.1. For EU ID 4,

- a. perform an initial 18-minute Method 9 observation of the exhaust of the EU within 30 days of startup.

[Condition 7.2, Minor Permit AQ1527MSS02, 1/4/2019]
[40 CFR 71.6(a)(3)]

- (i) record the results of the observations required in Condition 1.1.a using the Visible Emissions Observation Form in Section 11.
- (ii) include copies of the results of the visible emissions observations required in Condition 1.1.a in the first operating report required under Condition 67 that is due after the observation.
- (iii) report in accordance with Condition 66 if the results of any Method 9 observation conducted in accordance with Condition 1.1.a exceeds the limit in Condition 1, or if any of Conditions 1.1.a, 1.1.a(i), and 1.1.a(ii) are not met.

[Conditions 7.3 through 7.5, Minor Permit AQ1527MSS02, 1/4/2019]

- b. After the initial observation required in Condition 1.1.a, as long as the emissions unit does not exceed the thresholds in 18 AAC 50.326(e), monitoring shall consist of an annual compliance certification under Condition 68 with the visible emissions standard based on reasonable inquiry. If EU ID 4 exceeds any of the significant emissions thresholds in 18 AAC 50.326(e), the Permittee shall report that in the operating report required in Condition 67 and monitor, record, and report in accordance with Conditions 2 through 4 for the remainder of the permit term.

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

- 1.2. For EU IDs 1 through 3, use only gas as primary fuel. Monitoring for these emissions units shall consist of a statement in each operating report required in Condition 67 indicating whether each of these emissions units fired gas as the primary fuel during the period covered by the report. If operation on a back-up liquid fuel occurred during the period covered by the report, the Permittee shall monitor, record and report according to Condition 9.

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

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

Liquid Fuel-Fired Emissions Units (EU ID 4)

2. **Visible Emissions Monitoring.** When required by Condition 1.1.b, the Permittee shall observe the exhaust of EU ID 4 for visible emissions using either the Method 9 Plan under Condition 2.2 or the Smoke/No-Smoke Plan under Condition 2.3.
 - 2.1. The Permittee may change visible emissions plans for an emissions unit at any time unless prohibited from doing so by Condition 2.4.

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]
[40 CFR 71.6(a)(3)(i)]
 - 2.2. **Method 9 Plan.** For all 18-minute observations in this plan, observe exhaust, following 40 CFR 60, Appendix A-4, Method 9, adopted by reference in 18 AAC 50.040(a), for 18 minutes to obtain 72 consecutive 15-second opacity observations.
 - a. **First Method 9 Observation.**
 - (i) For EU ID 4, observe exhaust for 18 minutes within 14 calendar days after changing from the Smoke/No-Smoke Plan of Condition 2.3.
 - (ii) If EU ID 4 exceeds any threshold in Condition 1.1.b, observe the exhaust for 18 minutes of operations within 30 days after the calendar month during which that threshold has been exceeded, or within 30 days of the unit's next scheduled operations, whichever is later.
 - b. **Monthly Method 9 Observations.** After the first Method 9 observation, perform 18-minute observations at least once in each calendar month that an emissions unit operates.
 - c. **Semiannual Method 9 Observations.** After observing emissions for three consecutive operating months under Condition 2.2.b, unless a six-minute average is greater than 15 percent and one or more observations are greater than 20 percent, perform 18-minute observations:
 - (i) within six months after the preceding observation, or
 - (ii) for an emissions unit with intermittent operations, during the next scheduled operation immediately following six months after the preceding observation.
 - d. **Annual Method 9 Observations.** After at least two semiannual 18-minute observations, unless a six-minute average is greater than 15 percent and one or more individual observations are greater than 20 percent, perform 18-minute observations:
 - (i) within twelve months after the preceding observation; or

- (ii) for an emissions unit with intermittent operations, during the next scheduled operation immediately following twelve months after the preceding observation
 - e. **Increased Method 9 Frequency.** If a six-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more observations are greater than 20 percent, then increase or maintain the 18-minute observation frequency for that emissions unit to at least monthly intervals as described in Condition 2.2.b, until the criteria in Condition 2.2.c for semiannual monitoring are met.
- 2.3. **Smoke/No Smoke Plan.** Observe the exhaust for the presence or absence of visible emissions, excluding condensed water vapor.
- a. **Initial Monitoring Frequency.** Observe the exhaust during each calendar day that an emissions unit operates.
 - b. **Reduced Monitoring Frequency.** After the emissions unit has been observed on 30 consecutive operating days, if the emissions unit operated without visible smoke in the exhaust for those 30 days, then observe emissions at least once in every calendar month that an emissions unit operates.
 - c. **Smoke Observed.** If smoke is observed, either begin the Method 9 Plan of Condition 2.2 or perform the corrective action required under Condition 2.4.
- 2.4. **Corrective Actions Based on Smoke/No Smoke Observations.** If visible emissions are present in the exhaust during an observation performed under the Smoke/No Smoke Plan of Condition 2.3, then the Permittee shall either follow the Method 9 Plan of Condition 2.2 or
- a. initiate actions to eliminate smoke from the emissions unit within 24 hours of the observation;
 - b. keep a written record of the starting date, the completion date, and a description of the actions taken to reduce smoke; and
 - c. after completing the actions required under Condition 2.4.a,
 - (i) make smoke/no smoke observations in accordance with Condition 2.3
 - (A) at least once per day for the next seven operating days and until the initial 30-day observation period is completed; and
 - (B) continue as described in Condition 2.3.b; or

- (ii) if the actions taken under Condition 2.4.a do not eliminate the smoke, or if subsequent smoke is observed under the schedule of Condition 2.4.c(i)(A), then observe the exhaust using the Method 9 Plan unless the Department gives written approval to resume observations under the Smoke/No Smoke Plan; after observing smoke and making observations under the Method 9 Plan, the Permittee may at any time take corrective action that eliminates smoke and restart the Smoke/No Smoke Plan under Condition 2.3.a.

3. Visible Emissions Recordkeeping. When required by Condition 1.1.b, the Permittee shall keep records as follows:

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

3.1. If using Method 9,

a. the observer shall record

- (i) the name of the stationary source, emissions unit and location, emissions unit type, observer's name and affiliation, and the date on the Visible Emissions Observation Form in Section 11;
- (ii) the time, estimated distance to the emissions location, sun location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), plume background, and operating mode (load or fuel consumption rate or best estimate if unknown) on the sheet at the time opacity observations are initiated and completed;
- (iii) the presence or absence of an attached or detached plume and the approximate distance from the emissions outlet to the point in the plume at which the observations are made;
- (iv) opacity observations to the nearest five percent at 15-second intervals on the Visible Emission Observation Form in Section 11, and
- (v) the minimum number of observations required by the permit; each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period.

- b. To determine the six-minute average opacity, divide the observations recorded on the record sheet into sets of 24 consecutive observations; sets need not be consecutive in time and in no case shall two sets overlap; for each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24; record the average opacity on the sheet.
- c. Calculate and record the highest six-minute and 18-consecutive-minute average opacities observed.

- 3.2. If using the Smoke/No Smoke Plan of Condition 2.3, record the following information in a written log for each observation and submit copies of the recorded information upon request of the Department:
- a. the date and time of the observation;
 - b. from Table A, the ID of the emissions unit observed;
 - c. whether visible emissions are present or absent in the exhaust;
 - d. a description of the background to the exhaust during the observation;
 - e. if the emissions unit starts operation on the day of the observation, the startup time of the emissions unit;
 - f. name and title of the person making the observation; and
 - g. operating rate (load or fuel consumption rate).
4. **Visible Emissions Reporting.** When required by Condition 1.1.b, the Permittee shall report visible emissions as follows:
- [18 AAC 50.040(j), 50.326(j) & 50.346(c)]
[40 CFR 71.6(a)(3)(iii)]
- 4.1. Include in each operating report required under Condition 67:
- a. which visible emissions plan of Condition 2 was used for each emissions unit; if more than one plan was used, give the time periods covered by each plan;
 - b. for each emissions unit under the Method 9 Plan,
 - (i) copies of the observation results (i.e. opacity observations) for each emissions unit that used the Method 9 Plan, except for the observations the Permittee has already supplied to the Department; and
 - (ii) a summary to include:
 - (A) number of days observations were made;
 - (B) highest six- and 18-consecutive-minute average opacities observed; and
 - (C) dates when one or more observed six-minute average opacities were greater than 20 percent;
 - c. for each emissions unit under the Smoke/No Smoke Plan, the number of days that smoke/no smoke observations were made and which days, if any, that smoke was observed; and
 - d. a summary of any monitoring or recordkeeping required under Conditions 2 and 3 that was not done;

- 4.2. Report under Condition 66:
- a. the results of Method 9 observations that exceed 20 percent average opacity for any six-minute period; and
 - b. if any monitoring under Condition 2 was not performed when required, report within three days of the date the monitoring was required.

