DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ1071TVP04 Issue Date: Public Comment - August 16, 2024
Expiration Date: [Five Years]

The Alaska Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the Permittee, **Missile Defense Agency**, for the operation of the **Missile Defense Complex**.

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 Air Quality Control Minor Permit Nos. AQ1071MSS03 and AQ1071MSS04 have been incorporated into this operating permit.

Upon effective date of this permit, Operating Permit No. AQ1071TVP03 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
kW .....kilowatts
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
NSPS .....New Source Performance Standards [as contained in 40 C.F.R. 60]
O_2 .....oxygen
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
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:		**Missile Defense Agency** 5222 Martin Road Redstone Arsenal, AL 35898
Stationary Source Name:		**Missile Defense Complex**
Location:		63º 57′ 18.4" North; 145º 44′ 25.8" West
Physical Address:		PO Box 31049 Fort Greely, AK 99731
Owner:		**Missile Defense Agency/MSRN** (Mission Support Real Property Investments and Deployments Environmental Management) 5222 Martin Road Redstone Arsenal, AL 35898
Operator:		Missile Defense Agency/OSG (Operations Support Group) PO Box 31049 Fort Greely, AK 99731
Permittee's Responsible Official:		Dr. Buff Crosby, Ph.D., Director Environmental Management MDA/MSRN 5222 Martin Road Redstone Arsenal, AL 35898
Stationary Source and Building Contact:		Rod Harris, FGA Sustainment & Construction Site Lead MDA PO Box 31049 Fort Greely, AK 99731 (719) 721-1903 rodney.harris@mda.mil
Fee Contact:		Dr. Buff Crosby, Ph.D., Director Environmental Management MDA/MSRN 5222 Martin Road Redstone Arsenal, AL 35898 (256) 955-4032 buff.crosby@mda.mil
Permit Contact:		Dr. Buff Crosby, Ph.D., Director Environmental Management MDA/MSRN 5222 Martin Road Redstone Arsenal, AL 35898 (256) 955-4032 buff.crosby@mda.mil
Process Description:	SIC Code	9711 - National Security
	NAICS Code:	928110 - National Security

[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

EU ID	Building No.	Facility No.	Emissions Unit Name	Emissions Unit Description	Rating/Size	Installation or Construction Date
Liquid-Fuel Fired Boilers						
1	3102	MDC-BF01	Boiler	Bryan Boiler RV800-W-FD	8.00 MMBtu/hr	2003
2	3102	MDC-BF02	Boiler	Bryan Boiler RV800-W-FD	8 .00 MMBtu/hr	2003
3	3102	MDC-BF03	Boiler	Bryan Boiler RV800-W-FD	8.37 MMBtu/hr	2003
Liquid-Fuel Fired Generator Sets						
10	3301	MDC-IC07	Genset	Caterpillar 3456 DITA	691 hp	2004
11	3301	MDC-IC08	Genset	Caterpillar 3456 DITA	691 hp	2004
12	3106	MDC-IC09	Genset	Caterpillar 3516B DITA	2636 hp	2004
13	3106	MDC-IC10	Genset	Caterpillar 3516B DITA	2636 hp	2004
14	3106	MDC-IC11	Genset	Caterpillar 3516B DITA	2636 hp	2004
15	3106	MDC-IC12	Genset	Caterpillar 3516B DITA	2636 hp	2004
16	3107	MDC-IC13	Genset	Caterpillar 3516C DITA	2695 hp	2009
17	3107	MDC-IC14	Genset	Caterpillar 3516C DITA	2695 hp	2009
18	3107	MDC-IC15	Genset	Caterpillar 3516C DITA	2695 hp	2009
19	3107	MDC-IC16	Genset	Caterpillar 3516C DITA	2695 hp	2009
20	3107	MDC-IC17	Genset	Caterpillar 3516C DITA	2695 hp	2009
Rock Crusher Operations						
22	-	-	Jaw Crusher	-	400 tph	TBD [1]
23	-	-	Primary Screen	-	400 tph	TBD
24	-	-	Cone Crusher	-	400 tph	TBD
25	-	-	Tertiary Screen	-	400 tph	TBD
26 - 30	-	-	Conveyers	-	400 tph ea.	TBD
31	-	-	Nonroad Engines [2]	4 Rock Crushing CI Engines	300 hp; 415 hp; 131 hp; 134 hp	TBD

