DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ0302TVP04 Issue Date: Public Comment - February 24, 2022
Expiration Date: [Five Years]

The Alaska Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the Permittee, Hecla Mining Company, for the operation of the Hecla Greens Creek Mine.

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.

All currently applicable stationary source-specific terms and conditions of Minor Permit No. AQ0302MSS01 have been incorporated into this operating permit.

Upon effective date of this permit, Operating Permit No. AQ0302TVP03 expires.

This Operating Permit becomes effective <insert date—30 days after issue date>.

James R. Plosay, Manager
Air Permits Program

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Abbreviations and Acronyms

AAC.....Alaska Administrative Code
ADEC .....Alaska Department of Environmental Conservation
Administrator.....EPA and the Department.
AOS .....Air Online Services
AS .....Alaska Statutes
ASTM .....American Society for Testing and Materials
BACT .....best available control technology
bHp .....brake horsepower
CDX.....Central Data Exchange
CEDRI .....Compliance and Emissions Data Reporting Interface
C.F.R. .....Code of Federal Regulations
CAA or The Act .Clean Air Act
CO .....carbon monoxide
CO_2e .....CO_2-equivalent
Department .....Alaska Department of Environmental Conservation
dscf .....dry standard cubic foot
EPA .....US Environmental Protection Agency
EU.....emissions unit
EU ID .....emissions unit identification number
GACT .....Generally Available Control Technology
GAPCP .....Good Air Pollution Control Practice
GHG .....Greenhouse Gas
gr/dscf.....grain per dry standard cubic foot (1 pound = 7000 grains)
gph .....gallons per hour
HAPs .....hazardous air pollutants [as defined in AS 46.14.990]
Hp .....horsepower
kPa .....kiloPascals
LAER.....lowest achievable emission rate
MACT .....maximum achievable control technology [as defined in 40 C.F.R. 63]
MMBtu/hr.....million British thermal units per hour
MMscf .....million standard cubic feet
MR&R.....monitoring, recordkeeping, and reporting
NAICS.....North American Industrial Classification System
NESHAP .....National Emission Standards for Hazardous Air Pollutants [as contained in 40 C.F.R. 61 and 63]
NH_3.....ammonia
NO_x.....nitrogen oxides
N_2O.....Nitrous Oxide
NSPS .....New Source Performance Standards [as contained in 40 C.F.R. 60]
O & M .....operation and maintenance
O_2 .....oxygen
PAL .....plantwide applicability limitation
Pb .....lead
PM.....particulate matter
PM_{10} .....particulate matter less than or equal to a nominal 10 microns in diameter
$PM_{2.5}$.....particulate matter less than or equal to a nominal 2.5 microns in diameter
ppm .....parts per million
ppmv, ppmvd .....parts per million by volume on a dry basis
psia .....pounds per square inch (absolute)
PSD .....prevention of significant deterioration
PTE .....potential to emit
SIC. .....Standard Industrial Classification
SIP.....State Implementation Plan
SPC .....Standard Permit Condition
SO_2 .....sulfur dioxide
tph .....tons per hour
tpy .....tons per year
VOC .....volatile organic compound [as defined in 40 C.F.R. 51.100(s)]
VOL .....volatile organic liquid [as defined in 40 C.F.R. 60.111b, Subpart Kb]
vol% .....volume percent
wt% .....weight percent
$wt\%S_{fuel}$ .....weight percent of sulfur in fuel

Section 1. Stationary Source Information

Identification

Permittee:		Hecla Mining Company P.O. Box 32199 Juneau, Alaska 99803-2199
Stationary Source Name:		Hecla Greens Creek Mine
Location:		58º 5′ North; 134º 38′ West
Physical Address:		18.3 miles southeast of Hawk Inlet on Admiralty Island and 18 miles southwest of Juneau, Alaska; T44S, R66E, Section 4, Copper River Meridian
Owner:		Hecla Greens Creek Mining Company P.O. Box 32199 Juneau, AK 99803-2199
Operator:		Hecla Greens Creek Mining Company P.O. Box 32199 Juneau, AK 99803-2199
Permittee's Responsible Official:		Martin Stearns, Environmental/Surface Operations Manager P.O. Box 32199 Juneau, AK 99803-2199
Designated Agent:		Martin Stearns, Environmental/Surface Operations Manager P.O. Box 32199 Juneau, AK 99803-2199
Stationary Source and Building Contact:		Martin Stearns, Environmental/Surface Operations Manager P.O. Box 32199 Juneau, AK 99803-2199 mstearns@hecla-mining.com
Fee Contact:		Martin Stearns, Environmental/Surface Operations Manager P.O. Box 32199 Juneau, AK 99803-2199 mstearns@hecla-mining.com
Permit Contact:		Martin Stearns, Environmental/Surface Operations Manager P.O. Box 32199 Juneau, AK 99803-2199 mstearns@hecla-mining.com
Process Description:	SIC Code	1031/1044/1041 - Lead, Zinc, Silver and Gold Mining
	NAICS Code:	212231/212222/212221 - Lead, Zinc, Silver and Gold Mining

[18 AAC 50.040(j)(3) & 50.326(a)]
[40 C.F.R. 71.5(c)(1) & (2)]

Section 2. Emissions Unit Inventory and Description

Emissions units (EUs) listed in Table A have specific monitoring, recordkeeping, or reporting conditions in this permit. Emissions unit descriptions and ratings are given for identification purposes only.

Table A - Emissions Unit Inventory[1]

EU ID	Emission Unit Name	Rating/Size	Installation or Construction Date
	I Power Generation Facility		
1	Ruston Diesel Electric Generator Serial No. 1H9763	2,200 kW	1989
2	Ruston Diesel Electric Generator Serial No. 1H9796	2,200 kW	1989
3	Ruston Diesel Electric Generator Serial No. 1H9795	2,200 kW	1989
4	Caterpillar 3516B Diesel Electric Generator	1,825 kW	1997
5[2]	Volcano Oil-Fired Boiler	2.5 MMBtu/hr	1989
18	Caterpillar 3516B Diesel Electric Generator	1,825 kW	1999
19	Solar-Taurus 60-T7300S Combustion Turbine	5,045 kW	2001
20[3]	Cleaver Brooks FLX-450 Oil-Fired Boiler	4.5 MMBtu/hr	2010
21[4]	Well McLain Boiler LW-02	1.7 MMBtu/hr	2019
	II Mine Site		
6	Sullair Model 900 Air Compressor	266 hp	2001
22[5]	Perkins Engine	13 hp	2019
23[2]	John Deere Engine / Emergency Godwin Pump	99 hp	2010
24[2]	John Deere Engine / Emergency Godwin Pump	300 hp	2008
	III Mill Site		
7	Sag Mill (Crusher)	600 hp	1989
8	Ball Mill (Crusher)	900 hp	1989
9	Conveyor Drop Points	2,300 ton per day	1989

Notes:

1. EU IDs 10-17 listed in Permit No. AQ0302TVP02 Revision 1 are not included in Table A. These units have potential emission less than the significant emissions thresholds in 18 AAC 50.326(e) and are not subject to any specific State or Federal requirements.
2. EU IDs 5, 23, and 24 are included in Table A even though it has potential emissions of criteria pollutants less than the significant emissions thresholds listed in 18 AAC 50.326(e) because it is subject to emission unit-specific requirements.
3. EU ID 20 is a new emission unit not previously identified in Permit No. AQ0302TVP02 Revision 1. Hecla Greens Creek Mining Company (HGCMC) submitted notification of an off-permit change on November 22, 2010. Based on EU ID 20's potential-to-emit (PTE), a Title I permit was not required. The unit has actual emissions of criteria pollutants that are less than the significant emissions thresholds listed in 18 AAC 50.326(e), but does have emission unit-specific requirements.
4. EU ID 21 is a new emission unit not previously identified in Permit No. AQ0302TVP03. Hecla Greens Creek Mining Company (HGCMC) submitted notification of an off-permit change on June 11, 2019. Based on EU

ID 21's potential-to-emit (PTE), a Title I permit was not required. The unit has actual emissions of criteria pollutants that are less than the significant emissions thresholds listed in 18 AAC 50.236(e), but does have emission unit-specific requirements.

5. EU ID 22 is a new emission unit not previously identified in Permit No. AQ0302TVP03. Hecla Greens Creek Mining Company (HGCMC) submitted notification of an off-permit change on July 16, 2019. Based on EU ID 22's potential-to-emit (PTE), a Title I permit was not required. The unit has actual emissions of criteria pollutants that are less than the significant emissions thresholds listed in 18 AAC 50.236(e), but does have emission unit-specific requirements.

[18 AAC 50.326(a)]
[40 C.F.R. 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 1-8 and 18-24 listed in Table A to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

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

1.1. For EU IDs 1-4, 6, 18, and 19 monitor, record, and report in accordance with Conditions 2 - 4.

1.2. For EU IDs 7-8 monitor, record, and report in accordance with Conditions 35 and 36 by the end of each month.

1.3. For each of EU IDs 5 and 20-24, as long as actual emissions from the emissions unit are less than the significant emissions thresholds listed in 18 AAC 50.326(e) during any consecutive 12-month period, monitoring shall consist of an annual compliance certification under Condition 90 for the visible emissions standard based on reasonable inquiry. The Permittee shall report in the operating report under Condition 89 if any of EU IDs 5 and 20-24 reaches any of the significant emissions thresholds listed in 18 AAC 50.326(e) and monitor, record, and report in accordance with Conditions 2 through 4 for the remainder of the permit term for that emissions unit.

[18 AAC 50.040(j)(4), 50.326(j)(3) & (4), & 50.346(c)]
[40 C.F.R. 71.6(a)(3) & (c)(6)]

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

Liquid Fuel-Burning Equipment (EU IDs 1-6, 18 and 19-24)

2. **Visible Emissions Monitoring.** When required by any of Conditions 1.1 or 1.3, or in the event of replacement[1] during the permit term, the Permittee shall observe the exhaust of EU IDs 1-6, 18, and 19-24 for visible emissions using either the Method 9 Plan under Condition 2.3 or the Smoke/No-Smoke Plan under Condition 2.4.

2.1. The Permittee may change the visible emissions monitoring plan for an emissions unit at any time unless prohibited from doing so by Condition 2.5.

2.2. The Permittee may for each unit elect to continue the visible emissions monitoring schedule specified in Conditions 2.3.b through 2.3.e or Conditions 2.4.b through 2.5 that remains in effect from a previous permit.

2.3. **Method 9 Plan.** For all observations in this plan, observe emissions unit exhaust, following 40 C.F.R. 60, Appendix A-4, Method 9 for 18 minutes to obtain 72 consecutive 15-second opacity observations.[2]

[1] *"Replacement,"* as defined in 40 C.F.R. 51.166(b)(32).
[2] Visible emissions observations are not required during emergency operations.

a. First Method 9 Observation. Except as provided in Condition 2.2 or Condition 2.5.c(ii), observe the exhausts of EU IDs 1-6, 18, and 19-24 according to the following criteria:

(i) For any unit, observe emissions unit exhaust within 14 calendar days after changing from the Smoke/No-Smoke Plan of Condition 2.4.

(ii) Except as provided in Condition 2.3.a(iii), for any of EU IDs 1-4, 6, 18, and 19, observe exhaust within six months after the effective date of this permit.

(iii) For any unit replaced, observe exhaust within 60 days of the newly installed emissions unit becoming fully operational.[3] Except as provided in Condition 2.3.e, after the First Method 9 observation:

(A) For EU IDs 1-4, 6, 18, and 19, continue with the monitoring schedule of the replaced emissions unit; and

(B) For EU IDs 5 and 20-24 comply with Condition 1.3, as applicable.

b. Monthly Method 9 Observations. After the first Method 9 observation conducted under Condition 2.3.a, perform observations at least once in each calendar month that the emissions unit operates.

c. Semiannual Method 9 Observations. After at least three monthly observations under Condition 2.3.b unless a six-consecutive-minute average opacity is greater than 15 percent and one or more individual observations are greater than 20 percent, perform semiannual observations

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

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

d. Annual Method 9 Observations. After at least two semiannual observations under Condition 2.3.c, unless a six-consecutive-minute average opacity is greater than 15 percent and one or more individual observations are greater than 20 percent, perform annual observations

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

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

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

e. Increased Method 9 Frequency. If a six-consecutive-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more individual observations are greater than 20 percent, then increase or maintain the observation frequency for that emissions unit to at least monthly intervals as described in Condition 2.3.b, and continue monitoring in accordance with the Method 9 Plan.