Particulate Matter Emissions Standard

- 5. Industrial Process and Fuel-Burning Equipment Particulate Matter.** The Permittee shall not cause or allow particulate matter emitted from EU IDs 1 through 4 listed in Table A to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

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

- 5.1. For EU ID 4, obtain a certified manufacturer's guarantee that the EU will comply with the particulate matter standard within 30 days of startup; or monitor, record, and report in accordance with Conditions 1.1.a, and 1.1.a(i) through 1.1.a(iii).
- [Conditions 8.1 & 8.2, Minor Permit AQ1527MSS02, 1/4/2019]
[40 CFR 71.6(a)(3)]
- 5.2. After the initial compliance requirements in Condition 5.1, as long as EU ID 4 does not exceed the significant emissions thresholds in 18 AAC 50.326(e), monitoring shall consist of an annual compliance certification under Condition 68 with the particulate matter emissions standard based on reasonable inquiry. If EU ID 4 exceeds any of the significant emissions thresholds in 18 AAC 50.326(e), the Permittee shall report that in the operating report under Condition 67 and monitor, record and report in accordance with Conditions 6 through 8 for the remainder of the permit term.
- 5.3. For EU IDs 1 through 3, use gas as primary fuel. Monitoring for these emissions units shall consist of a statement in each operating report required in Condition 67 indicating whether each of these emissions units fired gas as the primary fuel during the period covered by the report. If operation on a back-up liquid fuel occurred during the period covered by the report, the Permittee shall monitor, record and report according to Condition 9.

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

Particulate Matter MR&R

Liquid Fuel-Fired Engines and Turbines (EU IDs 1 through 4)

- 6. Particulate Matter Monitoring.** The Permittee shall conduct source tests on diesel engines and liquid-fired turbines, EU IDs 1 through 4, to determine the concentration of particulate matter in the exhaust of each emissions unit as follows:

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

- 6.1. Except as allowed in Condition 6.4, within six months of exceeding the criteria of Conditions 6.2.a or 6.2.b, either
 - a. conduct a particulate matter source test according to requirements set out in Section 6; or
 - b. make repairs so that emissions no longer exceed the criteria of Condition 6.2; to show that emissions are below those criteria, observe emissions as described in Condition 2.2 under load conditions comparable to those when the criteria were exceeded.
 - 6.2. Conduct the test or make repairs according to Condition 6.1 if
 - a. 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity greater than 20 percent; or
 - b. for an emissions unit with an exhaust stack diameter that is less than 18 inches, 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity that is greater than 15 percent and not more than 20 percent, unless the Department has waived this requirement in writing.
 - 6.3. During each one-hour particulate matter source test run, observe the exhaust for 60 minutes in accordance with Method 9 and calculate the average opacity that was measured during each one-hour test run. Submit a copy of these observations with the source test report.
 - 6.4. The automatic particulate matter source test requirements in Conditions 6.1 and 6.2 are waived for an emissions unit if a particulate matter source test on that unit has shown compliance with the particulate matter standard during this permit term.
- 7. Particulate Matter Recordkeeping.** Within 30 days of installation, the Permittee shall record the exhaust stack diameters of EU IDs 1 through 4. Report the stack diameters in the next operating report under Condition 67.
- [18 AAC 50.040(j), 50.326(j), & 50.346(c)]
[40 CFR 71.6(a)(3)(ii)]
- 8. Particulate Matter Reporting.** The Permittee shall report as follows:
- [18 AAC 50.040(j), 50.326(j), & 50.346(c)]
[40 CFR 71.6(a)(3)(iii)]
- 8.1. Report under Condition 66:
 - a. the results of any particulate matter source test that exceeds the particulate matter emissions limit; or
 - b. if one of the criteria of Condition 6.2 was exceeded and the Permittee did not comply with either Condition 6.1.a or 6.1.b, this must be reported by the day following the day compliance with Condition 6.1 was required;

- 8.2. report observations in excess of the threshold of Condition 6.2.b within 30 days of the end of the month in which the observations occur;
- 8.3. in each operating report under Condition 67, include:
 - a. the dates, EU ID(s), and results when an observed 18-minute average was greater than an applicable threshold in Condition 6.2;
 - b. a summary of the results of any particulate matter testing under Condition 6; and
 - c. copies of any visible emissions observation results (opacity observations) greater than the thresholds of Condition 6.2, if they were not already submitted.

Dual Fuel-Fired Emissions Units (EU IDs 1 through 3)

9. The Permittee shall monitor, record, and report the monthly hours of operation when operating on a back-up liquid fuel.
 - 9.1. For any of EU IDs 1 through 3 that does not exceed 400 hours of operations per calendar year on a back-up liquid fuel, monitoring of compliance for visible emissions and particulate matter standards shall consist of an annual certification under Condition 68.

[18 AAC 50.040(j), 50.326(j)(4), & 50.346(c)]
[40 CFR 71.6(a)(3)]
 - 9.2. For any of EU IDs 1 through 3, notify the Department and begin monitoring the affected emissions unit according to Condition 9.3 no later than 15 days after the end of a calendar month in which the cumulative hours of operation for the calendar year exceed any multiple of 400 hours on a back-up liquid fuel. The Method 9 observation shall be conducted while the EU is operating on liquid fuel. If the observation exceeds the limit in Condition 1, monitor as described in Condition 6. If the observation does not exceed the limit in Condition 1, no additional monitoring is required until the cumulative hours of operation exceed each subsequent multiple of 400 hours on back-up liquid fuel during a calendar year¹.

[Condition 7.1, Minor Permit AQ1527MSS02, 1/4/2019]
[40 CFR 71.6(a)(3)]
 - 9.3. When required to do so by Condition 9.2, observe the exhaust, following 40 CFR 60, Appendix A-4 Method 9 (adopted by reference in 18 AAC 50.040(a)), for 18 minutes to obtain 72 consecutive 15-second opacity observations.
 - 9.4. Keep records and report in accordance with Conditions 3, 4, 7, and/or 8, as applicable.

¹ If the requirement to monitor is triggered more than once in a calendar month, only one Method 9 observation is required to be conducted by the stated deadline for that month.

- 9.5. Report under Condition 66 if the Permittee fails to comply with Conditions 9.2, 9.3 or 9.4.

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

Sulfur Compound Emissions Standard

- 10. Sulfur Compound Emissions.** The Permittee shall not cause or allow sulfur compound emissions, expressed as SO₂, from EU IDs 1 through 4 to exceed 500 ppm averaged over three hours.

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

Sulfur Compound MR&R

Fuel Oil²(EU IDs 1 through 4)

- 11. Sulfur Compound Monitoring and Recordkeeping.** The Permittee shall comply with the following:

- 11.1. The Permittee shall do one of the following for each shipment of fuel:
- a. If the fuel grade requires a sulfur content less than 0.5 percent by weight, keep receipts that specify fuel grade and amount; or
 - b. If the fuel grade does not require a sulfur content less than 0.5 percent by weight, keep receipts that specify fuel grade and amount and
 - (i) test the fuel for sulfur content; or
 - (ii) obtain test results showing the sulfur content of the fuel from the supplier or refinery; the test results must include a statement signed by the supplier or refinery of what fuel they represent.
- 11.2. Fuel testing under Condition 11.1 must follow an appropriate method listed in 18 AAC 50.035(b)-(c) or 40 CFR 60.17 incorporated by reference in 18 AAC 50.040(a)(1).
- 11.3. If a load of fuel contains greater than 0.75 percent sulfur by weight, the Permittee shall calculate SO₂ emissions in ppm using either the SO₂ material balance calculation in Section 12 or Method 19 of 40 CFR 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a).

- 12. Sulfur Compound Reporting.** The Permittee shall report as follows:

- 12.1. If SO₂ emissions calculated under Condition 11.3 exceed 500 ppm, the Permittee shall report under Condition 66. When reporting under this condition, include the calculation under Section 12 or Method 19.

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

- 12.2. The Permittee shall include in the report required by Condition 67
- a. a list of the fuel grades received at the stationary source during the reporting period;
 - b. for any grade with a maximum fuel sulfur greater than 0.5 percent sulfur, the fuel sulfur of each shipment; and
 - c. for fuel with a sulfur content greater than 0.75 percent, the calculated SO₂ emissions in ppm.

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

Fuel Gas (EU IDs 1 through 3)

13. Sulfur Compound MR&R. Monitor, record, and report in accordance with Conditions 15.2.a through 15.2.c.

- 13.1. Report in accordance with Condition 66 whenever the fuel combusted causes sulfur compound emissions to exceed the standard of Condition 10.