Table Notes:

1. To be determined.
2. Nonroad engines (NREs) must meet the definition of NRE in 40 C.F.R. 1068.30. EU ID 31 is 4 NRE listed in the table because they are subject to Title I permit 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 - 3, 10 - 20, and 22 - 30 listed in Table A to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

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

1.1. For EU IDs 1 - 3 and 12 - 20, monitor, record, and report in accordance with Conditions 2 - 4.

1.2. For each of EU IDs 10 and 11, as long as the emissions unit does not exceed the limit in Condition 24.2, monitoring shall consist of an annual compliance certification under Condition 91 for the visible emissions standard based on reasonable inquiry. Otherwise, comply with Condition 1.3.

1.3. For each of EU IDs 10 and 11, as long as actual emissions from the emissions unit are less than the significant emissions thresholds listed in 18 AAC 50.326(e) [1] during any consecutive 12-month period, monitoring shall consist of an annual compliance certification under Condition 91 for the visible emissions standard based on reasonable inquiry. The Permittee shall report in the operating report under Condition 90 if any of EU IDs 10 and 11 reach 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.

a. For EU IDs 10 and 11, monitor, record, and report in accordance with Conditions 25.6.a and 25.6.b.

b. If any of EU IDs 10 and 11 exceed the hour threshold in Condition 1.3, provide written notice to the Department in the operating report required in Condition 89.

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

1.4. For EU IDs 22 – 30, monitor, record and report in accordance with Conditions 5 through 7.

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

[1] Operation of EU IDs 10 or 11 for 540 hours each per 12-month rolling period will not exceed the significant emissions thresholds in 18 AAC 50.326(e).

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

Liquid Fuel-Burning Equipment

2. Visible Emissions Monitoring. When required by any of Conditions 1.1 through 1.3, or in the event of replacement[2] during the permit term, the Permittee shall observe the exhaust of EU IDs 1 - 3, and 10 - 20 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.[3]

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 - 3, and 10 - 20 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 - 3 and 12 - 20, 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.[4] Except as provided in Condition 2.3.e, after the First Method 9 observation:

(A) For EU IDs 1 - 3 and 12 - 20, continue with the monitoring schedule of the replaced emissions unit; and

(B) For EU IDs 10 and 11 comply with Conditions 1.2 and/or 1.3, as applicable.

(iv) For each of EU IDs 10 and 11, observe the exhaust of the emissions unit within 30 days after the end of the calendar month during which monitoring was triggered under Condition 1.3; or for an emissions unit with intermittent operations, within the first 30 days during the unit's next scheduled operation.

[2] *"Replacement,"* as defined in 40 C.F.R. 51.166(b)(32).
[3] Visible emissions observations are not required during emergency operations.
[4] "*Fully operational*" means upon completion of all functionality checks and commissioning after unit installation. "*Installation*" is complete when the unit is ready for functionality checks to begin.

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.

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 to eliminate visible emissions and restart the Smoke/No Smoke Plan under Condition 2.4.a.

(iii) For EUs that have no stack or are allowed by the Department to resume observations under the Smoke/No Smoke Plan, if subsequent visible emissions are observed under the schedule of Condition 2.5.c(i)(A), the Permittee shall continue to take corrective action(s) to eliminate 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 10;

(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 10; 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 90 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 90 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 89

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)]

Rock Crushers

5. Monitoring for Rock Crushers. The Permittee shall identify emission points capable of producing fugitive emissions and use the point with the highest continuous opacity for monitoring fugitive emissions from EU IDs 22 – 30.