2.4. **Smoke/No Smoke Plan.** Observe the emissions unit exhaust for the presence or absence of visible emissions, excluding condensed water vapor.

a. Initial Monitoring Frequency. Observe the emissions unit exhaust during each calendar day that the emissions unit operates for a minimum of 30 days.

b. Reduced Monitoring Frequency. If the emissions unit operates without visible emissions for 30 consecutive operating days as required in Condition 2.4.a, observe the emissions unit exhaust at least once in every calendar month that the emissions unit operates.

c. Smoke Observed. If visible emissions are observed, comply with Condition 2.5.

2.5. **Corrective Actions Based on Smoke/No Smoke Observations.** If visible emissions are present in the emissions unit exhaust during an observation performed under the Smoke/No Smoke Plan of Condition 2.4, then the Permittee shall either begin the Method 9 Plan of Condition 2.3 or

a. Initiate actions to eliminate visible emissions 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 visible emissions; and

c. After completing the actions required under Condition 2.5.a,

(i) conduct smoke/no smoke observations in accordance with Condition 2.4

(A) at least once per day for the next seven operating days and, if applicable, until the initial 30-day observation period of Condition 2.4.a is completed; and

(B) continue as described in Condition 2.4.b; or

(ii) if the actions taken under Condition 2.5.a do not eliminate the visible emissions, or if subsequent visible emissions are observed under the schedule of Condition 2.5.c(i)(A), then observe the emissions unit exhaust using the Method 9 Plan unless the Department gives written approval to resume observations under the Smoke/No Smoke Plan. After observing visible emissions and making observations under the Method 9 Plan, the Permittee may at any time take corrective action that eliminates visible emissions and restart the Smoke/No Smoke Plan under Condition 2.4.a.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(i)]

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

3.1. For all Method 9 observations,

a. the observer shall record the following:

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

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

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

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

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

b. To determine the six-minute average opacity,

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

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

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

(iv) record the average opacity on the sheet.

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

3.2. If using the Smoke/No Smoke Plan of Condition 2.4, 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. the EU ID of the emissions unit observed;

c. whether visible emissions are present or absent in the emissions unit 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 or best estimate**,** if unknown).

3.3. The records required by Conditions 3.1 and 3.2 may be kept in electronic format.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(ii)]

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

4.1. In the first operating report required in Condition 89 under this permit term, the Permittee shall state the intention to either continue the visible emissions monitoring schedule in effect from the previous permit or reset the visible emissions monitoring schedule.

4.2. Include in each operating report required under Condition 89 for the period covered by the report:

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 all Method 9 Plan observations:

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

(ii) a summary to include:

(A) number of days observations were made;

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

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

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 visible emissions were observed; and

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

4.3. Report under Condition 88:

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

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

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(iii)]

Particulate Matter (PM) Emissions Standard

5. **Industrial Process and Fuel-Burning Equipment PM Emissions.** The Permittee shall not cause or allow particulate matter emitted from EU IDs 1-8 and 18-24 listed in Table A to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.[4]

[18 AAC 50.040(j)(4), 50.055(b)(1), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(1)]

5.1. For EU IDs 1-4, 6, 18, and 19, monitor, record and report in accordance with Conditions 6 through 8.

5.2. For EU IDs 7-8 monitor, record, and report in accordance with Conditions 35 and 36.

5.3. For each of EU IDs 5 and 20-24, as long as actual emissions from the emissions unit are less than the significant emissions thresholds listed in 18 AAC 50.326(e) [5] during any consecutive 12-month period, monitoring shall consist of an annual compliance certification under Condition 90 for the PM emissions standard based on reasonable inquiry. The Permittee shall report in the operating report under Condition 89 if any of EU IDs 5 and 20-24 reaches any of the significant emissions thresholds and monitor, record and report in accordance with Conditions 6 through 8 and/or Conditions 9 through 11.

[18 AAC 50.040(j)(4), 50.326(j)(3) & (4), & 50.346(c)]
[40 C.F.R. 71.6(a)(3) & (c)(6)]

PM MR&R

Liquid Fuel-Burning Engines and Turbines (EU IDs 1-4, 6, 18, 19, 22-24)

6. **PM Monitoring.** The Permittee shall conduct source tests on EU IDs 1-4, 6, 18, and 19 (when required by Condition 5.1) and EU IDs 22-24 (when required by Condition 5.3), to determine the concentration of PM in the exhaust of each emissions unit as follows:

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(i)]

6.1. If the result of any Method 9 observation conducted under Condition 2.3 for any of EU IDs 1-4, 6, 18, and 19, the Permittee shall, within six months of that Method 9 observation, either:

[4] EU IDs 1-4 and 18 must also comply with a more restrictive particulate matter limit as set out in Condition 17.1

[5] *<If requested by Permittee, add operational hours or amount of fuel burned per 12-month rolling period equivalent to the worst-case significant emissions threshold in 18 AAC 50.326(e) for each affected emissions unit.>*

a. take corrective action and observe the emissions unit exhaust under load conditions comparable to those when the criteria were exceeded, following 40 C.F.R. 60, Appendix A-4 Method 9 for 18 minutes to obtain 72 consecutive 15-second opacity observations, to show that emissions are no longer greater than the criteria of Condition 6.2; or

b. except as exempted in Condition 6.4, conduct a PM source test according to requirements set out in Section 6.

6.2. Take corrective action or conduct a PM source test, in accordance with Condition 6.1, if any Method 9 observation under Condition 2.3 results in an 18-minute average opacity greater than

a. 20 percent for an emissions unit with an exhaust stack diameter that is equal to or greater than 18 inches; or

b. 15 percent for an emissions unit with an exhaust stack diameter that is less than 18 inches, unless the Department has waived this requirement in writing.

6.3. During each one-hour PM source test run under Condition 6.1.b, observe the emissions unit exhaust for 60 minutes in accordance with Method 9 and calculate the highest 18-consecutive-minute average opacity measured during each one-hour test run. Submit a copy of these observations with the source test report.

6.4. The PM source test requirements in Condition 6.1.b are waived for an emissions unit if

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

b. corrective action was taken to reduce visible emissions and two consecutive 18-minute Method 9 visible emissions observations (as described in Condition 2.3) conducted thereafter within a six-month period show visible emissions less than the threshold in Condition 6.2.

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

7.1. Within 30 calendar days of startup, the Permittee shall record the exhaust stack diameters of EU IDs 22-24.

7.2. Keep records of the results of any source test and visible emissions observations conducted under Condition 6.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(ii)]

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

8.1. Notify the Department of any Method 9 observation results that are greater than the threshold of either Condition 6.2.a or Condition 6.2.b within 30 days of the end of the month in which the observations occurred. Include the dates, EU ID(s), and results when an observed 18-minute average opacity was greater than an applicable threshold in Condition 6.2.

8.2. In each operating report under Condition 89, include:

a. a summary of the results of any PM source test and visible emissions observations conducted under Condition 6; and

b. copies of any visible emissions observation results greater than the thresholds of Condition 6.2, if they were not already submitted.

8.3. Report the stack diameters of EU IDs 22-24 in the next operating report under Condition 89 following the deadline in Condition 7.1 for collecting the stack diameter records.

8.4. Report in accordance with Condition 88:

a. anytime the results of a PM source test exceed the PM emissions standard in Condition 5; or

b. if the requirements under Condition 6.1 were triggered and the Permittee did not comply on time with either Condition 6.1.a or 6.1.b. Report the deviation within 24 hours of the date compliance with Condition 6.1 was required.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(iii)]

Liquid Fuel-Burning Boilers and Heaters (EU IDs 5, 20, and 21)

9. **PM Monitoring.** The Permittee shall conduct source tests on EU IDs 5, 20, and 21 (when required by Condition 5.3) to determine the concentration of PM in the exhaust of each emissions unit as follows:

9.1. If the result of any Method 9 observation conducted under Condition 2.3 for any of EU IDs 5, 20, and 21 results in an 18-minute average opacity greater than 20 percent opacity, the Permittee shall, within six months of that Method 9 observation, either:

a. take corrective action and observe the emissions unit exhaust under load conditions comparable to those when the criteria were exceeded, following 40 C.F.R. 60, Appendix A-4 Method 9 for 18 minutes to obtain 72 consecutive 15-second opacity observations, to show that emissions are no longer greater than an 18-minute average opacity of 20 percent; or

b. except as exempted under Condition 9.3, conduct a PM source test according to the requirements in Section 6.

9.2. During each one-hour PM source test run under Condition 9.1, observe the emissions unit exhaust for 60 minutes in accordance with Method 9 and calculate the highest 18-consecutive-minute average opacity measured during each one-hour test run. Submit a copy of these observations with the source test report.

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

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

b. corrective action was taken to reduce visible emissions and two consecutive 18-minute Method 9 visible emissions observations (as described in Condition 2.3) conducted thereafter within a six-month period show visible emissions less than the threshold in Condition 9.1.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(i)]

10. **PM Recordkeeping.** The Permittee shall keep records of the results of any source test and visible emissions observations conducted under Condition 9.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(ii)]

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

11.1. Notify the Department of any Method 9 observation results that are greater than the threshold of Condition 9.1 within 30 days of the end of the month in which the observations occurred. Include the dates, EU ID(s), and results when an observed 18-minute average opacity was greater than the threshold in Condition 9.1.

11.2. In each operating report required by Condition 89, include:

a. a summary of the results of any source test and visible emissions observations conducted under Condition 9; and

b. copies of any visible emissions observation results greater than the threshold in Condition 9.1, if they were not already submitted.

11.3. Report in accordance with Condition 88 any time the results of a source test exceed the PM emission standard in Condition 5.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(iii)]
[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]
[40 C.F.R. 71.6(a)(3)(i) - (iii)]

Sulfur Compound Emissions Standard

12. **Sulfur Compound Emissions.** The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EU IDs 1-6 and 18-24 to exceed 500 ppm averaged over three hours.

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

Sulfur Compound MR&R

Fuel Oil[6] (EU IDs 1-6 and 18-24)

13. **Sulfur Compound Monitoring and Recordkeeping.** The Permittee shall comply with Condition 12 by complying with the fuel sulfur content limit and MR&R in Condition 19.

Title I Permit Requirements

Owner Requested Limits (ORLs) to Avoid PSD Classification

14. **Sulfur Dioxide (SO_2) Requirements.** The Permittee shall limit, monitor, record, and report SO_2 emissions as follows:

    14.1. Limit total SO_2 emissions from EU IDs 4, 5, 6, 18, and 19 to no more than 40 tons per any consecutive 12-month period.

    14.2. Comply with Condition 14.1 by monitoring, recording, and reporting sulfur content of the fuel burned in EU IDs 4, 5, 6, 18, and 19 as specified in Condition 19.

    [Condition 4, Minor Permit No. AQ0302MSS01, January 26, 2011]
    [18 AAC 50.040(j) & 50.326(j)]
    [40 C.F.R. 71.6(a)]

15. **Carbon Monoxide (CO) Requirements.** The Permittee shall limit, monitor, record, and report CO emissions as follows:

    15.1. Limit the combined CO emissions from EU IDs 1, 2, and 3 to less than 100 tons per consecutive 12-month rolling period.

    15.2. When in use, operate EU ID 19 at greater than 2.62 MW (52 percent of rated capacity), except during startup and shutdown.

    15.3. Monitor and record as follows:

        a. Install, operate, and maintain a continuous monitoring system for measuring and recording the fuel consumption for each of EU IDs 1, 2, and 3.

        b. Monitor and record monthly hours of operation for each of EU IDs 1, 2, and 3 at the end of each calendar month.

        c. Monitor, calculate and record monthly fuel consumption, as measured in Condition 15.3.a, for each of EU IDs 1, 2, and 3 at the end of each calendar month.

        d. When operating EU ID 19, monitor and record the daily power output of EU ID 19, in accordance with Condition 18.2.a, to show compliance with Condition 15.2.

[6] *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 C.F.R. 60.41b.

e. Calculate and record the combined monthly and consecutive 12-month rolling CO emissions for EU IDs 1, 2, and 3 using the worst-case emission factor from most recent source test and monthly fuel consumption determined in Condition 15.3.c or monthly hours of operation determined in Condition 15.3.b.