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

Preconstruction Permit³ Requirements

Ambient Air Quality Protection Requirements

- 14.** To protect the annual nitrogen dioxide (NO₂); 24-hour particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀); 24-hour and annual particulate matter with an aerodynamic diameter of 2.5 microns or less (PM_{2.5}); and one-hour, three-hour, 24-hour, and annual sulfur dioxide (SO₂) Alaska ambient air quality standards (AAAQS), the Permittee shall operate the stationary source as described below:

[Condition 10, Minor Permit AQ1527MSS01, 8/3/2018]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

- 14.1. **Stack Configuration.** Construct and maintain vertical, uncapped exhaust stacks for EU IDs 1 through 4. All EUs may use flapper-style rain covers, or other similar designs, that do not hinder the vertical momentum of their exhaust plume.
- [Condition 11, Minor Permit AQ1527MSS02, 1/4/2019]
- a. Report in the first operating report required under Condition 67 that is due after the installation of each of EU IDs 1 through 4, whether the exhaust stack for that EU complies with Condition 14.1.
 - b. Report as described in Condition 66 if any exhaust stack for EU IDs 1 through 4 does not meet the requirements of Condition 14.1.

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

[Conditions 11.1 & 11.2, Minor Permit AQ1527MSS02, 1/4/2019]
[40 CFR 71.6(a)(3)]

15. Fuel Sulfur Limits. To protect the one-hour, three-hour, 24-hour, and annual SO₂ AAAQS, the Permittee shall:

[Condition 11, Minor Permit AQ1527MSS01, 8/3/2018]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

15.1. Limit the sulfur content of the liquid fuel fired in EU IDs 1 through 4 to no more than 15 ppmw.

[Condition 13, Minor Permit AQ1527MSS02, 1/4/2019]

- a. For each shipment of liquid fuel, obtain and keep receipts from fuel suppliers that specify the fuel grade (i.e. ultra-low sulfur diesel (ULSD)) and/or the fuel sulfur content in ppmw and the amount of fuel.
- b. Include in each operating report required by Condition 67 a statement indicating whether all fuel combusted in the EUs listed in Condition 15.1 during the reporting period was ULSD.
- c. Report as described in Condition 66 if any fuel combusted by EU IDs 1 through 4 exceeds the sulfur content limit in Condition 15.1.

[Conditions 13.1 through 13.3, Minor Permit AQ1527MSS02, 1/4/2019]
[40 CFR 71.6(a)(3)]

15.2. Limit the hydrogen sulfide (H₂S) content of the fuel gas fired in EU IDs 1 through 3 to no more than 100 ppmv.

[Condition 11.2, Minor Permit AQ1527MSS01, 8/3/2018]

- a. Determine the fuel gas H₂S content no less than once a month using ASTM D 4810-88, ASTM D 4913-89, or Gas Producer's Association method 2377-86. The fuel gas H₂S analysis required under this condition may be performed by the owner or operator, a service contractor retained by the owner or operator, or the fuel vendor.
- b. Keep records of each analysis conducted under Condition 15.2.a.
- c. Report the monthly fuel gas H₂S concentrations in each operating report required in Condition 67.
- d. Report in accordance with Condition 66 whenever the fuel gas H₂S concentration exceeds the limit in Condition 15.2.

[Conditions 11.2a through 11.2d, Minor Permit AQ1527MSS01, 8/3/2018]
[40 CFR 71.6(a)(3)]

16. To protect the annual NO₂ AAAQS, comply with Condition 17.6 for NO_x emissions.

[Condition 13, Minor Permit AQ1527MSS01, 8/3/2018]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

ORLs to Avoid Permit Classifications

- 17.** To avoid PSD permit requirements under 18 AAC 50.306 for NO_x and CO emissions, the Permittee shall comply with the following:

[Condition 14, Minor Permit AQ1527MSS01, 8/3/2018]
[18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(a)(1)]

- 17.1. For EU IDs 1 through 3, install Solar Titan 130 turbines with the 25/25/25 ppm emissions profile for NO_x/CO/unburned hydrocarbons (UHC) that are equipped with pilot active control logic and SoLoNO_x.

[Condition 14.1, Minor Permit AQ1527MSS01, 8/3/2018]

- a. In the first operating report required in Condition 67 that is due after the installation of each of EU IDs 1 through 3, the Permittee shall include documentation to show the turbines required in Condition 17.1 were installed.

[Condition 14.1a, Minor Permit AQ1527MSS01, 8/3/2018]
[40 CFR 71.6(a)(3)]

- 17.2. When using liquid fuel, the load for each of EU IDs 1 through 3 must be maintained at 65 percent or greater and 100 percent or less, except for startup and shutdown.

- 17.3. When using fuel gas, the load for each of EU IDs 1 through 3 must be maintained at 50 percent or greater and 100 percent or less, except for startup and shutdown.

[Conditions 14.2 & 14.3, Minor Permit AQ1527MSS01, 8/3/2018]

- 17.4. Monitor, record, and report as follows for Conditions 17.2 and 17.3:

[Condition 14.4, Minor Permit AQ1527MSS01, 8/3/2018]
[40 CFR 71.6(a)(3)]

- a. For each of EU IDs 1 through 3, record the date and time for

[Condition 14.4a, Minor Permit AQ1527MSS01, 8/3/2018]

- (i) starting the use of liquid fuel and stopping the use of liquid fuel.
(ii) starting the use of fuel gas and stopping the use of fuel gas.

[Conditions 14.4a(i) & (ii), Minor Permit AQ1527MSS01, 8/3/2018]

- b. Capture the 60-second average load for each operating turbine during all periods of operation. Except for startup and shutdown, for each calendar day and for each type of fuel used, record the lowest 60-second average load for each turbine that operates.
- c. Include copies of the records required in Conditions 17.4.a and 17.4.b in the operating report required in Condition 67.
- d. Report in accordance with Condition 66 anytime turbine load is not within the applicable required range in Condition 17.2 or 17.3.

[Conditions 14.4b through 14.4d, Minor Permit AQ1527MSS01, 8/3/2018]

17.5. For EU IDs 1 through 3, the inlet air temperature for each operating turbine must be maintained at -20° F or higher.

[Condition 14.5, Minor Permit AQ1527MSS01, 8/3/2018]
 [40 CFR 71.6(a)(1)]

- a. Capture the 60-second average inlet air temperature in degrees Fahrenheit (°F) for each operating turbine during all periods of operation. Record for each calendar day, the lowest 60-second average inlet air temperature for each turbine that operated.
- b. Include copies of the records required in Condition 17.5.a in the operating report required in Condition 67.
- c. Report in accordance with Condition 66 anytime turbine inlet air temperature is not within the required range in Condition 17.5.

[Conditions 14.5a through 14.5c, Minor Permit AQ1527MSS01, 8/3/2018]

17.6. For EU IDs 1 through 3, the Permittee shall limit the total combined emissions of NOx to 230 tons or less per 12-month rolling period and the total combined emissions of CO to 240 tons or less per 12-month rolling period.

[Condition 14.6, Minor Permit AQ1527MSS01, 8/3/2018]
 [40 CFR 71.6(a)(1)]

a. For EU IDs 1 through 3, the Permittee shall comply with the following:

[Condition 14.6a, Minor Permit AQ1527MSS01, 8/3/2018]
 [40 CFR 71.6(a)(3)]

(i) On or before the 15th day of each month,

[Condition 14.6a(i), Minor Permit AQ1527MSS01, 8/3/2018]

(A) Calculate and record the hourly NOx and CO emissions (lbs) for each turbine for the previous calendar month for periods of operation other than startup and shutdown. Emissions shall be calculated using the fuel records required in Condition 17.4.a, the 60-second average inlet air temperatures obtained under Condition 17.5.a, and the emission factors in Table B.

[Condition 14.6a(i)(A), Minor Permit AQ1527MSS01, 8/3/2018]

Table B - Turbine Emission Factors (lb/minute)

Inlet Air Temp (°F)	Liquid Fuel		Fuel Gas	
	NOx	CO	NOx	CO
-20 to -1	1.63	1.00	0.47	0.68
0 to 19	1.01	0.32	0.27	0.16
20 to 39	0.97	0.31	0.26	0.16
40 to 59	0.92	0.29	0.25	0.15
60 or greater	0.88	0.28	0.24	0.15

- (B) Calculate and record the NOx and CO emissions (lbs) due to startups and shutdowns for each turbine for the previous calendar month.