[Condition 5.1, Minor Permit AQ1071MSS04, 4/26/2019]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(i)]

5.1. Observe the exhaust for visible emissions in accordance with 40 C.F.R. 60, Appendix A, Method 9 for 18 minutes to obtain 72 consecutive 15-second opacity observations, and as follows:

[Condition 5.1a, Minor Permit AQ1071MSS04, 4/26/2019]

a. Select an observer position at least 15 feet from the emission unit.

b. When possible, select an observer position that minimizes interference from other fugitive emissions sources while maintaining the observer position relative to the sun, as required by Method 9.

c. If water mist is present, make the observation at a point in the plume where the mist is no longer visible.

[Conditions 5.1a(i) through (iii), Minor Permit AQ1071MSS04, 4/26/2019]

5.2. Conduct observations at a load typical of the maximum operation during the reporting period described in Condition 90.

5.3. Conduct the observations:

[Conditions 5.1b & c, Minor Permit AQ1071MSS04, 4/26/2019]

a. Within two days of initial startup;

b. Within two days after startup at each new location; and

c. At least once in every 30 days of operation.

[Conditions 5.1c(i) through (iii), Minor Permit AQ1071MSS04, 4/26/2019]

6. Recordkeeping for Rock Crushers. Keep records as specified under Condition 3.1.a.

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

7. Reporting for Rock Crushers. Report as follows:

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

7.1. Include the results of all visible emissions observations conducted under Condition 5 with the operating report required by Condition 90.

[Conditions 5.2 & 5.2(a), Minor Permit AQ1071MSS04, 4/26/2019]

7.2. Report the results of Method 9 observations that exceed 20 percent average opacity for any six-minute period in accordance with Condition 89.

[40 C.F.R. 71.6(c)(6)]

Particulate Matter (PM) Emissions Standard

8. Industrial Process and Fuel-Burning Equipment PM Emissions. The Permittee shall not cause or allow particulate matter emitted from EU IDs 1 - 3, 10 - 20, and 22 - 30 listed in Table A to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

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

8.1. For EU IDs 12 - 20, monitor, record and report in accordance with Conditions 9 through 11.

8.2. For EU IDs 1- 3, monitor, record and report in accordance with Conditions 12 through 14.

8.3. For each of EU IDs 10 and 11, as long as the emissions unit does not exceed the limits in Condition 24.2, monitoring shall consist of an annual compliance certification under Condition 91 for the PM emissions standard based on reasonable inquiry. Otherwise, comply with Condition 8.4.

8.4. For each of EU IDs 10 and 11, 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 91 for the PM emissions standard based on reasonable inquiry. The Permittee shall report in the operating report under Condition 90 if any of EU IDs 10 and 11 reach the significant emissions thresholds and monitor, record and report in accordance with Conditions 9 through 11 for the remainder of the permit term for that emissions unit.

8.5. For EU IDs 22 – 30, monitor, record, and report in accordance with Condition 15.

[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

9. PM Monitoring. The Permittee shall conduct source tests on EU IDs 12 - 20 and EU IDs 10 and 11 (when required by Condition 8.4), 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)]

[5] Operation of EU IDs 10 or 11 for 540 hours each per 12-month rolling period will not exceed the significant emissions thresholds in 18 AAC 50.326(e).

9.1. If the result of any Method 9 observation conducted under Condition 2.3 for any of EU IDs 12 - 20 and EU IDs 10 and 11 is greater than the criteria of Condition 9.2.a or Condition 9.2.b, the Permittee shall, within six months of that Method 9 observation, either:

a. take corrective action and observe the emissions unit exhaust under load conditions comparable to those when the criteria were exceeded, following 40 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 9.2; or

b. except as exempted in Condition 9.4, conduct a PM source test according to requirements set out in Section 5.