15.4. Report CO emissions as follows:

a. In the operating report required by Condition 89, include the following:

(i) The minimum daily power output for EU ID 19 for each month it operates during the reporting period, excluding periods of startup and shutdown; and

(ii) The combined consecutive 12-month rolling CO emissions for EU IDs 1, 2, and 3 for each month of the reporting period.

b. Report as Excess Emissions and Permit Deviations under Condition 88 if the CO emissions exceed the limit in Condition 15.1 or the power output exceed the limit in Condition 15.2.

[Condition 5, Minor Permit No. AQ0302MSS01, January 26, 2011]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

16. **Nitrogen Oxides (NO_X) Requirements.** The Permittee shall limit, monitor, record, and report NO_X emissions as follows:

16.1. Limit the NO_X emissions concentration in the exhaust from EU IDs 4 and 18 to 795 parts per million by volume (ppmv) of NO_X, corrected to 15 percent oxygen (O_2), for a 3-hr averaging period.

16.2. Limit the combined total NO_X emission rate from EU IDs 1 through 4, 18, and 19 to 535.7 tons per consecutive 12-month period, expressed as NO_2.

16.3. Monitor and record emissions as follows:

a. Within five years of the latest source test, conduct a NO_X emissions source test on each of EU IDs 4 and 18 in accordance with source testing requirements described in Section 6 to ensure compliance with NO_X emission limit in Condition 16.1. Quantify emissions in terms of ppmv corrected to 15% O_2 for a 3-hour averaging period and in pounds per hour (lb/hr) using Methods 1 through 4 or Method 19 of 40 C.F.R. 60, Appendix A. For emission units of the same make, model, and design, one unit within the group can be tested. No source test is required for an emission unit that was operated for less than 400 hours per year for each year in the preceding five years.

b. Install, operate, and maintain a continuous monitoring system for measuring and recording the fuel consumption for each of EU IDs 1 through 4, 18, and 19.

c. Monitor and record the monthly fuel consumption, as measured in Condition 16.3.b, for each of EU IDs 1 through 4, 18, and 19 at the end of each calendar month.

d. Monitor and record monthly hours of operation for each of EU IDs 1 through 4, 18, and 19 at the end of each calendar month.

e. Calculate and record the combined monthly and consecutive 12-month rolling NO_X emissions for EU IDs 1 through 4, 18, and 19 using the most recent source test emission factors and monthly fuel consumption per unit determined in Condition 16.3.c or monthly hours of operation per unit determined in Condition 16.3.d.

16.4. Report NO_X emissions as follows:

a. In the operating report required by Condition 89, include the combined consecutive 12-month rolling NO_X emissions for EU IDs 1 through 4, 18, and 19 for each month of the reporting period.

b. Report as Excess Emissions and Permit Deviations described in Condition 88, if the NO_X emissions exceed the limit in Condition 16.1 or 16.2.

[Condition 6, Minor Permit No. AQ0302MSS01, January 26, 2011]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

17. **Particulate Matter (PM) Requirements.** The Permittee shall limit, monitor, record, and report PM emissions as follows:

17.1. Limit the PM concentration in each of the exhausts of EU IDs 1 through 4 and 18 to 0.021 grains per dry square cubic feet (gr/dscf).

17.2. Upon the Department's request, verify compliance with the grain loading standard in Condition 17.1 by conducting PM source tests in accordance with source test procedures described in Section 6.

17.3. Report the PM source test results to the Department as described in Condition 82.

[Condition 7, Minor Permit No. AQ0302MSS01, January 26, 2011]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

17.4. Report as Excess Emissions and Permit Deviations described in Condition 88, if test results show PM concentrations exceed the limit in Condition 17.1.

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a) & 71.6(c)(6)]

Ambient Air Quality Protection Requirements

18. **Power Output Limit.** Limit total power output as specified in Conditions 18.1.a and 18.1.b.

18.1. The combined daily average power production from the five diesel electric generators (EU IDs 1 through 4 and 18) and the Solar combustion turbine (EU ID 19) shall not exceed:

a. 12.5 MW on any day when EU ID 19 is operating; and

b. 9.5 MW on any day when EU ID 19 is not operating.

18.2. Monitor, record, and report compliance with Condition 18.1 as follows:

a. Install, operate, and maintain a continuous system for measuring and recording power output for each of EU IDs 1 through 4, 18, and 19.

b. Monitor, calculate, and record the combined daily power output of EU IDs 1 through 4, 18, and 19, as measured in Condition 18.2.a, to determine compliance with Condition 18.1.

c. Report the combined daily power output of EU IDs 1 through 4, 18, and 19 as follows:

(i) Include the maximum combined daily power output of EU IDs 1 through 4, 18, and 19 (when EU ID 19 is in operation) and the maximum combined daily power output of EU IDs 1 through 4 and 18 (when EU ID 19 is not in operation) in the operating report required by Condition 89 for each month of the reporting period.

(ii) Report as Excess Emissions and Permit Deviation as described in Condition 88 if the daily power output exceeds any of the limits under Condition 18.1.

[Condition 8, Minor Permit No. AQ0302MSS01, January 26, 2011]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

19. **Fuel Sulfur Requirements.** For all diesel fuel burning equipment:

19.1. The annual average of fuel oil sulfur content shall not exceed 0.08 percent by weight; and

19.2. The fuel oil sulfur content shall not exceed 0.1 percent by weight at any time.

19.3. Test each shipment of fuel for sulfur content following an appropriate method listed in 18 AAC 50.035, or obtain and keep a signed statement from the supplier or refinery showing test results that include the sulfur content of the fuel.

19.4. Report as follows:

a. Include a list showing the fuel sulfur content for each shipment of fuel received during the reporting period or the fuel sulfur test results in the operating report required by Condition 89.

b. Report as Excess Emissions and Permit Deviations described in Condition 88 if fuel sulfur content exceed the limits in Condition 19.1 or 19.2.

[Condition 9, Minor Permit No. AQ0302MSS01, January 26, 2011]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

Best Available Control Technology (BACT)

20. **Nitrogen Oxides (NO_X) BACT Requirements[7].** The Permittee shall limit, monitor, record, and report NO_X emissions as follows:

    20.1. Limit NO_X emissions concentrations in each of the exhaust of EU IDs 1 through 3 to 795 ppmv, corrected to 15 percent O_2, for a 3-hour averaging period.

    20.2. Within five years of the latest source test, conduct a NO_X emissions source test on each of EU IDs 1, 2, and 3 in accordance with source testing requirements described in Section 6 to ensure compliance with NO_X BACT emission limit in Condition 20.1. Quantify emissions in terms of ppmv corrected to 15% O_2 for a 3-hour averaging period and in pounds per hour (lb/hr) using Methods 1 through 4 or Method 19 of 40 C.F.R. 60, Appendix A. For emission units of the same make, model, and design, one emission unit within the group can be tested. No source test is required for an emission unit that was operated for less than 400 hours per year for each year in the preceding five years.

    20.3. Report as Excess Emissions and Permit Deviations described in Condition 88 if the NO_X emissions exceed the limit in Condition 20.1.

    [Condition 10, Minor Permit No. AQ0302MSS01, January 26, 2011]
    [18 AAC 50.040(j) & 50.326(j)]
    [40 C.F.R. 71.6(a)]

Insignificant Emissions Units

21. For emission 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:

    21.1. **Visible Emissions Standard**: The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from an industrial process or fuel-burning equipment, 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)]

    21.2. **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)]

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

    [18 AAC 50.055(c)]

[7] The Title V permit for the source requires EU ID 19 to comply with a more stringent NSPS standard of 176 ppmvd and is therefore excluded from this BACT requirement.

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

a. Submit the compliance certifications of Condition 90 based on reasonable inquiry;

b. Comply with the requirements of Condition 71;

c. Report in the operating report required by Condition 89 if an emissions unit has historically been classified as insignificant because of actual emissions less than the thresholds of 18 AAC 50.326(e) and current actual emissions have become greater than any of those thresholds; and

d. No other monitoring, recordkeeping or reporting is required for insignificant emissions units to demonstrate compliance with the emissions standards under Conditions 21.1, 21.2, and 21.3.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(b)(4)]
[40 C.F.R. 71.6(a)(1) & (a)(3)]

Section 4. Federal Requirements

40 C.F.R. Part 60 New Source Performance Standards (NSPS)

NSPS Subpart A – General Provisions

22. **NSPS Subpart A Notification.** Unless exempted by a specific subpart, for any affected facility[8] or existing facility[9] regulated under NSPS requirements in 40 C.F.R. 60, the Permittee shall furnish the Administrator[10] written notification or, if acceptable to both the EPA and the Permittee, electronic notification, as follows:

[18 AAC 50.035 & 50.040(a)(1)]
[40 C.F.R. 60.7(a) & 60.15(d), Subpart A]

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

[40 C.F.R. 60.7(a)(1), Subpart A]

22.2. a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date;

[40 C.F.R. 60.7(a)(3), Subpart A]

22.3. a notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 C.F.R. 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include: [11]

a. information describing the precise nature of the change,

b. present and proposed emission control systems,

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

d. the expected completion date of the change.

[40 C.F.R. 60.7(a)(4), Subpart A]

22.4. a notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with 40 C.F.R. 60.13(c). The notification shall be postmarked not less than 30 days prior to such date;

[40 C.F.R. 60.7(a)(5), Subpart A]

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

[9] *Existing facility* means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in 40 C.F.R. Part 60, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type, as defined in 40 C.F.R. 60.2.

[10] The Department defines the "the Administrator" to mean "the EPA and the Department."

[11] The Department and EPA may request additional relevant information subsequent to this notice.

22.5. a notification of the anticipated date for conducting the opacity observations required by 40 C.F.R. 60.11(e)(1). The notifications shall also include, if appropriate, a request for the EPA to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.

[40 C.F.R. 60.7(a)(6), Subpart A]

22.6. a notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by 40 C.F.R. 60.8 in lieu of Method 9 observation data as allowed by 40 C.F.R. 60.11(e)(5). This notification shall be postmarked not less than 30 days prior to the date of the performance test.

[40 C.F.R. 60.7(a)(7), Subpart A]

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

[40 C.F.R. 60.15(d), Subpart A]

a. the name and address of owner or operator,

b. the location of the existing facility,

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

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

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

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

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

23. **NSPS Subpart A Startup, Shutdown, & Malfunction Requirements.** The Permittee shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of EU IDs 7-9 or 19 any malfunction of the air-pollution control equipment, or any periods during which a continuous monitoring system or monitoring device for EU IDs 7-9 or 19 is inoperative.

[18 AAC 50.040(a)(1)]
[40 C.F.R. 60.7(b), Subpart A]

24. **NSPS Subpart A Excess Emissions and Monitoring Systems Performance Report.** The Permittee shall submit excess emissions and monitoring systems performance (EEMSP)[12] report and/or summary report form (see Condition 25) 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 C.F.R. 60.7(c), Subpart A]

24.1. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of EU ID 19, the nature and cause of any malfunction (if known), and the corrective action taken, or preventative measures adopted.

[40 C.F.R. 60.7(c)(2), Subpart A]

24.2. 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 C.F.R. 60.7(c)(3), Subpart A]

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

[40 C.F.R. 60.7(c)(4), Subpart A]

25. **NSPS Subpart A Summary Report Form.** The Permittee shall submit to the Department and to EPA one "summary report form" in the format shown in Figure 1 of 40 C.F.R. 60.7 (see Attachment A to the Statement of Basis) for each pollutant monitored for EU ID 19. The report shall be submitted semiannually, postmarked by the 30th day following the end of each six-month period, except when more frequent reporting is specifically required by an applicable subpart or the EPA, as follows:

[18 AAC 50.040(a)(1)]
[40 C.F.R. 60.7(c) & (d), Subpart A]

25.1. If the total duration of excess emissions for the reporting period is less than one percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than five percent of the total operating time for the reporting period, submit a summary report form unless the EEMSP report described in Condition 24 is requested, or

[40 C.F.R. 60.7(d)(1), Subpart A]

[12] The federal EEMSP report is not the same as the state excess emission report required by Condition 88. Excess emissions are defined in applicable subparts.