[Condition 14.6a(i)(B), Minor Permit AQ1527MSS01, 8/3/2018]

- (1) Record the date and time of each startup and shutdown for each turbine.
- (2) Emissions shall be calculated using the records required in Condition 17.6.a(i)(B)(1), the fuel records required in Condition 17.4.a, and emission factors in Table C.

[Conditions 14.6a(i)(B)(1) & (2), Minor Permit AQ1527MSS01, 8/3/2018]

Table C - Turbine Emission Factors (lb/event)

Event	Liquid Fuel		Fuel Gas	
	NOx	CO	NOx	CO
Startup	8	336	3	172
Shutdown	8	265	3	169

- (C) Calculate and record the total combined NOx emissions and the total combined CO emissions (lbs) for the previous calendar month.

- (D) Calculate and record the total combined 12-month rolling NOx emissions and the total combined 12-month rolling CO emissions (tons).

[Conditions 14.6a(i)(C) & (D), Minor Permit AQ1527MSS01, 8/3/2018]

- (ii) Include the emissions calculated under Condition 17.6.a(i)(D) in the operating report required in Condition 67.
- (iii) Report in accordance with Condition 66 whenever a limit in Condition 17.6 is exceeded.

[Conditions 14.6a(ii) & (iii), Minor Permit AQ1527MSS01, 8/3/2018]

- 17.7. Conduct NOx and CO source tests on the first of EUs 1 through 3 to be started up to verify the emission factors in Table B for -20 to -1° F.

[Condition 14.7, Minor Permit AQ1527MSS01, 8/3/2018]

[40 CFR 71.6(a)(3)]

- a. Testing shall be conducted as follows:

[Condition 14.7a, Minor Permit AQ1527MSS01, 8/3/2018]

- (i) Conduct the tests no later than one year after startup and at an inlet air temperature of -20 to -1° F.
- (ii) Each test shall be conducted in accordance with Section 6 of this permit.

- (iii) Testing shall be conducted while the turbine is firing on liquid fuel and when firing on gaseous fuel.
 - (iv) Testing shall be conducted at the following loads:
 - [Conditions 14.7a(i) through (iv), Minor Permit AQ1527MSS01, 8/3/2018]
 - (A) At or within +10 percent of the minimum allowed loads in Conditions 17.2 and 17.3.
 - (B) 90 to 100 percent load, or at maximum achievable load if 90 percent load cannot be reached.
 - [Conditions 14.7a(iv)(A) & (B), Minor Permit AQ1527MSS01, 8/3/2018]
 - (v) Test results shall be the average of three one-hour test runs.
 - [Condition 14.7a(v), Minor Permit AQ1527MSS01, 8/3/2018]
- 17.8. If source testing under Condition 17.7 results in an emission factor greater than the value in Table B for the corresponding temperature range, the Permittee shall submit an application for a minor permit under 18 AAC 50.508(6) to revise the emission factor in Table B.
 - [Condition 14.8, Minor Permit AQ1527MSS01, 8/3/2018]
 - [40 CFR 71.6(a)(3)]
- a. The application must be submitted no later than 30 days after Department approval of the source test result.
 - [Condition 14.8a, Minor Permit AQ1527MSS01, 8/3/2018]
18. To avoid PSD permit requirements under 18 AAC 50.306 and minor permit requirements under 18 AAC 50.502(c)(1) for SO₂, the Permittee shall comply with Condition 15.
 - [Condition 15, Minor Permit AQ1527MSS01, 8/3/2018]
 - [18 AAC 50.040(j) & 50.326(j)]
 - [40 CFR 71.6(a)(1)]

Insignificant Emissions Units

19. 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:
- 19.1. **Visible Emissions Standard:** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from an industrial process, fuel-burning equipment, or an incinerator to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.
 - [18 AAC 50.050(a) & 50.055(a)(1)]
 - 19.2. **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)]

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

[18 AAC 50.055(c)]

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

- a. The Permittee shall submit the compliance certifications of Condition 68 based on reasonable inquiry;
- b. The Permittee shall comply with the requirements of Condition 49;
- c. The Permittee shall report in the operating report required by Condition 67 if an emissions unit has historically been classified as insignificant because of actual emissions less than the thresholds of 18 AAC 50.326(e) and current actual emissions become greater than any of those thresholds; and
- d. No other monitoring, recordkeeping or reporting is required.

[18 AAC 50.346(b)(4)]

Section 4. Federal Requirements

40 CFR Part 60 New Source Performance Standards

Subpart A

- 20. New Source Performance Standards (NSPS) Subpart A Notification.** For any affected facility⁴ or existing facility⁵ regulated under NSPS requirements in 40 CFR 60, the Permittee shall furnish the Administrator written notification or, if acceptable to both the Administrator⁶ and the Permittee, electronic notification, as follows:

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

- 20.1. For EU IDs 1 through 3, 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]

- 21. NSPS Subpart A Startup, Shutdown, & Malfunction Requirements.** Maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of EU IDs 1 through 3, any malfunction of the air-pollution control equipment, or any periods during which a continuous monitoring system or monitoring device for EU IDs 1 through 3 is inoperative.

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

- 22. NSPS Subpart A Excess Emissions and Monitoring Systems Performance Report.** Each Permittee required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts and limits are in Condition 29.2) and-or summary report form (see Condition 23) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:

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

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

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

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

⁵ *Existing facility* means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in this part, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type, as defined in 40 CFR 60.2.

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

- 22.2. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of EU IDs 1 through 3; 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]
- 22.3. 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]
- 22.4. 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]
- 23. NSPS Subpart A Summary Report Form.** The summary report form shall contain the information and be in the format shown in figure 1 of 40 CFR 60.7 (see Attachment 1) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.
[18 AAC 50.040(a)(1)]
[40 CFR 60.7(c) & (d), Subpart A]
- 23.1. 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 22 need not be submitted unless requested by the Administrator.
[40 CFR 60.7(d)(1), Subpart A]
- 23.2. 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 22 shall both be submitted.
[40 CFR 60.7(d)(2), Subpart A]
- 24. 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)]

- 24.1. 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]

- 24.2. 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]

- 24.3. 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]

- 24.4. 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]

- 24.5. 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]

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

[40 CFR 60.8(f), Subpart A]

25. NSPS Subpart A Good Air Pollution Control Practice. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate EU IDs 1 through 3 including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. The Administrator will determine whether acceptable operating and maintenance procedures are being used based on information available, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance records, and inspections of EU IDs 1 through 3.

[18 AAC 50.040(a)(1)]

[40 CFR 60.11(d), Subpart A]

26. NSPS Subpart A Credible Evidence. For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of the standards set forth in Condition 29, nothing in 40 CFR Part 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether EU IDs 1 through 3 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]

- 27. NSPS Subpart A Concealment of Emissions.** The Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of a standard set forth in Condition 28 or 29. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard that is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[18 AAC 50.040(a)(1)]
[40 CFR 60.12, Subpart A]

Subpart III

- 28.** For EU ID 4, comply with the following applicable requirements of NSPS Subpart III.

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

NSPS Subpart III Emission Standards

- 28.1. The Permittee must comply with the following emission standards,

[40 CFR 71.6(a)(1)]
[40 CFR 60.4205(b), Subpart III]

- a. NMHC + NO_x: 6.4 g/kW-hr
- b. CO: 3.5 g/kW-hr
- c. PM: 0.20 g/kW-hr

[40 CFR 60.4202(a)(2), Subpart III]

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

[40 CFR 71.6(a)(1)]
[40 CFR 60.4205(e), Subpart III]

- 28.3. Owners and operators of stationary compression ignition (CI) internal combustion engines (ICE) must operate and maintain stationary CI ICE that achieve the emission standards as required in Condition 28.1 over the entire life of the engine.

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

- 28.4. Owners and operators of stationary CI ICE subject to NSPS Subpart III that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

[40 CFR 71.6(a)(1)]
[40 CFR 60.4207(b), Subpart III]

NSPS Subpart III Compliance Requirements

- 28.5. You must install a non-resettable hour meter prior to startup of the engine.

[40 CFR 71.6(a)(3)]
[40 CFR 60.4209(a), Subpart III]

28.6. You must do all of the following, except as permitted under Condition 28.9:

[40 CFR 71.6(a)(3)]
[40 CFR 60.4211(a), Subpart III]

- a. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
- b. Change only those emission-related settings that are permitted by the manufacturer; and
- c. Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

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

28.7. You must comply with the emission standards in Condition 28.1 by purchasing an engine certified to the emission standards in Condition 28.1. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in Condition 28.9.