9.2. Take corrective action or conduct a PM source test, in accordance with Condition 9.1, 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.

9.3. During each one-hour PM source test run under Condition 9.1.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.

9.4. The PM source test requirements in Condition 9.1.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 9.2.

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

10.1. 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 either Condition 9.2.a or Condition 9.2.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 9.2.

11.2. In each operating report under Condition 90, include:

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

b. copies of any visible emissions observation results greater than the thresholds of Condition 9.2, if they were not already submitted.

11.3. Report in accordance with Condition 89

a. anytime the results of a PM source test exceed the PM emissions standard in Condition 8; or

b. if the requirements under Condition 9.1 were triggered and the Permittee did not comply on time with either Condition 9.1.a or 9.1.b. Report the deviation within 24 hours of the date compliance with Condition 9.1 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

12. PM Monitoring. The Permittee shall conduct source tests on EU IDs 1- 3 to determine the concentration of PM in the exhaust of each emissions unit as follows:

12.1. If the result of any Method 9 observation conducted under Condition 2.3 for any of EU IDs 1- 3 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 12.3, conduct a PM source test according to the requirements in Section 5.

12.2. During each one-hour PM source test run under Condition 12.1, 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.

12.3. The PM source test requirement in Condition 12.1 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 12.1.

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

13. PM Recordkeeping. The Permittee shall keep records of the results of any source test and visible emissions observations conducted under Condition 12.

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

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

14.1. Notify the Department of any Method 9 observation results that are greater than the threshold of Condition 12.1 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 12.1.

14.2. In each operating report required by Condition 90, include:

a. a summary of the results of any source test and visible emissions observations conducted under Condition 12; and

b. copies of any visible emissions observation results greater than the threshold in Condition 12.1, if they were not already submitted.

14.3. Report in accordance with Condition 89 any time the results of a source test exceed the PM emission standard in Condition 8.

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

Rock Crushers

15. Particulate Matter MR&R. The Permittee shall take reasonable precautions to prevent the release of airborne particulate matter and fugitive dust from the rock crusher operations (EU IDs 22 – 30).

[Condition 7, Minor Permit AQ1017MSS04, 4/26/2019]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)]

15.1. Reasonable precautions for rock crushers to prevent particulate matter from becoming airborne include but are not limited to:

[Condition 7.1, Minor Permit AQ1071MSS04, 4/26/2019]
[40 C.F.R. 71.6(a)(3)(i)]

a. Clean-up of loose material on work surfaces; and

b. Minimizing drop distances on conveyor systems and lowering loader buckets to be in contact with the surface of the soil or ground before dumping.

[Conditions 7.1a & b, Minor Permit AQ1071MSS04, 4/26/2019]

15.2. The Permittee shall only crush material that is wet and shall ensure compliance by

[Condition 7.2, Minor Permit AQ1071MSS04, 4/26/2019]
[40 C.F.R. 71.6(a)(3)(i)]

a. Wetting materials using one or more of the following:

[Condition 7.2a, Minor Permit AQ1071MSS04, 4/26/2019]

(i) Naturally occurring conditions such as precipitation;

(ii) Spraying with water prior to being fed into the crusher; or

(iii) Installation and use of built in spray nozzles; and

[Condition 7.2a(i) through (iii), Minor Permit AQ1071MSS04, 4/26/2019]

b. Applying enough water to minimize any dust seen during rock crushing operations.

[Condition 7.2b, Minor Permit AQ1071MSS04, 4/26/2019]

15.3. During the material transfer to storage piles, when visible observations indicate the presence of fugitive dust, the Permittee shall use watering and/or chemical wetting agents[6] to control fugitive dust. These activities include:

[Condition 7.3, Minor Permit AQ1071MSS04, 4/26/2019]
[40 C.F.R. 71.6(a)(3)(i)]

a. Loading of aggregate onto storage piles (batch or continuous drop operation);

b. Equipment traffic in storage area;

c. Wind erosion of pile surfaces and ground areas around piles; and

d. Load out of aggregate for shipment or for return to the process stream (batch or continuous drop operation).