25.2. If the total duration of excess emissions for the reporting period is one percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is five percent or greater of the total time for the reporting period, then submit a summary report form and the EEMSP report described in Condition 24.

[40 C.F.R. 60.7(d)(2), Subpart A]

26. **NSPS Subpart A Performance (Source) Tests.** The Permittee shall conduct source tests according to 40 C.F.R. 60.8 and section 8 on any affected facility at such times as may be required by the EPA and shall provide the Department and EPA with a written report of the results of the source test.

[18 AAC 50.040(a)(1)]
[40 C.F.R. 60.8(a) – (f), Subpart A]

27. **NSPS Subpart A Good Air Pollution Control Practice (GAPCP).** At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate EU IDs 7-9 and 19 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 7-9 and 19.

[18 AAC 50.040(a)(1)]
[40 C.F.R. 60.11(d), Subpart A]

28. **NSPS Subpart A Credible Evidence.** For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of the standards set forth in Conditions 30 through 43 nothing in 40 C.F.R. Part 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether EU IDs 7-9 and 19 would have been in compliance with applicable requirements of 40 C.F.R. Part 60 if the appropriate performance or compliance test or procedure had been performed.

[18 AAC 50.040(a)(1)]
[40 C.F.R. 60.11(g), Subpart A]

29. **NSPS Subpart A Concealment of Emissions.** The Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of a standard set forth in Conditions 30 through 43. 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 C.F.R. 60.12, Subpart A]

NSPS Subpart GG[13] – Stationary Gas Turbines, EU ID 19

30. **NSPS Subpart GG Applicability.** For EU ID 19 listed in Table A, the Permittee shall comply with the applicable requirements for stationary gas turbines, which commenced construction, modification, or reconstruction after October 3, 1977, with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour based on the lower heating value of the fuel fired.

[18 AAC 50.040(a)(2)(V) & (j)(4) and 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.330(a) & (b), Subpart GG]

31. **NSPS Subpart GG NO_X Standard.** The Permittee shall not allow the exhaust gas concentration of NO_X from EU ID 19 to exceed 176 ppmv at 15 percent O_2 dry exhaust basis.

[18 AAC 50.040(a)(2)(V)]
[40 C.F.R. 60.332(a)(2) & (d), Subpart GG]

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

[18 AAC 50.040(j) & 50.326(j)(4)]
[40 C.F.R. 71.6(a)(3)(i) & (c)(6)]

a. **Periodic Testing**. For each turbine subject to Condition 30 that operates for 400 hours or more in any 12-month period during the life of this permit, the Permittee shall satisfy either Condition 31.1.a(i) or 31.1.a(ii).

(i) For existing turbines whose latest emissions source testing was certified as operating at less than or equal to 90 percent of the limit shown in Condition 30, the Permittee shall conduct a NO_X and O_2 source test under 40 C.F.R. 60, Appendix A, Method 20, or Method 7E and either Method 3 or 3A, within the first applicable criteria below in the noted timeframe no later than June 13, 2026, except as set out in Conditions 31.1.a(i)(C) and 31.1.a(ii):

(A) Within 5 years of the latest performance test, or

(B) Within 1 year of the date of issue of this permit if the last source test occurred greater than five years prior to issuance of this permit and the 400-hour threshold was triggered within 6 months of the permit issue date, or

(C) Within 1 year after exceeding 400 hours of operation in a 12-month period if the last source test occurred greater than 4 years prior to the exceedance.

[13] The provisions of NSPS Subpart GG listed in Conditions 0 through **Error! Reference source not found.** are current as amended through Feb. 27, 2014. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

(ii) For existing turbines whose latest emissions source testing was certified as operating at greater than 90 percent of the limit shown in Condition 30, the Permittee shall conduct a NO_X and O_2 source test under 40 C.F.R. 60, Appendix A, Method 20, or Method 7E and either Method 3 or 3A, annually until two consecutive tests show performance results certified at less than or equal to 90 percent of the limit of Condition 30.

b. **Substituting Test Data**. The Permittee may use a Method 20, or Method 7E and either Method 3 or 3A, test under Condition 31.1.a performed on only one of a group of turbines to satisfy the requirements of those conditions for the other turbines in the group if

(i) the Permittee demonstrates that test results are less than or equal to 90 percent of the emission limit of Condition 30, and are projected under Condition 31.1.c to be less than or equal to 90 percent of the limit at maximum load;

(ii) for any source test done after the issuance date of this permit, the Permittee identifies in a source test plan under Condition 80

(A) the turbine to be tested;

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

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

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

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

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

(4) uses the same fuel type from the same source.

(iii) The Permittee may not use substitute test results to represent emissions from a turbine or group of turbines if that turbine or group of turbines is operating at greater than 90 percent of the emission limit of Condition 30.

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

(i) Conduct all tests under Condition 31.1 in accordance with 40 C.F.R. 60.335, except as otherwise approved in writing by the Department, or by EPA if the circumstances at the time of the EPA approval are still valid. For the highest load condition, if it is not possible to operate the turbine during the test at maximum load, the Permittee will test the turbine when operating at the highest load achievable by the turbine under the ambient and stationary source operating conditions in effect at the time of the test.

(ii) Demonstrate in the source test plan for any test performed after the issue date of this permit whether the test is scheduled when maximum NO_X emissions are expected.

(iii) If the highest operating rate tested is less than the maximum load of the tested turbine or another turbine represented by the test data,

(A) for each such turbine the Permittee shall provide to the Department as an attachment to the source test report

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

(2) a demonstration based on the additional test information that projects the test results from Condition 31.1 to predict the highest load at which emissions will comply with the limit in Condition 30;

(B) the Permittee shall not operate any turbine represented by the test data at loads for which the Permittee's demonstration predicts that emissions will exceed the limit of Condition 30;

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

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

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

(3) the Permittee must retest during a period of greater expected demand on the turbine, and

(D) the Permittee may revise a load limit by submitting results of a more recent Method 20, or Method 7E and either Method 3 or 3A, test done at a higher load, and, if necessary, the accompanying information and demonstration described in Condition 31.1.c(iii)(A); the new limit is subject to any new Department finding under Condition 31.1.c(iii)(C) and

(iv) In order to perform a Method 20, or Method 7E and either Method 3 or 3A, emission test, the Permittee may operate a turbine at a higher load than that prescribed by Condition 31.1.c(iii).

(v) For the purposes of Conditions 31.1 through 31.3, maximum load means the hourly average load that is the smallest of

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

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

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

31.2. **Recordkeeping**. The Permittee shall keep records as follows:

[18 AAC 50.040(j) & 50.326(j)(4)]
[40 C.F.R. 71.6(a)(3)(ii) & (c)(6)]

a. The Permittee shall comply with the following for each turbine for which a demonstration under Condition 31.1.c(iii) does not show compliance with the limit of Condition 30 at maximum load.

(i) The Permittee shall keep records of

(A) load; or

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

(ii) Records in Condition 31.2.a shall be hourly or otherwise as approved by the Department.

(iii) Within one month after submitting a demonstration under Condition 31.1.c(iii)(A)(2) that predicts that the highest load at which emissions will comply is less than maximum load, or within one month of a Department finding under Condition 31.1.c(iii)(C), whichever is earlier, the Permittee shall propose to the Department how they will measure load or load surrogates, and shall propose and comply with a schedule for installing any necessary equipment and beginning monitoring. The Permittee shall comply with any subsequent Department direction on the load monitoring methods, equipment, or schedule.

b. For any turbine subject to Condition 30, that will operate less than 400 hours in any 12 consecutive months, the Permittee shall keep monthly records of the hours of operation.

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

[18 AAC 50.040(j) & 50.326(j)(4)]
[40 C.F.R. 71.6(a)(3)(iii) & (c)(6)]

a. In each operating report under Condition 89 the Permittee shall list for each turbine tested or represented by testing at less than maximum load and for which the Permittee must limit load under Condition 31.1.c(iii)

(i) the load limit;

(ii) the turbine identification; and

(iii) the highest load recorded under Condition 31.2.a during the period covered by the operating report.

b. In each operating report under Condition 89 for each turbine for which Condition 31.1 has not been satisfied because the turbine normally operates less than 400 hours in any 12 consecutive months, the Permittee shall identify

(i) the turbine;

(ii) the highest number of operating hours for any 12 consecutive months ending during the period covered by the report; and

(iii) any turbine that operated for 400 or more hours.

c. The Permittee shall report under Condition 88 if

(i) a test result exceeds the emission standard;

(ii) Method 20, or Method 7E and either Method 3 or 3A, testing is required under Condition 31.1.a(i) or 31.1.a(ii) but not performed, or

(iii) the turbine was operated at a load exceeding that allowed by Conditions 31.1.c(iii)(B) and 31.1.c(iii)(C); exceeding a load limit is deemed a single violation rather than a multiple violation of both monitoring and the underlying emission limit.

[18 AAC 50.220(a) - (c) & 50.040(a)(1)]
[40 C.F.R. 60.8(b), Subpart A]

32. **NSPS Subpart GG Sulfur Standard.** The Permittee shall comply with the fuel sulfur content standard in Condition 32.1 below:

[18 AAC 50.040(a)(2)(V)]
[40 C.F.R. 60.333, Subpart GG]

32.1. Do not allow the sulfur content for the fuel burned in EU ID 19 to exceed 0.8 percent by weight.

[40 C.F.R. 60.333(b), Subpart GG]

32.2. **Monitoring**. The Permittee shall monitor compliance with the standards listed in this condition, as follows:

[18 AAC 50.040(a)(2)(V)]
[40 C.F.R. 60.334 & 60.335, Subpart GG]

a. Monitor the total sulfur content of the fuel being fired in the turbine. The sulfur content of the fuel must be determined using total sulfur methods described in 40 C.F.R. 60.335(b)(10) and Condition 32.3.

[40 C.F.R. 60.334(h)(1), Subpart GG]

b. For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and for which a custom fuel monitoring schedule has previously been approved, the owner or operator may, without submitting a special petition to the Administrator, continue monitoring on this schedule.

[40 C.F.R. 60.334(h)(4), Subpart GG]

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

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 60.334(i), Subpart GG]

(i) 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 of 40 C.F.R Part 75 (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). If an emission allowance is being claimed for fuel-bound nitrogen, the nitrogen content of the oil shall be determined and recorded once per unit operating day.

[40 C.F.R. 60.334(i)(1), Subpart GG]

32.3. **Test Methods and Procedures**. If the owner or operator is required under Condition 32.2.c(i) to periodically determine the sulfur content of the fuel combusted in the turbine, a minimum of three fuel samples shall be collected during the performance test. Analyze the samples for the total sulfur content of the fuel using Condition 32.3.a:

[18 AAC 50.040(a)(2)(V)]
[40 C.F.R. 60.335(b)(10), Subpart GG]

a. For liquid fuels, ASTM D129–00, D2622–98, D4294–02, D1266–98, D5453–00 or D1552–01; or

[40 C.F.R. 60.335(b)(10)(1), Subpart GG]

b. The fuel analyses required under Condition 32.3 may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

[40 C.F.R. 60.335(b)(11), Subpart GG]

32.4. **Recordkeeping**. Keep records as required by Conditions 32.2 and 32.3, and in accordance with Condition 84.

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(ii)]

32.5. **Reporting**. For each affected unit that periodically determines the fuel sulfur content under Condition 32.2.a, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with 40 C.F.R. 60.7(c) as summarized in Condition 24. except where otherwise approved by a custom fuel monitoring schedule. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction as described by 40 C.F.R. 60.334(j)(2).

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 60.334(j), Subpart GG]

Metallic Mineral Processing Plants Subject to Federal NSPS Subpart LL

33. **NSPS Subpart LL – Standard for Particulate Matter and Opacity.** The Permittee shall not cause to be discharged into the atmosphere from EU IDs 7 – 9 any process fugitive emission that exhibit greater than 10 percent opacity.