[40 CFR 71.6(a)(3)]
[40 CFR 60.4211(c), Subpart III]

28.8. You must operate the emergency stationary ICE according to the requirements in Conditions 28.8.a through 28.8.c. In order for the engine to be considered an emergency stationary ICE under NSPS Subpart III, any operation other than emergency operation, maintenance and testing, and operation in nonemergency situations for 50 hours per year, as described in Conditions 28.8.a through 28.8.c, is prohibited. If you do not operate the engine according to the requirements in Conditions 28.8.a through 28.8.c, the engine will not be considered an emergency engine under NSPS Subpart III and must meet all requirements for non-emergency engines.

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

- a. There is no time limit on the use of emergency stationary ICE in emergency situations.
- b. You may operate your emergency stationary ICE for the purpose specified in Condition 28.8.b(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition 28.8.c counts as part of the 100 hours per calendar year allowed by this condition.

[40 CFR 60.4211(f)(1) & (2), Subpart III]

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

[40 CFR 60.4211(f)(2)(i), Subpart III]

- c. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for nonemergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 CFR 60.4211(f)(3), Subpart III]

- (i) The 50 hours per year for nonemergency situations can be used to supply power as part of a financial arrangement with another entity if all of the conditions of 40 CFR 60.4211(f)(3)(i)(A) through (E) are met.

[40 CFR 60.4211(f)(3)(i), Subpart III]

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

[40 CFR 71.6(a)(3)]

[40 CFR 60.4211(g), Subpart III]

- a. You must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

[40 CFR 60.4211(g)(3), Subpart III]

NSPS Subpart III Testing Requirements

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

[40 CFR 71.6(a)(3)]

[40 CFR 60.4212, Subpart III]

NSPS Subpart III Reporting Requirements

- 28.11. If the emergency stationary CI ICE operates for the purposes specified in Condition 28.8.c(i), you must submit an annual report according to the requirements in Conditions 28.11.a through 28.11.c.

[40 CFR 71.6(a)(3)]

[40 CFR 60.4214(d), Subpart III]

- a. The report must contain the information in 40 CFR 60.4214(d)(1)(i) through (vii).
- b. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
- c. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 CFR 60.4.

[40 CFR 60.4214(d)(1) through (3), Subpart III]

Subpart KKKK

29. For EU IDs 1 through 3, comply with the following applicable requirements of NSPS Subpart KKKK.

[18 AAC 50.040(a)(2)(QQ), 50.040(j)(4), & 50.326(j)]
[40 CFR 71.6(a)(1)]
[40 CFR 60.4305(a), Subpart KKKK]

NSPS Subpart KKKK Emission Limits

- 29.1. You must meet the following emission limit for NO_x:

[40 CFR 71.6(a)(1)]
[40 CFR 60.4320(a), Subpart KKKK]

- a. 150 ppm at 15 percent O₂ or 1,100 ng/J of useful output (8.7 lb/MWh).

[Table 1, Subpart KKKK]

- 29.2. You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input.

[40 CFR 71.6(a)(1)]
[40 CFR 60.4330(a)(2), Subpart KKKK]

NSPS Subpart KKKK General Compliance Requirements

- 29.3. You must operate and maintain your stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.

[40 CFR 71.6(a)(1)]
[40 CFR 60.4333(a), Subpart KKKK]

NSPS Subpart KKKK Monitoring Requirements

- 29.4. You must perform annual NO_x performance tests in accordance with Conditions 29.11 and 29.12 to demonstrate continuous compliance. If the NO_x emission result from the performance test is less than or equal to 75 percent of the NO_x emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO_x emission limit for the turbine, you must resume annual performance tests.

[40 CFR 71.6(a)(3)]
[40 CFR 60.4340(a), Subpart KKKK]

- 29.5. You must monitor the total sulfur content of the fuel being fired in the turbine, except as provided in Condition 29.6. The sulfur content of the fuel must be determined using total sulfur methods described in Condition 29.13.a. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half the applicable limit, ASTM D4084, D4810, D5504, or D6228, or Gas Processors Association Standard 2377, which measure the major sulfur compounds, may be used.

[40 CFR 71.6(a)(3)]
[40 CFR 60.4360, Subpart KKKK]

- 29.6. You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input. You must use one of the following sources of information to make the required demonstration:

[40 CFR 71.6(a)(3)]
[40 CFR 60.4365, Subpart KKKK]

- a. The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use is 0.05 weight percent (500 ppmw) or less, and the total sulfur content for natural gas use is 20 grains of sulfur or less per 100 standard cubic feet; or
- b. Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to 40 CFR 75 is required.

[40 CFR 60.4365(a) & (b), Subpart KKKK]

- 29.7. The frequency of determining the sulfur content of the fuel must be as follows:

[40 CFR 71.6(a)(3)]
[40 CFR 60.4370, Subpart KKKK]

- a. Fuel oil. For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of appendix D to part 75 of this chapter (i.e., flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank).
- b. Gaseous fuel. If you elect not to demonstrate sulfur content using options in Condition 29.6, and the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel must be determined and recorded once per unit operating day.

- c. Custom schedules. Notwithstanding the requirements of Condition 29.7.b, operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in 40 CFR 60.4370(c)(1) and (c)(2), custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in §60.4330.

[40 CFR 60.4370(a) through (c), Subpart KKKK]

NSPS Subpart KKKK Reporting Requirements

- 29.8. For each affected unit required to periodically determine the fuel sulfur content under NSPS Subpart KKKK, you must submit reports of excess emissions and monitor downtime, in accordance with Condition 22. Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.
- 29.9. For each affected unit that performs annual performance tests in accordance with Condition 29.4, you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test.

[40 CFR 71.6(a)(3)]

[40 CFR 60.4375(a) & (b), Subpart KKKK]

- 29.10. If you choose the option to monitor the sulfur content of the fuel, excess emissions and monitoring downtime are defined as follows:

[40 CFR 71.6(a)(3)]

[40 CFR 60.4385, Subpart KKKK]

- a. For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the combustion turbine exceeds the applicable limit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.
- b. If the option to sample each delivery of fuel oil has been selected, you must immediately switch to one of the other oil sampling options (i.e., daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.05 weight percent. You must continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and you must evaluate excess emissions according to Condition 29.10.a. When all of the fuel from the delivery has been burned, you may resume using the as-delivered sampling option.

- c. A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.

[40 CFR 60.4385(a) through (c), Subpart KKKK]

NSPS Subpart KKKK Performance Test Requirements

- 29.11. You must conduct an initial NO_x performance test, as required in Condition 24. Subsequent NO_x performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test).

[40 CFR 71.6(a)(3)]

[40 CFR 60.4400(a), Subpart KKKK]

- a. There are two general methodologies that you may use to conduct the performance tests. For each test run:

[40 CFR 60.4400(a)(1), Subpart KKKK]

- (i) Measure the NO_x concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of 40 CFR 60. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of 40 CFR 60, and measure and record the electrical and thermal output from the unit. Then, use Equation 5 under 40 CFR 60.4400(a)(1) to calculate the NO_x emission rate; or
- (ii) Measure the NO_x and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in appendix A of 40 CFR 60. Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of 40 CFR 60 to calculate the NO_x emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in 40 CFR 60.4350(f) to calculate the NO_x emission rate in lb/MWh.

[40 CFR 60.4400(a)(1)(i) & (ii), Subpart KKKK]

- b. Sampling traverse points for NO_x and (if applicable) diluent gas are to be selected following EPA Method 20 or EPA Method 1 (non-particulate procedures), and sampled for equal time intervals. The sampling must be performed with a traversing single-hole probe, or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.
- c. Notwithstanding Condition 29.11.b, you may test at fewer points than are specified in EPA Method 1 or EPA Method 20 in appendix A of 40 CFR 60 if the conditions of 40 CFR 60.4400(a)(3)(i) and (ii) are met.

[40 CFR 60.4400(a)(2) & (3), Subpart KKKK]

29.12. The NO_x performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. You may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. You must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes.

[40 CFR 71.6(a)(3)]

[40 CFR 60.4400(b), Subpart KKKK]

a. If the stationary combustion turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel.

[40 CFR 60.4400(b)(1), Subpart KKKK]

b. Compliance with the emission limit in Condition 29.1 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NO_x emission rate at each tested level meets the emission limit in Condition 29.1.

[40 CFR 60.4400(b)(4), Subpart KKKK]

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

[40 CFR 60.4400(b)(6), Subpart KKKK]

29.13. You must conduct an initial SO₂ performance test, as required in Condition 24. Subsequent SO₂ performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test). There are three methodologies that you may use to conduct the performance tests.