[Conditions 7.3a through d, Minor Permit AQ1071MSS04, 4/26/2019]

15.4. Monitor using visual observations to ensure that dust in continuously controlled (e.g. apply water if rock crusher operations are generating dust).

15.5. Report in each operating report required by Condition 90, a statement that reasonable precautions and mitigative actions were implemented for the rock crusher and storage piles to prevent the release of airborne particulate matter and fugitive dust.

15.6. Report in accordance with Condition 89 if the Permittee fails to comply with Conditions 15.1 through 15.5.

[Conditions 7.4 through 7.6, Minor Permit AQ1071MSS04, 4/26/2019]

[6] Application of water and/or chemical wetting agents shall not be required when freezing conditions exist.

[40 C.F.R. 71.6(a)(3)]

Sulfur Compound Emissions Standard

16. Sulfur Compound Emissions. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EU IDs 1 – 3 and 10 – 20 listed in Table A 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[7] (EU IDs 1 – 3 and 10 – 20)

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

17.1. Comply with either Condition 17.1.a or Condition 17.1.b:

a. For each shipment of fuel:

(i) If the fuel grade requires a sulfur content 0.5 percent by weight ($wt\%S_{fuel}$) or less, keep receipts that specify fuel grade and amount; or

(ii) If the fuel grade does not require a sulfur content 0.5 $wt\%S_{fuel}$ or less, keep receipts that specify fuel grade and amount, and either

(A) test the fuel for sulfur content; or

(B) obtain test results showing the sulfur content of the fuel from the supplier or refinery; the test results must include a statement signed by the supplier or refinery of what fuel they represent; or

b. Test the sulfur content of the fuel in each storage tank that supplies fuel to EU IDs 1 – 3 and 10 – 20 at least monthly.

17.2. Fuel testing under Condition 17.1.a or Condition 17.1.b must follow an appropriate method listed in 18 AAC 50.035(b)-(c) or 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1).

17.3. If a shipment of fuel contains greater than 0.75 $wt\%S_{fuel}$ or if the results of a fuel sulfur content test indicate that the fuel contains greater than 0.75 wt%Sfuel, the Permittee shall calculate SO_2 emissions in parts per million (ppm) using either the SO_2 material balance calculation in Section 11 or Method 19 of 40 C.F.R. 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a)(3).

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

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

[7] *Oil* means crude oil or petroleum or a liquid fuel derived from crude oil or petroleum, including distillate and residual oil, as defined in 40 C.F.R. 60.41b.

18.1. If SO_2 emissions calculated under Condition 17.3 exceed 500 ppm, the Permittee shall report in accordance with Condition 89. When reporting under this condition, include the calculation under Condition 17.3.

18.2. The Permittee shall include in the operating report required by Condition 90 for each month covered by the report:

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

b. for any fuel received with a fuel sulfur content greater than 0.5 wt%S_{fuel}, the fuel sulfur content of the shipment;

c. the results of all fuel sulfur analyses conducted under Condition 17.1.a or Condition 17.1.b and documentation of the method(s) used to complete the analyses; and

d. for any fuel received with a sulfur content greater than 0.75 wt%S_{fuel}, the calculated SO_2 emissions in ppm calculated under Condition 17.3.

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

19. For EU IDs 1 – 3 and 10 – 20, to ensure compliance with Condition 16, the Permittee shall comply with the fuel sulfur limit and associated MR&R requirements in Condition 20.