[18 AAC 50.040(a)(2)(X), 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.382(b), Subpart LL]

34. **Test Methods and Procedures.** The owner or operator shall determine compliance with the applicable particulate matter and opacity standards of Condition 33 as follows:

[40 C.F.R. 71.6(a)(3)(i)]
[40 C.F.R. 60.386(b), Subpart LL]

34.1. Method 9 and the procedures in 40 C.F.R. 60.11 shall be used to determine opacity from stack emissions and process fugitive emissions. The observer shall read opacity only when emissions are clearly identified as emanating solely from the affected facility being observed. A single visible emission observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval. This option is subject to the following limitations:

[40 C.F.R. 60.386(b)(2), Subpart LL]

a. No more than three emission points are read concurrently;

b. All three emission points must be within a 70° viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points; and

c. If an opacity reading for any one of the three emission points is within 5 percent opacity of the application standard, then the observer must stop taking readings for the other two points and continue reading just that single point.

[40 C.F.R. 60.386(b)(2)(i) through (iii), Subpart LL]

35. **Monitoring and Recordkeeping**. The Permittee shall observe the access and operating ports of EU IDs 7 - 9 using the test method in Condition 34. Keep records of monthly dust inspections from access and operating ports of EU IDs 7 - 9 that may potentially result in fugitive emissions.

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(ii) & 71.6(c)(6)]

36. **Reporting**. Report in the operating report required by Condition 89 the results of the monthly dust inspections as set out in Condition 35.

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii) & 71.6(c)(6)]

NSPS Subpart IIII[14] – Compression Ignition Internal Combustion Engines (CI ICE), EU IDs 22, 23, and 24

37. **NSPS Subpart IIII Applicability and General Compliance Requirements.** For EU IDs 22-24 listed in Table A, the Permittee shall comply with the applicable requirements for stationary CI ICE located in remote areas of Alaska[15] whose construction[16] commenced after July 11, 2005.

    37.1. For EU IDs 22-24, the Permittee shall comply with the applicable provisions of 40 C.F.R. 60 Subpart A as specified in Table 8 to Subpart IIII, and applicable provisions of Subpart IIII as specified in Conditions 38 through 43.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[[40 C.F.R. 60.4200(a)(2), 60.4218 and Table 8, Subpart IIII]

38. **NSPS Subpart IIII GAPCP.** Except as permitted under Condition 41.1, the Permittee shall operate and maintain EU IDs 22-24 and control device according to the manufacturer's written instructions, may change only those emission-related settings that are permitted by the manufacturer, and shall meet the requirements of Condition 40 and the applicable requirements of 40 C.F.R. 1068. In addition, the Permittee shall operate and maintain EU IDs 22-24 that achieves the emissions standards as required in Condition 40 over the entire life of the engine.

[40 C.F.R. 60.4206, 60.4209, and 60.4211(a), Subpart IIII]

39. **NSPS Subpart IIII Fuel Requirements.** The Permittee shall comply with the following:

    39.1. For EU ID 22, comply with the applicable fuel requirements in 40 C.F.R. 60.4207, as provided under 40 C.F.R. 60.4216 for engines operated in Alaska, as follows:

        a. Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 C.F.R. 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. For CI ICE with a displacement of less than 30 liters per cylinder that use diesel fuel, use diesel fuel that meets the requirements of 40 C.F.R. 1090.305 for nonroad diesel fuel:

[14] The provisions of NSPS Subpart IIII listed in Conditions **Error! Reference source not found.** through **Error! Reference source not found.** are current as amended through December 4, 2020. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

[15] *Remote areas of Alaska,* as defined in 40 C.F.R. 60.4219.

[16] For the purposes of NSPS Subpart IIII, the date that construction commences is the date the engine is ordered by the owner or operator as defined in 40 C.F.R. 60.4200(a).

(i) Except as specified in 1090.300(a), diesel fuel must meet the ULSD per-gallon standards of this section.

(ii) The maximum sulfur content allowed is 15 ppm.

(iii) Diesel fuel must meet one of the following standards:

(A) Minimum cetane index of 40.

(B) Maximum aromatic content of 35 volume percent.

39.2. For EU IDs 22-24, the fuel requirements of 40 C.F.R 60.4207 do not prevent owners and operators of stationary CI ICE subject to this subpart that are located in remote areas of Alaska from using fuels mixed with used lubricating oil, in volumes of up to 1.75 percent of the total fuel. The sulfur content of the used lubricating oil must be less than 200 parts per million. The used lubricating oil must meet the on-specification levels and properties for used oil in 40.C.F.R. 279.11.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 60.4207(b) & 60.4216(d) & (f)]
[40 C.F.R. 1090.305, Subpart D]

40. **NSPS Subpart IIII Emission Standards.** The Permittee shall comply with the following emission standards:

[18 AAC 50.040(a)(2)(OO) & (j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

40.1. Exhaust emissions from EU ID 22 shall not exceed the following applicable exhaust emission standards:

a. 7.5 g/kW-hr (5.6 g/hp-hr) for NMHC + NO_x;

b. 6.6 g/kW-hr (4.9 g/hp-hr) for CO; and

c. 0.40 g/kW-hr (0.30 g/hp-hr) for PM.

[40 C.F.R. 60.4216(c), Table 2 60.4202(a)(1) & 60.4205(b), Subpart IIII]

40.2. Exhaust emissions from EU ID 23 shall not exceed the following applicable exhaust emission standards:

a. 10.5 g/kW-hr (7.8 g/hp-hr) for NMHC + NO_x;

b. 5.0 g/kW-hr (3.7 g/hp-hr) for CO; and

c. 0.80 g/kW-hr (0.6 g/hp-hr) for PM.

40.3. Exhaust emissions from EU ID 24 shall not exceed the following applicable exhaust emission standards:

a. 10.5 g/kW-hr (7.8 g/hp-hr) for NMHC + NO_x;

b. 3.5 g/kW-hr (2.6 g/hp-hr) for CO;

c. 0.54 g/kW-hr (0.4 g/hp-hr) for PM.

[40 C.F.R. 60.4205(c), Table 4 to Subpart IIII]

40.4. Measure smoke as specified in 40 C.F.R. 1039.501(c). Smoke from each of EU IDs 22 must not exceed the following standards:

a. 20 percent during the acceleration mode;

b. 15 percent during the lugging mode; and

c. 50 percent during the peaks in either the acceleration or lugging modes.

[40 C.F.R. 60.4216(c), 60.4202(a)(1) & 60.4205(b), Subpart IIII]
[40 C.F.R. 1039.105(a)&(b), Subpart B]

41. **NSPS Subpart IIII Monitoring and Recordkeeping.** The Permittee shall comply with the following:

[18 AAC 50.040(a)(2)(OO) & (j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(i) & (ii) & (c)(6)]

41.1. If the Permittee does not install, configure, operate, and maintain EU IDs 21-24 and control devices according to the manufacturer's emission-related written instructions as required in Condition 37, or changes emission-related settings in a way that is not permitted by the manufacturer, the Permittee shall demonstrate compliance as follows:

a. For EU IDs 22 and 23:

(i) 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.

(ii) In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

[40 C.F.R. 60.4209 and 60.4211(g)(2), Subpart IIII]

b. For EU ID 24:

(i) Keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 C.F.R. 60.4209 and 60.4211(g)(3), Subpart IIII]

(ii) In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

[40 C.F.R. 60.4204(d), 60.4205(e) and 60.4212(a) & (c), Subpart IIII]

41.2. For EU IDs 22-24, demonstrate compliance with the emission standards by purchasing an engine certified to the applicable emission standards in Conditions 40.1 through 40.3. The engines must be installed and configured according to the manufacturer's specifications, except as permitted in Condition 41.1.

[40 C.F.R. 60.4209 and 60.4211(c), Subpart IIII]

41.3. If using fuels mixed with used lubricating oil as specified in Condition 39.2, comply with the following:

a. Determine that the used oil to be burned for energy recovery meets the fuel specifications of 40 C.F.R. 279.11 and the sulfur content limit in Condition 39.1.a(ii) by performing approved analyses or obtaining copies of analyses or other information documenting that the used oil fuel meets the specifications.

b. Keep records of the following:

(i) copies of analyses of the used oil (or other information used to make the compliance determination in Condition 41.3.a) for three years;

(ii) the amount of the used lubricating oil to be blended;

(iii) the amount of other distillate fuel oil to be mixed with the used lubricating oil; and

(iv) the ratio of the lubricating oil to the total fuel blend.

[40 C.F.R. 71.6(c)(6)]
[40 C.F.R. 279.72(a) & (b)]

42. **NSPS Subpart IIII Reporting.** The Permittee shall report as follows:

42.1. If using fuels mixed with used lubricating oil, include with the operating report required under Condition 89 a copy of the records required in Condition 41.3.b for the period covered by the report.

42.2. Report in accordance with Condition 88 if any of the requirements in Conditions 37 through 43 was not met.

[18 AAC 50.040 (j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii) & (c)(6)]

43. **NSPS Subpart IIII Deadline for Importing or Installing Stationary CI ICE in Previous Model Years.** The Permittee shall comply with the following:

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

[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.4200(a)(4), 60.4208(a) – (i), & 60.4216(e), Subpart IIII]

43.1. The Permittee shall not install stationary CI ICE units in previous (2007 – 2017) model years after the dates and as specified in 40 C.F.R. 60.4208(a) – (g).

[40 C.F.R. 60.4208(a) - (g), Subpart IIII]

43.2. In addition to the requirements specified in 40 C.F.R. 60.4201, 60.4202, 60.4204, and 60.4205, the Permittee shall not import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements and after the dates specified in 40 C.F.R. 60.4208(a) – (g).

[40 C.F.R. 60.4208(h), Subpart IIII]

43.3. The requirements of Condition 43 do not apply to stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

[40 C.F.R. 60.4208(i), Subpart IIII]40 C.F.R. Part 63 National Emission Standards for Hazardous Air Pollutants (NESHAP)

NESHAP Subpart A – General Provisions

44. **NESHAP Subpart A Applicability.** The Permittee shall comply with the applicable requirements of 40 C.F.R. 63 Subpart A in accordance with the provisions for applicability of Subpart A in:

44.1. Table 8 to Subpart ZZZZ for EU IDs 1-4, 6, and 18 listed in Table A.

44.2. Table 8 to Subpart JJJJJJ for EU IDs 5, 20, and 21 listed in Table A.

[18 AAC 50.040(c)(1), (23) & (39), 50.040(j)(4) and 50.326(j)]
[40 C.F.R. 71.6(a)(1) & (a)(3)]
[40 C.F.R. 63.1-63.15, Subpart A]
[40 C.F.R. 63.6665 & Table 8, Subpart ZZZZ]
[40 C.F.R. 63.11235 & Table 8, Subpart JJJJJJ]

NESHAP Subpart ZZZZ[17] – Stationary RICE, EU IDs 1-4, 6, and 18

45. **NESHAP Subpart ZZZZ Applicability.** The Permittee shall comply with applicable requirements for existing[18] (EU IDs 1-4, 6, and 18) stationary reciprocating internal combustion engines (RICE) located at an area source of hazardous air pollutant (HAP) emissions that commenced construction before June 12, 2006.

45.1. For EU IDs 1-4, 6, and 18, existing stationary RICE units, the Permittee shall at all times comply with Conditions 46 through 50.

[18 AAC 50.040(c)(23) & (j)(4) and 50.326(j)]
40 C.F.R. 71.6((a)(1)

[17] The provisions of NESHAP Subpart ZZZZ listed in Conditions 44 through **Error! Reference source not found.** are current as amended through December 4, 2020. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

[18] In accordance with 40 C.F.R. 63.6590(a)(1)(iii), a stationary RICE located at an area source of HAP emissions is *existing* if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

[40 C.F.R. 63.6585(c), 63.6590(a)(1)(iii), (a)(2)(iii) & (c)(1), and 63.6605(a), Subpart ZZZZ]

46. **NESHAP Subpart ZZZZ Management Practices.** For EU IDs 1-4, 6, and 18, the Permittee shall comply with the following work and management practices:

[18 AAC 50.040(c)(23) & (i) and 50.326(j)]
[40 C.F.R. 71.6(a)(1) & (3)(i)]

46.1. Except during periods of startup, the Permittee shall meet the following requirements:

a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first, except as allowed by Condition 48.2;

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

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

46.2. During periods of startup, the Permittee shall comply with Condition 48.1.

[40 C.F.R. 63.6603(a), (b), (b)(1) & Table 2d, item 1, Subpart ZZZZ]

47. **NESHAP Subpart ZZZZ General Compliance Requirements.** For EU IDs 1-4, 6, and 18, the Permittee shall comply with the following:

[18 AAC 50.040(c)(23) & (j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1) & (3)(i)]

47.1. You must be in compliance with the management practices, work practice standards, and other requirements in Conditions 46 through 48 that apply to you at all times.