[40 CFR 71.6(a)(3)]

[40 CFR 60.4415(a), Subpart KKKK]

a. If you choose to periodically determine the sulfur content of the fuel combusted in the turbine, a representative fuel sample would be collected following ASTM D5287 for natural gas or ASTM D4177 for oil. Alternatively, for oil, you may follow the procedures for manual pipeline sampling in section 14 of ASTM D4057. The fuel analyses of this section may be performed either by you, a service contractor retained by you, the fuel vendor, or any other qualified agency. Analyze the samples for the total sulfur content of the fuel using:

[40 CFR 60.4415(a)(1), Subpart KKKK]

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

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

[40 CFR 60.4415(a)(1)(i) & (ii), Subpart KKKK]

40 CFR Part 61 National Emission Standards for Hazardous Air Pollutants

Subparts A & M

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

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

40 CFR Part 63 National Emission Standards for Hazardous Air Pollutants

Subpart ZZZZ

31. **NESHAP Subpart ZZZZ Applicability.** For EU ID 4, 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]

- 31.1. EU ID 4 must meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR 60 Subpart IIII, for compression ignition engines. No further requirements apply under 40 CFR 63.

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

40 CFR Part 82 Protection of Stratospheric Ozone

Subparts F, G, & H

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

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

33. **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]

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

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

General NSPS and NESHAP Requirements

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

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

- 35.1. 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]
36. 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)]
37. After the effective date of any relevant standard promulgated by the Administrator under 40 CFR 63, an owner or operator who constructs a new affected source that is not major-emitting or reconstructs an affected source that is not major-emitting that is subject to such standard, or reconstructs a source such that the source becomes an affected source subject to the standard, must notify the Administrator and the Department of the intended construction or reconstruction. The notification must be submitted in accordance with the procedures in 40 CFR 63.9(b).
- [18 AAC 50.040(c)(1), 50.040(j), & 50.326(j)]
[40 CFR 71.6(a)(3)(iii)]
[40 CFR 63.5(b)(4), Subpart A]
38. **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 67 for the period covered by the report, a copy of any NSPS and NESHAPs reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10. For reports previously submitted to ADEC or submitted through CDX/CEDRI, state in the operating report the date and a brief description of each of the reports submitted during the reporting period.
- [18 AAC 50.326(j)(4) & 50.040(j)]
[40 CFR 71.6(c)(6)]
39. **Waivers.** Upon request by the Department, provide a written copy of any EPA-granted alternative monitoring requirement, custom monitoring schedule or waiver of the federal emission standards, recordkeeping, monitoring, performance testing, or reporting requirements. The Permittee shall keep a copy of each U.S. EPA-issued monitoring waiver or custom monitoring schedule with the permit.
- [18 AAC 50.326(j)(4) & 50.040(j)]
[40 CFR 71.6(c)(6)]

Section 5. General Conditions

Standard Terms and Conditions

40. 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)]
41. 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)]
42. 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)]
43. **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]
44. **Assessable Emissions.** The Permittee shall pay to the Department annual emission fees based on the stationary source's assessable emissions as determined by the Department under 18 AAC 50.410.⁷ The assessable emission fee rate is set out in 18 AAC 50.410. The Department will assess fees per ton of each air pollutant that the stationary source emits or has the potential to emit in quantities 10 tons per year or greater. The quantity for which fees will be assessed is the lesser of
- 44.1. the stationary source's assessable potential to emit of 628 tpy; or
 - 44.2. the stationary source's projected annual rate of emissions that will occur from July 1 to the following June 30, based upon credible evidence of actual annual emissions emitted during the most recent calendar year or another 12-month period approved in writing by the Department, when demonstrated by the most representative of one or more of the following methods:
 - a. an enforceable test method described in 18 AAC 50.220;
 - b. material balance calculations;
 - c. emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or
 - d. other methods and calculations approved by the Department, including appropriate vendor-provided emissions factors when sufficient documentation is provided.

⁷ If the stationary source has not commenced construction or operation on or before March 31st, submit to the Department's Juneau office a transmittal letter certified under 18 AAC 50.205 that identifies the source's assessable emissions for the previous fiscal year to be zero tons per year and provide estimates for when construction and operation will commence.

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

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

- 45.1. no later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions to ADEC, Air Permits Program, ATTN: Assessable Emissions Estimate, PO Box 111800, Juneau, AK 99811-1800; the submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates; or
- 45.2. if no estimate is submitted on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit set out in Condition 44.1.

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

46. 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)]

47. Reasonable Precautions to Prevent Fugitive Dust. A person who causes or permits bulk materials to be handled, transported, or stored, or who engages in an industrial activity or construction project shall take reasonable precautions to prevent particulate matter from being emitted into the ambient air.

[18 AAC 50.045(d), 50.040(e), 50.326(j)(3), & 50.346(c)]

- 47.1. 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 47.1.a or to address the results of Department inspections that found potential problems; and
 - (ii) to prevent future dust problems.

47.2. The Permittee shall report according to Condition 49.

48. 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)]

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

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

49.1. Monitoring, Recordkeeping, and Reporting for Condition 49:

- a. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 66.
- b. As soon as practicable after becoming aware of a complaint that is attributable to emissions from the stationary source, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of Condition 49.
- c. The Permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if
 - (i) after an investigation because of a complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of Condition 49; or
 - (ii) the Department notifies the Permittee that it has found a violation of Condition 49.
- d. The Permittee shall keep records of
 - (i) the date, time, and nature of all emissions complaints received;
 - (ii) the name of the person or persons that complained, if known;
 - (iii) a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 49; and
 - (iv) any corrective actions taken or planned for complaints attributable to emissions from the stationary source.
- e. With each stationary source operating report under Condition 67, the Permittee shall include a brief summary report which must include
 - (i) the number of complaints received;
 - (ii) the number of times the Permittee or the Department found corrective action necessary;
 - (iii) the number of times action was taken on a complaint within 24 hours; and

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

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

50. 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 standard⁸ listed in Condition 28, 29, or 32 (refrigerants),

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

50.2. report in accordance with Condition 66; 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

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

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

51.2. Include this condition in the annual certification required under Condition 68.

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

⁸ 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

- 52. 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)]

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

[18 AAC 50.220(b)]

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

53.2. 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.

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

54.1. 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]

54.2. 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]

54.3. 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]

54.4. 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)]

54.5. 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]

- 54.6. Source testing for emissions of PM_{2.5} and PM₁₀ must be conducted in accordance with the procedures specified in 40 CFR 51, Appendix M, Methods 201 or 201A and 202.
- [18 AAC 50.035(b)(2) & 50.220(c)(1)(F)]
[40 CFR 51, Appendix M]
- 54.7. 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]
- 55. 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)]
- 56. Test Exemption.** Compliance with Conditions 58, 59 and 60 is not required for Method 9 Plan (Condition 2.2) or Smoke/No Smoke Plan (Condition 2.3) observations.
- [18 AAC 50.345(a)]
- 57. 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)]
- 58. Test Plans.** Except as provided in Condition 56, 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 52 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)]
- 59. Test Notification.** Except as provided in Condition 56, 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)]

60. Test Reports. Except as provided in Condition 56, 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 63. 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)]

61. Particulate Matter Calculations. In source testing for compliance with the particulate matter standards in Conditions 5 and 19.2, 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

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

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

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

Reporting Requirements

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

- 63.1. The Department may accept an electronic signature on an electronic application or other electronic record required by the Department if
- a. a certifying authority registered under AS 09.80.020 verifies that the electronic signature is authentic; and
 - b. the person providing the electronic signature has made an agreement, with the certifying authority described in Condition 63.1.a, that the person accepts or agrees to be bound by an electronic record executed or adopted with that signature.

[18 AAC 50.345(a) & (j), 50.205, & 50.326(j)]

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

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

64.1. Provide electronic submittals, either by:

- a. email under a cover letter using dec.aq.airreports@alaska.gov; or
- b. using the Department's Air Online Services at <http://dec.alaska.gov/applications/air/airtoolsweb/>.

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

65. 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)]

66. Excess Emissions and Permit Deviation Reports.

66.1. Except as provided in Condition 49, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

- a. In accordance with 18 AAC 50.240(c), as soon as possible after the event commences or is discovered, report
 - (i) emissions that present a potential threat to human health or safety; and
 - (ii) excess emissions that the Permittee believes to be unavoidable;
- b. In accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or nonroutine repair that causes emissions in excess of a technology-based emission standard;
- c. Report all other excess emissions and permit deviations
 - (i) within 30 days after the end of the month during which the emissions or deviation occurred, except as provided in Condition 66.1.c(iii); or
 - (ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the Department provides written permission to report under Condition 66.1.c(i); and

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

66.2. When reporting either excess emissions or permit deviations, the Permittee shall report using either the Department's online form, which can be found at <http://dec.alaska.gov/applications/air/airtoolsweb>, or if the Permittee prefers, the form contained in Section 13 of this permit. The Permittee must provide all information called for by the form that is used.

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

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

67. Operating Reports. During the life of this permit⁹, the Permittee shall submit an operating report by August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year.

67.1. 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.

67.2. When excess emissions or permit deviations that occurred during the reporting period are not included with the operating report under Condition 67.1, the Permittee shall identify

- a. the date of the deviation;
- b. the equipment involved;
- c. the permit condition affected;
- d. a description of the excess emissions or permit deviation; and
- e. any corrective action or preventive measures taken and the date(s) of such actions; or

67.3. when excess emissions or permit deviations have already been reported under Condition 66 the Permittee shall cite the date or dates of those reports.

67.4. The operating report must include, for the period covered by the report, a listing of emissions monitored under Conditions 2.2.e and 2.3.c 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

⁹ *Life of this permit* is defined as the permit effective dates, including any periods of reporting obligations that extend beyond the permit effective dates. For example if a permit expires prior to the end of a calendar year, there is still a reporting obligation to provide operating reports for the periods when the permit was in effect.

- d. the monitoring result which triggered the additional monitoring.

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

68. Annual Compliance Certification. Each year by March 31, compile and submit to the Department an annual compliance certification report according to Condition 64.

- 68.1. 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;

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

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

69. Emission Inventory Reporting. The Permittee shall submit to the Department reports of actual emissions, by emissions unit, of CO, NH₃, NO_x, PM₁₀, PM_{2.5}, SO₂, VOCs and lead (Pb) (and lead compounds) using the form in Section 14 of this permit, as follows:

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

- a. 250 tpy of NH₃, PM₁₀, PM_{2.5} or VOCs; or
- b. 2,500 tpy of CO, NO_x or SO₂.

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

- a. 0.5 tpy of actual Pb, or
- b. 1,000 tpy of CO; or
- c. 100 tpy of SO₂, NH₃, PM₁₀, PM_{2.5}, NO_x or VOCs.

- 69.3. For reporting under Condition 69.2, the Permittee shall report in 2015 for calendar year 2014, 2018 for calendar year 2017, 2021 for calendar year 2020, etc., in accordance with the Environmental Protection Agency set schedule.

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

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

Section 8. Permit Changes and Renewal

- 70. Permit Applications and Submittals.** Comply with the following requirements for submitting application information to the US Environmental Protection Agency (EPA):
- 70.1. Provide a copy of each application for modification or renewal of this permit, including any compliance plan, or application addenda, at the time the application or addendum is submitted to the Department;
 - 70.2. The information shall be submitted to the Part 70 Operating Permit Program, US EPA Region 10, Mail Stop: OAW-150, 1200 Sixth Avenue, Suite 155, Seattle, WA 98101.
 - 70.3. To the extent practicable, provide applications in portable document format (pdf); MS Word format (.doc); or other computer-readable format compatible with EPA's national database management system; and
 - 70.4. Maintain records as necessary to demonstrate compliance with this condition.
[18 AAC 50.040(j)(7), 50.326(a) & 50.346(b)(7)]
[40 CFR 71.10(d)(1)]
- 71. Emissions Trading.** No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit.
[18 AAC 50.040(j)(4) & 50.326(j)]
[40 CFR 71.6(a)(8)]
- 72. Off Permit Changes.** Changes that are not addressed or prohibited by this permit, other than those subject to the requirements of 40 CFR Part 72 through 78 or those that are modifications under any provision of Title I of the Act, may be made without a permit revision, provided that the following requirements are met:
- 72.1. Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition;
 - 72.2. Provide contemporaneous written notice to EPA and the Department of each such change, except for changes that qualify as insignificant under 18 AAC 50.326(d) – (i). Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change;
 - 72.3. The change shall not qualify for the shield under 40 CFR 71.6(f);
 - 72.4. Keep a record describing changes made at the stationary source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
[18 AAC 50.040(j)(4) & 50.326(j)]
[40 CFR 71.6(a)(12)]

73. Operational Flexibility. CAA Section 502(b)(10)¹⁰ changes may be made within the permitted stationary source without a permit revision, if the changes are not modifications under any provision of Title I of the Act and the changes do not exceed the emissions allowable under this permit (whether expressed therein as a rate of emissions or in terms of total emissions): Provided, that the Permittee provides EPA and the Department with written notification no less than seven days in advance of the proposed change.

73.1. For each such change, the notification required by Condition 73 shall include a brief description of the change within the permitted stationary source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

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

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

74. Permit Renewal. To renew this permit, the Permittee shall submit to the Department¹¹ 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)]

¹⁰ 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.

¹¹ Submit permit applications to the Department's Anchorage office. The current address is: Air Permit Intake Clerk, ADEC, 555 Cordova Street, Anchorage, AK 99501.

Section 9. Compliance Requirements

General Compliance Requirements

- 75.** Compliance with permit terms and conditions is considered to be compliance with those requirements that are
- 75.1. included and specifically identified in the permit; or
 - 75.2. determined in writing in the permit to be inapplicable.
- [18 AAC 50.326(j)(3) & 50.345(a) & (b)]
- 76.** The Permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 18 AAC 50, and, except for those terms or conditions designated in the permit as not federally enforceable, the Clean Air Act, and is grounds for
- 76.1. an enforcement action;
 - 76.2. permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or
 - 76.3. denial of an operating permit renewal application.
- [18 AAC 50.040(j), 50.326(j) & 50.345(a) & (c)]
- 77.** For applicable requirements with which the stationary source is in compliance, the Permittee shall continue to comply with such requirements.
- [18 AAC 50.040(j) & 50.326(j)]
[40 CFR 71.6(c)(3) & 71.5(c)(8)(iii)(A)]
- 78.** It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.
- [18 AAC 50.326(j)(3) & 50.345(a) & (d)]
- 79.** The Permittee shall allow the Department or an inspector authorized by the Department, upon presentation of credentials and at reasonable times with the consent of the owner or operator to
- 79.1. enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;
 - 79.2. have access to and copy any records required by the permit;
 - 79.3. inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and
 - 79.4. sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.
- [18 AAC 50.326(j)(3) & 50.345(a) & (h)]

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

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

Section 10. Permit As Shield from Inapplicable Requirements

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

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

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

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

[18 AAC 50.326(j)]
 [40 CFR 71.6(f)(3)(i) & (ii)]

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

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

Table D - Permit Shields Granted

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
1 through 3	40 CFR 60 Subpart GG	EU IDs 1 – 3 are new stationary turbines that commenced construction after February 18, 2005 and are therefore subject to 40 CFR 60 Subpart KKKK. According to 40 CFR 60.4305(b), stationary combustion turbines regulated under Subpart KKKK are exempt from the requirements of Subpart GG.
1 through 3	40 CFR 60.4335	EU IDs 1 – 3 do not use water or steam injection.
1 through 3	40 CFR 60.4340(b), 60.4345, 60.4350, 60.4355	EU IDs 1 – 3 do not use CMS.
1 through 3	40 CFR 60.4390	EU IDs 1 – 3 are not emergency combustion turbines or research and development turbines.
1 through 3	40 CFR 63 Subpart YYYY	EU IDs 1 – 3 are not located at a major source of HAP emissions.
4	40 CFR 60 Subpart JJJJ	EU ID 4 is not a spark ignition internal combustion engine.
Stationary source-wide	40 C.F.R. 60 Subpart J, Ja, GGG, GGGa, QQQ	Stationary source does not meet the definition for a petroleum refinery.
Stationary source-wide	40 C.F.R. 60 Subpart KKK	Stationary source is not a natural gas processing plant as defined in subpart.
Stationary source-wide	40 C.F.R. 60 Subpart LLL	Stationary source does not operate natural gas sweetening unit(s).