[40 C.F.R. 63.6605(a), Subpart ZZZZ]

47.2. At all times, operate and maintain EU IDs 1-4, 6, and 18, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance procedures, and inspection of EU IDs 1-4, 6, and 18.

[40 C.F.R. 63.6605(b), Subpart ZZZZ]

47.3. The Permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to either

a. the manufacturer's emission-related written operation and maintenance instructions; or

b. a maintenance plan developed by the Permittee which must provide, to the extent practicable, for the maintenance and operation of the engine in a manner consistent with good air pollution control practices for minimizing emissions.

[40 C.F.R. 63.6605(b), 63.6625(e)(4), & Table 6 item 9, Subpart ZZZZ]

48. **NESHAP Subpart ZZZZ Monitoring, Operation, and Maintenance Requirements.** The Permittee shall comply with the following for EU IDs 1-4, 6, and 18:

[18 AAC 50.040(c)(23) & (i); 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)(1) & (3)]

48.1. The Permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards are applicable at all times.

[40 C.F.R. 63.6625(h), Subpart ZZZZ]

48.2. The Permittee has the option to utilize an oil analysis program in order to extend the specified oil change requirements in Condition 46.1.a, as described below:

a. The oil analysis must be performed at the same frequency specified for changing the oil in Conditions 46.1.a.

b. The analysis program must, at a minimum, analyze the following three parameters: Total Base Number (for CI engines), Total Acid Number (for SI engines), viscosity, and percent water content. The condemning limits for these parameters are as follows:

(i) Total Base Number is less than 30 percent of the Total Base Number of the oil when new;

(ii) viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or

(iii) percent water content (by volume) is greater than 0.5.

c. If all of the condemning limits in Conditions 48.2.b(i) through 48.2.b(iii) are not exceeded, the Permittee is not required to change the oil.

d. If any of the limits in Conditions 48.2.b(i) through 48.2.b(iii) is exceeded, the Permittee must change the oil within 2 business days of receiving the results of the analysis.

(i) If the engine is not in operation when the results of the analysis are received, the Permittee must change the oil within 2 business days or before commencing operation, whichever is later.

e. The analysis program must be part of the maintenance plan for the engine.

[40 C.F.R. 63.6625(i) and Table 2d (Footnote 1), Subpart ZZZZ]

48.3. You must demonstrate continuous compliance with the requirements in Condition 46 by:

[40 C.F.R. 63.6640(a), Subpart ZZZZ]

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

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

[Table 6, item 9, Subpart ZZZZ]

49. **NESHAP Subpart ZZZZ Recordkeeping Requirements.** The Permittee shall keep records, as follows:

[18 AAC 50.040(c)(23) & (j)(4) and 50.326(j)]
[40 C.F.R. 71.6(a)(3)(ii)]

49.1. Keep records required in Condition 47.3, as applicable, to show continuous compliance with the applicable management practices in Condition 46.

[40 C.F.R. 63.6655(d), Subpart ZZZZ]

49.2. If electing to operate and maintain EU IDs 1-4, 6, and 18 according to a maintenance plan developed by the Permittee as allowed under Condition 47.3.b, keep records of the maintenance conducted on EU IDs 1-4, 6, and 18 in order to demonstrate that the stationary RICE and after-treatment control device (if any) are operated and maintained according to the maintenance plan.

[40 C.F.R. 63.6655(e)(3), Subpart ZZZZ]

49.3. If electing to utilize the oil analysis program described in Condition 48.2, keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine.

[40 C.F.R. 63.6625(i), Subpart ZZZZ]

49.4. Keep records in a form suitable and readily available for expeditious review. Keep each record in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 C.F.R. 63.10(b)(1), except that all records may be retained off site.

[40 C.F.R. 63.6660 & Table 8, Subpart ZZZZ]
[40 C.F.R. 63.10(b)(1), Subpart A]

50. **NESHAP Subpart ZZZZ Reporting Requirements.** The Permittee shall report, as follows:

[18 AAC 50.040(c)(23) & (j)(4) and 50.326(j)]
[40 C.F.R. 71.6(c)(3)(iii) & (c)(6)]

50.1. Include in the operating report required by Condition 89 a report of all deviations as defined in 40 C.F.R. 63.6675 and of each instance in which an applicable requirement in 40 C.F.R. 63, Subpart A (Table 8 to Subpart ZZZZ) was not met.

[40 C.F.R. 63.6640(e) & 63.6650(f), Subpart ZZZZ]

50.2. Notify the Department in accordance with Condition 88 if any of the requirements in Conditions 45 through 50 were not met.

[18 AAC 50.040(j)(4) and 50.326(j)(4)]
[40 C.F.R. 71.6(a)(3)(iii) & (c)(6)]

NESHAP Subpart JJJJJJ[19] - Industrial, Commercial, and Institutional (ICI) Boilers, EU IDs 5, 20, and 21

51. **NESHAP Subpart JJJJJJ Applicability[20,21].** For EU IDs 5 and 20, the Permittee shall comply with applicable requirements for existing industrial boilers located at an area source of HAP emissions. For EU ID 21, the Permittee shall comply with applicable requirements for new industrial oil boilers located at an area source of HAP emissions.

[18 AAC 50.040(j); 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.11193, 63.11194(a)(1 & 2), (b), &, (c), Subpart JJJJJJ]

52. **NESHAP Subpart JJJJJJ Compliance Deadline.** For EU IDs 5, 20, and 21, the Permittee shall comply with the work practice or management practice standard for existing and new industrial boilers located at an area source of HAP emissions, as specified in Condition 54, no later than March 21, 2014 for EU IDs 5 and 20 and upon startup for EU ID 21.

[18 AAC 50.040(j); 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.11196(a)(1) & (b), Subpart JJJJJJ]

53. **NESHAP Subpart JJJJJJ General Compliance Requirements.** At all times the Permittee shall operate and maintain EU IDs 5, 20, and 21 including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[18 AAC 50.040(j); 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.11205(a), Subpart JJJJJJ]

54. **NESHAP Subpart JJJJJJ Work or Management Practices.** For each of EU IDs 5, 20, and 21, the Permittee shall comply with the following work or management practices and demonstrate continuous compliance, as follows:

    54.1. Conduct a tune-up of each boiler every 5 years.

[19] The provisions of NESHAP Subpart JJJJJJ listed in Conditions 44.2 and 51 through **Error! Reference source not found.** are current as amended through September 14, 2016. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

[20] The Permittee submitted the Initial Applicability Notification for NESHAP Subpart JJJJJJ required under 40 C.F.R. 63.11225(a)(2) to the EPA on September 12, 2011 for EU IDs 5 and 20. The Permittee submitted the Initial Applicability Notification for NESHAP Subpart JJJJJJ required under 40 C.F.R. 63.11225(a)(2) to the EPA on June 11, 2019 for EU ID 21.

[21] An Affected source is an existing source if construction or reconstruction of the affected source commenced on or before June 4, 2010. [40 C.F.R. 63.11194(b)].

54.2. Perform tune-ups while burning the type of fuel that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up, as follows:

a. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up.

b. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may delay the burner inspection until the next scheduled shut down, not to exceed 72 months from the previous inspection).

c. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.

d. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection until the next scheduled unit shutdown, not to exceed 72 months from the previous inspection).

e. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.

f. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

g. Maintain on-site and submit, if requested by the Administrator, a biennial report containing the information in Conditions 54.2.g(i) and 54.2.g(ii).

(i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.

(ii) A description of any corrective actions taken as part of the tune-up of the boiler.

h. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

[18 AAC 50.040(j); 18 AAC 50.326(j)]
[40 C.F.R. 71.6(a)(3)(i)]
[40 C.F.R. 63.11201(b); 63.11223(a), (b), & (e), and Table 2 items 12 & 13, Subpart JJJJJJ]

55. **NESHAP Subpart JJJJJJ Recordkeeping Requirements.** For each of EU IDs 5, 20, and 21, the Permittee shall keep records as follows:

55.1. As required in 40 C.F.R. 63.10(b)(2)(xiv), keep a copy of each notification and report submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status submitted.

55.2. Keep records to document conformance with the work practice standards and management practices as specified in Condition 55.2.a below.

a. Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.

55.3. Keep records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.

55.4. Keep records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in Condition 53, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

[18 AAC 50.040(j); 18 AAC 50.326(j)]
[40 C.F.R. 71.6(c)(3)(iii)]
[40 C.F.R. 63.11223(a) & 63.11225(c), Subpart JJJJJJ]
[40 C.F.R. 63.11223(b)(6), Subpart JJJJJJ]

55.5. According to 40 C.F.R. 63.10(b)(1), The Permittee shall keep records in a form suitable and readily available for expeditious review for 5 years following the date of each recorded action, and onsite for at least 2 years after the date of each recorded action. The Permittee may keep the records off site for the remaining 3 years.

[40 C.F.R. 63.11225(j) & Table 8, Subpart JJJJJJ]
[40 C.F.R. 63.10(b)(1), Subpart A]

56. **NESHAP Subpart JJJJJJ Reporting Requirements.** For each of EU IDs 5, 20, and 21, the Permittee shall report, as follows:

[18 AAC 50.040(j); 18 AAC 50.326(j)]
[40 C.F.R. 71.6(c)(3)(iii)]

56.1. Prepare, by March 1, and submit to the EPA and the Department upon request, a 5-year Compliance Certification report for EU IDs 5, 20, and 21 containing the information specified in Conditions 56.1.a and 56.1.c. If there was any instance described by Condition 56.1.c, submit the report by March 15 immediately following the date of the occurrence.

a. Company name and address.

b. Statement by the responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart. The notification must include the following certification of compliance, and signed by a responsible official: "This facility complies with the requirements in §63.11223 to conduct a 5-year tune-up of each boiler."

c. If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.

[40 C.F.R. 63.112259(b), Subpart JJJJJJ]

40 C.F.R. Part 61 National Emission Standards for Hazardous Air Pollutants (NESHAP)

Subpart A – General Provisions & Subpart M – Asbestos

57. The Permittee shall comply with the applicable requirements set forth in 40 C.F.R. 61.145, 61.150, and 61.152 of Subpart M, and the applicable sections set forth in 40 C.F.R. 61, Subpart A and Appendix A.

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

40 C.F.R. Part 82 Protection of Stratospheric Ozone

58. **Subpart F – Recycling and Emissions Reduction.** The Permittee shall comply with the applicable standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F.

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

59. **Subpart G – Significant New Alternatives.** The Permittee shall comply with the applicable prohibitions set out in 40 C.F.R. 82.174 (Protection of Stratospheric Ozone Subpart G – Significant New Alternatives Policy Program).

[18 AAC 50.040(d) & 50.326(j)]
[40 C.F.R. 82.174(b) through (d), Subpart G]

60. **Subpart H – Halons Emissions Reduction.** The Permittee shall comply with the applicable prohibitions set out in 40 C.F.R. 82.270 (Protection of Stratospheric Ozone Subpart H – Halon Emission Reduction).

[18 AAC 50.040(d) & 50.326(j)]
[40 C.F.R. 82.270(b) through (f), Subpart H]

NESHAP Applicability Determination Requirements

61. The Permittee shall determine rule applicability and designation of affected sources under National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories (40 C.F.R. 63) in accordance with the procedures described in 40 C.F.R. 63.1(b).

    61.1. If an owner or operator of a stationary source who is in the relevant source category determines that the source is not subject to a relevant standard or other requirement established under 40 C.F.R. 63, the owner or operator must keep a record as specified in 40 C.F.R. 63.10(b)(3).

    61.2. If a source becomes affected by an applicable subpart of 40 C.F.R. 63, the owner or operator shall comply with such standard by the compliance date established by the Administrator in the applicable subpart, in accordance with 40 C.F.R. 63.6(c).

61.3. After the effective date of any relevant standard promulgated by the Administrator under this part, 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 C.F.R. 63.9(b).

[18 AAC 50.040(c)(1), 50.040(j), & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(ii)]
[40 C.F.R. 63.1(b), 63.5(b)(4), 63.6(c)(1), 63.9(b), & 63.10(b)(3), Subpart A]

Section 5. General Conditions

Standard Terms and Conditions

62. 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) and 50.345(a) & (e)]

63. 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) and 50.345(a) & (f)]

64. The permit does not convey any property rights of any sort, nor any exclusive privilege.

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

65. **Administration Fees.** The Permittee shall pay to the Department all assessed permit administration fees. Administration fee rates are set out in 18 AAC 50.400-403.

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

66. **Assessable Emissions.** For each period from July 1 through the following June 30, the Permittee shall pay to the Department an annual emission fee based on the stationary source's assessable emissions, as determined by the Department under 18 AAC 50.410. The Department will assess fees per ton of each air pollutant that the stationary source emits or has the potential to emit in quantities 10 tons per year or greater. The quantity for which fees will be assessed is the lesser of the stationary source's:

    66.1. potential to emit of 852 TPY; or

    66.2. projected annual rate of emissions, in TPY, based upon actual annual emissions for the most recent calendar year, or another 12-month period approved in writing by the Department, when demonstrated by credible evidence of actual emissions, based upon the most representative information available from one or more of the following methods:

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

        b. material balance calculations;

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

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

[18 AAC 50.040(j)(4), 50.035, 50.326(j)(1) & (3), 50.346(b)(1), 50.410, & 50.420]

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

67.1. No later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions as determined in Condition 66.2. Submit actual emissions estimates in accordance with the submission instructions on the Department's Standard Permit Conditions web page at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-condition-i-submission-instructions/.

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

67.3. If the stationary source has not commenced construction or operation on or before March 31st, the Permittee may submit to the Department's Anchorage office a waiver letter certified under 18 AAC 50.205 that states the stationary source's actual annual emissions for the previous calendar year are zero TPY and provides estimates for when construction or operation will commence.

67.4. If no estimate or waiver letter is submitted on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit in Condition 66.1.

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

68. **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)]

69. **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.

69.1. 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 69.1.a or to address the results of Department inspections that found potential problems; and

(ii) to prevent future dust problems.

69.2. The Permittee shall report according to Condition 71.3.

[18 AAC 50.045(d), 50. 326(j)(3), and 50.346(c)]

70. **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)]

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

[18 AAC 50.040(j)(4), 50.110, 50.326(j)(3), and 50.346(a)]
[40 C.F.R. 71.6(a)(3)]

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

a. As soon as practicable after becoming aware of a complaint that is attributable to emissions from the stationary source, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of Condition 71.

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

(i) after an investigation because of a complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of Condition 71; or

(ii) the Department notifies the Permittee that it has found a violation of Condition 71.

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

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

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

c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 71; and

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

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

a. With each stationary source operating report under Condition 89, the Permittee shall include a brief summary report which must include the following for the period covered by the report:

(i) the number of complaints received;

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

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

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

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

c. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 88.

72. **Technology-Based Emission Standard.** If an unavoidable emergency, malfunction (as defined in 18 AAC 50.235(d)), or non-routine repair (as defined in 18 AAC 50.990(64)), causes emissions in excess of a technology-based emission standard[22] listed in Conditions 21.1, 31,32.1, 33, 39, 40, and 58 (refrigerants), the Permittee shall

72.1. take all reasonable steps to minimize levels of emissions that exceed the standard; and

72.2. report in accordance with Condition 88.1.b; 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 C.F.R. 71.6(c)(6)]

Open Burning Requirements

73. **Open Burning.** If the Permittee conducts open burning at this stationary source, the Permittee shall comply with the requirements of 18 AAC 50.065. The Permittee shall comply as follows:

73.1. Keep written records to demonstrate that the Permittee complies with the limitations in this condition and the requirements of 18 AAC 50.065. Upon request by the Department, submit copies of the records; and

73.2. Include this condition in the annual certification required under Condition 90.

[18 AAC 50.065, 50.040(j), and 50.326(j)]
[40 C.F.R. 71.6(a)(3)]

[22] 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 C.F.R. 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

74. **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) and 50.345(a) & (k)]

75. **Operating Conditions.** Unless otherwise specified by an applicable requirement or test method, the Permittee shall conduct source testing

[18 AAC 50.220(b)]

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

75.2. 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.

76. **Reference Test Methods.** The Permittee shall use the following test methods when conducting source testing for compliance with this permit:

76.1. 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 C.F.R. 60.

[18 AAC 50.220(c)(1)(A) and 50.040(a)]
[40 C.F.R. 60]

76.2. 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 C.F.R. 61.

[18 AAC 50.040(b) and 50.220(c)(1)(B)]
[40 C.F.R. 61]

76.3. 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 C.F.R. 63.

[18 AAC 50.040(c) and 50.220(c)(1)(C)]
[40 C.F.R. 63]

76.4. 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 and 50.220(c)(1)(D)]

76.5. 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 C.F.R. 60, Appendix A.

[18 AAC 50.040(a)(3) and 50.220(c)(1)(E)]
[40 C.F.R. 60, Appendix A]

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

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

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

[18 AAC 50.040(c)(32) & 50.220(c)(2)]
[40 C.F.R. 63, Appendix A, Method 301]

77. **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) and 50.990(102)]

78. **Test Exemption.** The Permittee is not required to comply with Conditions 80, 81 and 82 when the exhaust is observed for visible emissions by Method 9 Plan (Condition 2.3) or Smoke/No Smoke Plan (Condition 2.4).

[18 AAC 50.345(a)]

79. **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)]

80. **Test Plans.** Except as provided in Condition 78, 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 74 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)]

81. **Test Notification.** Except as provided in Condition 78, 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)]

82. **Test Reports.** Except as provided in Condition 78, 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 85. 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)]

83. **Particulate Matter Calculations.** In source testing for compliance with the particulate matter standards in Conditions 5 and 21.2, the three-hour average is determined using the average of three one-hour test runs. The source test must account for those emissions caused by soot blowing, grate cleaning, or other routine maintenance activities by ensuring that at least one test run includes the emissions caused by the routine maintenance activity and is conducted under conditions that lead to representative emissions from that activity. The emissions must be quantified using the following equation:

$$E = E_M\left[(A+B)\times\frac{S}{R\times A}\right]+E_{NM}\left[\frac{(R-S)}{R}-\frac{BS}{R\times A}\right]$$

Where:

- E = the total particulate matter emissions of the emissions unit in grains per dry standard cubic foot (gr/dscf)
- E_M = the particulate matter emissions in gr/dscf measured during the test that included the routine maintenance activity
- E_{NM} = the arithmetic average of particulate matter emissions in gr/dscf measured by the test runs that did not include the routine maintenance activity
- A = the period of routine maintenance activity occurring during the test run that included routine maintenance activity, expressed to the nearest hundredth of an hour
- B = the total period of the test run, less A
- R = the maximum period of emissions unit operation per 24 hours, expressed to the nearest hundredth of an hour
- S = the maximum period of routine maintenance activity per 24 hours, expressed to the nearest hundredth of an hour

[18 AAC 50.220(f)]

Section 7. General Recordkeeping and Reporting Requirements

Recordkeeping Requirements

84. The Permittee shall keep all records required by this permit for at least five years after the date of collection, including:

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

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

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

        b. the date(s) analyses were performed;

        c. the company or entity that performed the analyses;

        d. the analytical techniques or methods used;

        e. the results of such analyses; and,

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

[18 AAC 50.040(a)(1) & (j)(4) and 50.326(j)]
[40 C.F.R 60.7(f), Subpart A, 40 C.F.R 71.6(a)(3)(ii)(A) & (B)]

Reporting Requirements

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

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

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

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

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

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

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

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

87. **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)]
    [40 C.F.R. 71.5(a)(2) & 71.6(a)(3)]

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

    88.1. **Excess Emissions Reporting.** Except as provided in Condition 71, the Permittee shall report all emissions or operations that exceed emissions standards or limits of this permit as follows:

        a. In accordance with 18 AAC 50.240(c), as soon as possible, report

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

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

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

        c. If a continuous or recurring excess emissions is not corrected within 48 hours of discovery, report within 72 hours of discovery unless the Department provides written permission to report under Condition 88.1.d.

        d. Report all other excess emissions not described in Conditions 88.1.a, 88.1.b, and 88.1.c within 30 days after the end of the month during which the excess emissions occurred or as part of the next routine operating report in Condition 89 for excess emissions that occurred during the period covered by the report, whichever is sooner.

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

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

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

a. Report according to the required deadline for failure to monitor, as specified in other applicable conditions of this permit (Conditions 4.3.b and 8.4.b)

b. Report all other permit deviations within 30 days after the end of the month during which the deviation occurred or as part of the next routine operating report in Condition 89 for permit deviations that occurred during the period covered by the report, whichever is sooner.

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

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

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

89. **Operating Reports.** During the life of this permit[23], the Permittee shall submit to the Department an operating report in accordance with Conditions 85 and 86 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.

89.1. 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.

89.2. When excess emissions or permit deviations that occurred during the reporting period are not included with the operating report under Condition 89.1, the Permittee shall identify

a. the date of the excess emissions or permit deviation;

b. the equipment involved;

c. the permit condition affected;

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

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

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

89.3. when excess emissions or permit deviation reports have already been reported under Condition 88 during the period covered by the operating report, the Permittee shall either

a. include a copy of those excess emissions or permit deviation reports with the operating report; or

b. cite the date(s) of those reports.

89.4. The operating report must include, for the period covered by the report, a listing of emissions monitored under Conditions 2.3.e, 2.4.c, 6.2, and 9.1 which trigger additional testing or monitoring, whether or not the emissions monitored exceed an emission standard. The Permittee shall include in the report

a. the date of the emissions;

b. the equipment involved;

c. the permit condition affected; and

d. the monitoring result which triggered the additional monitoring.

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

[18 AAC 50.346(b)(6) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii)(A)]

90. **Annual Compliance Certification.** Each year by March 31, the Permittee shall compile and submit to the Department an annual compliance certification report according to Condition 86.

90.1. 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.

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

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

[18 AAC 50.205, 50.345(a) & (j), & 50.326(j)]
[40 C.F.R. 71.6(c)(5)]

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

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

a. 250 TPY of NH_3, PM_{10}, $PM_{2.5}$ or VOC; or

b. 2,500 TPY of CO, NO_x, or SO_2.

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

a. For stationary sources located in Attainment and Unclassifiable Areas:

(i) 0.5 TPY of actual Pb; or

(ii) 1,000 TPY of CO; or

(iii) 100 TPY of SO_2, NH_3, PM_{10}, $PM_{2.5}$, NO_x or VOC.

b. For stationary sources located in Nonattainment Areas:

(i) 0.5 TPY of actual Pb; or

(ii) 1,000 TPY of CO or, when located in a CO nonattainment area, 100 TPY of CO; or

(iii) 100 TPY of SO_2, NH_3, PM_{10}, $PM_{2.5}$, NO_x, or VOC; or as specified in Conditions 91.2.b(iv) through 91.2.b(viii);

(iv) 70 TPY of SO_2, NH_3, $PM_{2.5}$, NO_x, or VOC in $PM_{2.5}$ serious nonattainment areas; or

(v) 70 TPY of PM_{10} in PM_{10} serious nonattainment areas; or

(vi) 50 TPY of NO_x or VOC in O_3 serious nonattainment areas; or

(vii) 25 TPY of NO_x or VOC in O_3 severe nonattainment areas; or

(viii) 10 TPY of NO_x or VOC in O_3 extreme nonattainment areas.

91.3. For reporting under Condition 91.2, the Permittee shall report the annual emissions and the required data elements under Condition 91.4 every third year for the previous calendar year as scheduled by the EPA.[24].

91.4. For each emissions unit and the stationary source, include in the report the required data elements[25] contained within the form included in the Emission Inventory Instructions available at the Department's AOS system on the Point Source Emission Inventory webpage at http://dec.alaska.gov/Applications/Air/airtoolsweb/PointSourceEmissionInventory.

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

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

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

92.1. **Reports:** Except for previously submitted reports and federal reports and notices submitted through EPA's Central Data Exchange (CDX) and Compliance and Emissions Data Reporting Interface (CEDRI) online reporting system, attach to the operating report required by Condition 89 for the period covered by the report, a copy of any NSPS and NESHAP 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 online reports submitted during the reporting period.