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
Stationary source-wide	40 C.F.R. 60 Subparts OOOO & OOOOa	Stationary source does not contain onshore affected facilities as defined in the subpart.
Stationary source-wide	40 C.F.R. 61 Subpart J	No process components in benzene service, as defined by subpart (10% benzene by weight).
Stationary source-wide	40 C.F.R. 61 Subpart V	Stationary source does not operate equipment in volatile hazardous air pollutant (VHAP) service, as defined by subpart (> or = 10% VHAP by weight).
Stationary source-wide	40 C.F.R. 61 Subpart Y	Stationary source does not operate storage vessels in benzene service.
Stationary source-wide	40 C.F.R. 61 Subpart BB	Stationary source does not conduct benzene transfer operations.
Stationary source-wide	40 C.F.R. 61 Subpart FF	Stationary source does not engage in benzene waste operations.
Stationary source-wide	40 C.F.R. 63, Subpart B	Stationary source is not a major source of HAPs.
Stationary source-wide	40 C.F.R. 63 Subpart T	Stationary source does not operate halogenated solvent cleaning machines.
Stationary source-wide	40 C.F.R. 63 Subpart CC, UUU	Stationary source does not meet the definition for a petroleum refinery.
Stationary source-wide	40 C.F.R. 63 Subpart VV	Provisions only apply to oil-water separators and organic-water separators affected by 40 C.F.R. 60, 61, or 63 that specifically reference 40 C.F.R. 63 Subpart VV.
Stationary source-wide	40 C.F.R. 63 Subpart HH	Area sources and stationary source are exempt from the subpart because it exclusively processes, store, or transfers “black oil” and stationary source is not a major source of HAPS.
Stationary source-wide	40 C.F.R. 63 Subpart EEEE	Stationary source is not a major source of HAPs and does not distribute organic liquids.
Stationary source-wide	40 C.F.R. 63 Subpart HHH	Stationary source does not transmit or store natural gas prior to entering the pipeline to a local distribution company or to a final end user and stationary source is not a major source of HAPS.
Mobile internal combustion engines	18 AAC 50.055	Mobile internal combustion engines are not included in the “fuel-burning equipment” definition in 18 AAC 50.990. Therefore, the requirements in 18 AAC 50.055 do not apply to mobile internal combustion engines.

[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/tnemc01/methods/webinar8.pdf>).

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

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

Section 12. SO₂ Material Balance Calculation

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

$$\begin{aligned}
 \text{A. } &= 31,200 \times [\text{wt}\% \mathbf{S}_{\text{fuel}}] = 31,200 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{B. } &= 0.148 \times [\text{wt}\% \mathbf{S}_{\text{fuel}}] = 0.148 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{C. } &= 0.396 \times [\text{wt}\% \mathbf{C}_{\text{fuel}}] = 0.396 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{D. } &= 0.933 \times [\text{wt}\% \mathbf{H}_{\text{fuel}}] = 0.933 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{E. } &= \text{B} + \text{C} + \text{D} = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{F. } &= 20.9 - [\text{vol}\%_{\text{dry}} \mathbf{O}_{2, \text{exhaust}}] = 20.9 - \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{G. } &= [\text{vol}\%_{\text{dry}} \mathbf{O}_{2, \text{exhaust}}] \div \text{F} = \underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{H. } &= 1 + \text{G} = 1 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \text{I. } &= \text{E} \times \text{H} = \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 \mathbf{SO_2 \text{ concentration}} &= \text{A} \div \text{I} = \underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ ppm}
 \end{aligned}$$

The **wt%*S*_{fuel}**, **wt%*C*_{fuel}**, and **wt%*H*_{fuel}** are equal to the weight percents of sulfur, carbon, and hydrogen in the fuel. These percentages should total 100%.

The fuel weight percent (wt%) of sulfur is obtained pursuant to Condition 11. The fuel weight percents of carbon and hydrogen are obtained from the fuel refiner.

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

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

[18 AAC 50.346(c)]

Section 13. ADEC Notification Form¹²

Milne Point L-Pad

AQ1527TVP01

Stationary Source (Facility) Name

Air Quality Permit Number.

Hilcorp Alaska, LLC

Company Name

When did you discover the Excess Emissions/Permit Deviation?

Date: ____ / ____ / ____

Time: ____ : / ____

When did the event/deviation?

Begin: Date: ____ / ____ / ____

Time: ____ : ____ (please use 24-hr clock.)

End: Date: ____ / ____ / ____

Time: ____ : ____ (please use 24-hr clock)

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

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

- Excess Emissions – Complete Section 1 and Certify
- Deviation from Permit Condition – Complete Section 2 and Certify
- Deviations from COBC, CO, or Settlement Agreement – Complete Section 2 and Certify

Section 1. Excess Emissions

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

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

- Start Up/Shut Down
- Natural Cause (weather/earthquake/flood)
- Control Equipment Failure
- Schedule Maintenance/Equipment Adjustment
- Bad Fuel/Coal/Gas
- Upset Condition
- Other _____

(c) **Description**

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

¹² Revised as of September 27, 2010.

(d) **Emissions Units Involved:**

Identify the emissions unit involved in the event, using the same identification number and name as in the permit. Identify each emission standard potentially exceeded during the event and the exceedance.

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

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

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

(f) **Unavoidable Emissions:**

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

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

Certify Report (go to end of form)

Section 2. Permit Deviations

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

- Emissions Unit-Specific
- Failure to Monitor/Report
- General Source Test/Monitoring Requirements
- Recordkeeping/Reporting/Compliance Certification
- Standard Conditions Not Included in the Permit
- Other Section: _____
- Generally Applicable Requirements
- Reporting/Monitoring for Diesel Engines
- Insignificant Emissions Unit
- Stationary Source Wide

(Title of section and section number of your permit).

(b) **Emissions Units Involved:**

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

EU ID	EU Name	Permit Condition/ Potential Deviation

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

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

(d) **Corrective Actions:**

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

Certification:

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

Printed Name: _____ Title: _____ Date: _____
 Signature: _____ Phone Number: _____

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

To submit this report:

1. Fax to: 907-451-2187

Or

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

Or

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

Or

4. Phone Notifications: 907-451-5173

Phone notifications require a written follow-up report.

Or

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

If submitted online, report must be submitted by an authorized E-Signer for the stationary source.

[18 AAC 50.346(b)(3)]

Section 14. Emission Inventory Form

ADEC Reporting Form Emission Inventory Reporting State of Alaska Department of Environmental Conservation Division of Air Quality		Emission Inventory Year- []	
Mandatory information is highlighted in bright yellow. Make additional copies as needed.			
Stationary Source Detail			
Inventory start date			
Inventory end date			
ADEC ID or Permit Number			
EPA ID:			
Census Area/ Community			
Facility Name			
Facility Physical Location		Address:	
		City, State, Zip Code:	
		Latitude:	Longitude:
Owner Name & Address & contact number		Legal Description:	
Mailing Contact Information		Owner Name:	
		Owner Address:	
		Phone Number:	
Mailing Contact Information		Mailing Address:	
Line of Business (NAICS)			
Line of Business (SIC)			
Facility Status:			

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

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

Winter %	
Spring %	
Operational Schedule	
Days/Week	
Hours/Day	
Weeks/Year	
Hours/Year	

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

Heating		
Heat Input	Heat Output	Heat Values Convention

Emissions Operating Type:

Pollutant	Emission Factor (EF)	EF Numerator	EF Denominator	EF Source	Tons
Carbon Monoxide (CO)					
Nitrogen Oxides NOx					
PM₁₀ Primary (PM₁₀-PRI)					
PM_{2.5} Primary (PM₂₅-PRI)					
Sulfur Dioxide (SO₂)					
Ammonia (NH₃)					
Lead and lead compounds					
Volatile Organic Compounds (VOC)					

Emissions' Release Point					
Release Point ID					
Apportion%					

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

	>				
	>				
Material Processed					
Period Start					
Period End					
Throughput (units)					
Summer %					
Fall %					
Winter %					
Spring %					
Operational Schedule					
Days/Week					
Hours/Day					
Weeks/Year					
Hours/Year					
Fuel Characteristics					
Heat Content	Elem. Sulfur Content (%)	H2S Sulfur Content	Ash Content (if applicable)		
Heating					
Heat Input	Heat Output	Heat Values Convention			
Emissions Operating Type:					
Pollutant	Emission Factor (EF)	EF Numerator	EF Denominator	EF Source	Tons
Carbon Monoxide (CO)					
Nitrogen Oxides NOx					
PM₁₀ Primary (PM₁₀-PRI)					
PM_{2.5} Primary (PM₂₅-PRI)					
Sulfur Dioxide (SO₂)					
Ammonia (NH₃)					
Lead and lead compounds					
Volatile Organic Compounds (VOC)					

Emissions' Release Point					
Release Point ID					
Apportion%					

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

Certification:

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

Printed Name: _____ Title _____ Date _____

Signature: _____ Phone number _____

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

To submit this report:

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

Or

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

<http://dec.alaska.gov/Applications/Air/airtoolsweb/>.

[18 AAC 50.346(b)(9)]

Attachment 1 - 40 CFR 60 Subpart A Summary Report

Gaseous and Opacity Excess Emission and Monitoring System Performance

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

Pollutant (*Circle One*): SO₂ NO_x TRS H₂S CO Opacity

Reporting period dates: From _____ to _____

Company: _____
 Emission Limitation: _____

Address: _____

Monitor Manufacturer: _____

Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total source operating time in reporting period ¹: _____

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

¹ For opacity, record all times in minutes. For gases, record all times in hours.

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

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

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

Name: _____

Signature: _____ Date: _____

Title: _____