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

[18 AAC 50.040(j)(4) and 50.326(j)(4)]
[40 C.F.R. 60.13, 63.10(d) & (f) and 40 C.F.R. 71.6(c)(6)]

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

[25] The required data elements to be reported to the EPA are outlined in 40 C.F.R. 51.15 and Tables 2a and 2b to Appendix A of 40 C.F.R. 51 Subpart A.

Section 8. Permit Changes and Renewal

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

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

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

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

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

    [18 AAC 50.040(j)(7), 50.326(a) & (j)(3), and 50.346(b)(7)]
    [40 C.F.R. 71.10(d)(1)]

94. **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) and 50.326(j)(4)]
    [40 C.F.R. 71.6(a)(8)]

95. **Off Permit Changes.** The Permittee may make changes that are not addressed or prohibited by this permit other than those subject to the requirements of 40 C.F.R. Parts 72 through 78 or those that are modifications under any provision of Title I of the Act to be made without a permit revision, provided that the following requirements are met:

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

    95.2. 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;

    95.3. The change shall not qualify for the shield under 40 C.F.R. 71.6(f);

    95.4. The Permittee shall 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) and 50.326(j)(4)]
    [40 C.F.R. 71.6(a)(12)]

96. **Operational Flexibility.** The Permittee may make CAA Section 502(b)(10)[26] changes within the permitted stationary source without requiring 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).

    96.1. The Permittee shall provide EPA and the Department with a written notification no less than seven days in advance of the proposed change.

    96.2. For each such change, the notification required by Condition 96.1 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.

    96.3. The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made pursuant to Condition 96.

[18 AAC 50.040(j)(4) and 50.326(j)(4)]
[40 C.F.R. 71.6(a)(13)]

97. **Permit Renewal.** To renew this permit, the Permittee shall submit to the Department[27] an application under 18 AAC 50.326 no sooner than **<18 months before the expiration date of this permit>** and no later than **<6 months before the expiration date of this permit>**. The renewal application shall 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 C.F.R. 71.7(b) and 71.5(a)(1)(iii).

[18 AAC 50.040(j)(3) and 50.326(c) & (j)(2)]
[40 C.F.R. 71.5(a)(1)(iii) and 71.7(b) & (c)(1)(ii)]

[26] As defined in 40 C.F.R. 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.

[27] 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

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

    98.1. included and specifically identified in the permit; or

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

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

99. 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

    99.1. an enforcement action;

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

    99.3. denial of an operating permit renewal application.

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

100. 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)(3) & (4) and 50.326(j)]
[40 C.F.R. 71.6(c)(3) and 71.5(c)(8)(iii)(A)]

101. 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) and 50.345(a) & (d)]

102. 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

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

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

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

    102.4. sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

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

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.

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

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

103.2. 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 50.040(j)(4) and 50.326(j)]
[40 C.F.R. 71.6(f)(3)(i) & (ii)]

104. Table B identifies the emissions units that are not subject to the specified requirements at the time of permit issuance. If any of the requirements listed in Table B becomes applicable during the permit term, the Permittee shall comply with such requirements on a timely basis including, but not limited to, providing appropriate notification to EPA, obtaining a construction permit and/or an operating permit revision.

[18 AAC 50.040(j)(4) and 50.326(j)]
[40 C.F.R. 71.6(f)(1)(ii)]

Table B - Permit Shields Granted

Non-Applicable Requirements	Reason for Non-Applicability
Gas Turbines: EU ID 19	
40 C.F.R. 60 Subpart A §60.7(a)(1) & (3) - Notification and Recordkeeping (Initial Notification) §60.8(a) - Performance Test, (Initial Performance Test Only)	Obsolete requirements - completed as required.
§60.334(a), (b), & (d) - Monitoring of Operations §60.335(b)(4) - Test Methods and Procedures	Applies only to affected turbines equipped with water injection to control emissions of NOx. Source is not equipped with water injection to control emissions of NOx.
§60.334(e) & (f) - Monitoring of Operations	Applies only to affected turbines that commenced construction after July 8, 2004. Emission units commenced construction prior to this date.
§60.334(g) - Monitoring of Operations	Applies only to affected turbines subject to the continuous monitoring requirements of 60.334(a), (d), or (f).
§60.334(h)(2) - Monitoring of Operations (Fuel Nitrogen Only)	HGCMC has not claimed an allowance for fuel bound nitrogen to calculate the applicable NOx emission limit under §60.332.

Non-Applicable Requirements	Reason for Non-Applicability
40 C.F.R. 60 Subpart KKKK	The emission units commenced construction, before the applicability date of February 18, 2005. The permit shield will not be applicable upon modification, reconstruction or replacement.
40 C.F.R. 63 Subpart YYYY	The stationary source is not a major source of HAPs.
Liquid Fuel-Fired Engines: EU IDs 1 – 4 and 18	
40 C.F.R. 60 Subpart IIII	The emission units commenced construction, before the applicability date of July 11, 2005. Permit shield will not be applicable upon modification, reconstruction or replacement.
§63.8 - Monitoring	Per 40 C.F.R. 63.6645(a)(5), these engines are not subject to the requirements of §63.8(e), (f)(4) and (f)(6).
§63.7 - Performance Testing Requirements 40 C.F.R. 63 Subpart ZZZZ §63.6600, §63.6601, and §63.6602 - Emission Limitations §63.6610 and §63.6611 - Testing and Initial Compliance Requirements Table 2b - Operating Limitations	The stationary source is not a major source of HAP emissions.
§63.6604 - Fuel Requirements §63.6612 - Testing and Initial Compliance Requirements §63.6615 - Subsequent Testing §63.6620 - Performance Tests and Procedures §63.6625(g) - Installation Requirements §63.6630(b) &(c) - Initial Compliance Demonstration §63.6635, Monitoring to Demonstrate Continuous Compliance §63.6640(b) - Reporting Requirements §63.6655(a) & (b) - Recordkeeping Requirements	There are no emission limitations, performance testing, or fuel requirements which apply to existing stationary non-emergency CI RICE greater than 300 HP located at areas not accessible by the Federal Aid Highway System, per 40 C.F.R. 63.6603(b) & 63.6604.
§63.6655(c) - Recordkeeping Requirements	The affected engines are not new or reconstructed stationary RICE which fires landfill gas or digester.
§63.9, Subpart A - Notification Requirements §63.6645, Subpart ZZZZ - Notification Requirements	Per 40 C.F.R. 63.6645(a)(5), initial notification is not required for existing stationary CI RICE that is not subject to any numerical emission standards.
§63.6640(f), Subpart ZZZZ – Requirements for Emergency Stationary RICE	This requirement does not apply to non-emergency engines.
Diesel Storage Tank (60,000 gal)	
40 C.F.R. 60 Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels	Per 40 C.F.R. 60.110b(b), this subpart does not apply to storage vessels with a capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa).

Non-Applicable Requirements	Reason for Non-Applicability
Well McLain WGO-6 Oil-Fired Boilers #1 and #2	
40 C.F.R. 63 Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources	The 2 Well McLain WGO-6 Oil-Fired Boilers (< 120 US gallons capacity each) are used as hot water heaters; therefore, exempt from Subpart JJJJJJ per 40 C.F.R. 63.11195(f).

[18 AAC 50.326(j)]
[40 C.F.R. 71.6(f)(1)(ii)]

104.1. The Department has determined that the stationary source is not subject to the requirements set forth in 18 AAC 50.316. This determination is based upon certification by the Permittee that Hecla Greens Creek Mine is not a major source of HAPs.

[18 AAC 50.326(j)]
[40 C.F.R. 71.6(f)(1)(ii)]

Section 11. Visible Emissions Forms

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 in https://www3.epa.gov/ttnemc01/methods/webinar8.pdf).

- Source Name: full company name, parent company or division or subsidiary information, if necessary.
- Address: street (not mailing or home office) address of facility where visible emissions observation is being made.
- Phone (Key Contact): number for appropriate contact.
- Stationary Source ID Number: number from NEDS, agency file, etc.
- Process Equipment, Operating Mode: brief description of process equipment (include type of facility) and operating rate, % capacity, and/or mode (e.g., charging, tapping, shutdown).
- Control Equipment, Operating Mode: specify type of control device(s) and % utilization, control efficiency.
- Describe Emission Point: for identification purposes, stack or emission point appearance, location, and geometry; and whether emissions are confined (have a specifically designed outlet) or unconfined (fugitive).
- Height Above Ground Level: stack or emission point height relative to ground level; can use engineering drawings, Abney level, or clinometer.
- Height Relative to Observer: indicate height of emission point relative to the observation point.
- Distance from Observer: distance to emission point; can use rangefinder or map.
- Direction from Observer: direction plume is traveling from observer.
- Describe Emissions and Color: include physical characteristics, plume behavior (e.g., looping, lacy, condensing, fumigating, secondary particle formation, distance plume visible, etc.), and color of emissions (gray, brown, white, red, black, etc.). Note color changes in comments section.
- Visible Water Vapor Present?: check "yes" if visible water vapor is present.
- If Present, note in the Comments column whether the Plume is "attached" if water droplet plume forms prior to exiting stack, and "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.
- Observer's Affiliation: observer's employer.
- Certifying Organization, Certified By, Date: name of "smoke school," certifying observer, and date of most recent certification.

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

Page No.____________

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

SOURCE LAYOUT SKETCH: 1 Stack or Point Being Read 2 Wind Direction From 3 Observer Location 4 Sun Location 5 North Arrow 6 Other Stacks

Additional Information:

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

Range of Opacity:
Minimum Maximum

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

Data Reduction:

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

Average Opacity Summary:

Set Number	Time			Opacity		Comments
	Start	End		Sum	Average	

Section 12. SO_2 Material Balance Calculation

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

[18 AAC 50.346(c)]

Section 13. Notification Form[28]

Hecla Greens Creek Mine — **Stationary Source Name**

AQ0302TVP04 — **Air Quality Permit Number.**

Hecla Mining Company — **Company Name**

When did you discover the Excess Emissions/Permit Deviation?

Date: ____/____/____ Time: ____:____

When did the event/deviation occur?

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

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

What was the duration of the event/deviation? ____:____ (hrs:min) or ____days

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

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

☐ Excess Emissions - Complete Section 1 and Certify

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

☐ Deviation from Permit Conditions - Complete Section 2 and Certify

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

☐ Deviation from COBC[29], CO[30], or Settlement Agreement - Complete Section 2 and Certify

[28] Revised as of July 22, 2020.

[29] Compliance Order By Consent

[30] Compliance Order

Section 1. Excess Emissions

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

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

☐Start Up/Shut Down
☐Natural Cause (weather/earthquake/flood)
☐Control Equipment Failure
☐Scheduled Maintenance/Equipment Adjustments
☐Bad fuel/coal/gas
☐Upset Condition
☐Other _____

(c) **Description**

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

(d) **Emissions Units (EU) Involved:**

Identify the emissions units 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 all that apply and provide the value requested, if any):

- ☐ Opacity _____%
- ☐ Control Equipment Down
- ☐ Emission Limit Exceeded
- ☐ Flaring
- ☐ Other**:** _____
- ☐ Venting _____(gas/scf)
- ☐ Fugitive Emissions
- ☐ Marine Vessel Opacity

(f) **Corrective Actions:**

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

(g) **Unavoidable Emissions:**

Do you intend to assert that these excess emissions were unavoidable? ☐YES ☐NO

Do you intend to assert the affirmative defense of 18 AAC 50.235? ☐YES ☐NO

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

Section 2. Permit Deviations

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

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

(b) **Emissions Units (EU) Involved:**

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

EU ID	EU Name	Permit Condition /Potential Deviation

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

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

(d) **Corrective Actions:**

Describe actions taken to correct the deviation or potential deviation and to prevent future recurrence. Attach supporting information if necessary.

Certification:

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

Printed Name:_____Title_____Date _____

Signature:_____ Phone number_____

NOTE: *This document must be certified in accordance with 18 AAC 50.345(j). Read and sign the certification in the bottom of the form above. (See Condition 85.)*

Submit this report in accordance with the submission instructions on the Department's Standard Permit Conditions web page at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-iii-and-iv-submission-instructions/.

If submitted online, report must be submitted by an authorized E-signer for the stationary source (according to Condition 85).

[18 AAC 50.346(b)(3)]