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

Preconstruction Permit [8] Requirements

Ambient Air Quality Protection Requirements

20. The Permittee shall limit the maximum sulfur content of fuel oil, for EU IDs 1 – 3 and 10 – 20 to 0.12 percent, by weight. Monitor, record, and report as follows:

[Condition 4, Minor Permit AQ1071MSS03, 1/23/2018]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

20.1. Obtain a statement or receipt from the fuel supplier certifying the maximum sulfur content of the fuel for each shipment of fuel delivered to the stationary source. If a certificate is not available from the supplier, analyze a representative sample of the fuel to determine the sulfur content using an appropriate method listed in 18 AAC 50.035(b)-(c) or 40 C.F.R. 60.17.

20.2. Keep a list of the fuel sulfur contents and amount of each shipment of fuel oil received at the stationary source during the reporting period.

20.3. Include the list with the operating report required in Condition 90.

[Conditions 4.1 through 4.3, Minor Permit AQ1071MSS03, 1/23/2018]
[40 C.F.R. 71.6(a)(3)]

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

21. The Permittee shall limit the annual operations as indicated in Condition 24.

[Condition 5, Minor Permit AQ1071MSS03, 1/23/2018]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

22. The Permittee shall not concurrently operate more than three among EU IDs 16 – 20, except for brief periods of concurrent engine startup and shutdown which shall not last more than one hour. Monitor, record, and report as follows:

[Condition 6, Minor Permit AQ1071MSS03, 1/23/2018]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

22.1. Record and maintain daily records identifying which emissions units among EU IDs 16 – 20 are operating concurrently.

[Condition 6.1, Minor Permit AQ1071MSS03, 1/23/2018]
40 C.F.R. 71.6(a)(3)]

23. The Permittee shall not operate EU IDs 22 – 31 within 400 feet of the nearest occupied structure off the work site.

[Condition 8, Minor Permit AQ1071MSS04, 4/26/2019]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

23.1. Report in accordance with Condition 89 whenever EU IDs 22 – 31 are operated within 400 feet of the nearest occupied structure off the work site.

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

Owner Requested Limit (ORL) to Avoid PSD for NO_x

24. The Permittee shall limit the total cumulative NO_x emissions for the stationary source to no greater than 197 tons per rolling 12-month period as follows:

[Condition 7, Minor Permit AQ1071MSS03, 1/23/2018]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

Boiler Limit

24.1. For EU IDs 1 – 3, limit the total fuel oil burned to not exceed 1,098,687 gallons ***combined*** per rolling 12-month period.

[Condition 7.1, Minor Permit AQ1071MSS03, 1/23/2018]

Generator Limits

24.2. For EU IDs 10 and 11, limit the individual total hours of operation to no greater than 350 hours ***each*** per rolling 12-month period.

24.3. For EU IDs 12 – 15, limit the total fuel oil burned to no greater than 656,640 gallons ***combined*** per rolling 12-month period.

24.4. For EU IDs 16 – 20, limit the total fuel oil burned to no greater than 656,640 gallons ***combined*** per rolling 12-month period.

[Conditions 7.2 through 7.4, Minor Permit AQ1071MSS03, 1/23/2018]

25. Monitoring, Recordkeeping, and Reporting Requirements

25.1. The Permittee shall monitor the monthly fuel consumption of the emissions units as source category totals. For EU IDs 1 – 3, 12 – 15, and 16 – 20, the Permittee shall accurately monitor and record the quantity of fuel oil burned. The Permittee shall:

[Condition 8.1, Minor Permit AQ1071MSS03, 1/23/2018]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)]

a. Install and operate flow meters on each emission unit to document the aggregate fuel consumption in each emission unit group in Conditions 24.1, 24.3, and 24.4 or monitor fuel use and keep records in accordance with Conditions 25.1.a(i) through 25.1.a(iii).

[Condition 8.1a, Minor Permit AQ1071MSS03, 1/23/2018]

(i) For each emission unit group in Conditions 24.1, 24.3, and 24.4, use a (auto) level gauging probe to determine the volume of fuel in the tanks that supply fuel to the group and record the cumulative volume of fuel on the beginning and end of each month.

(ii) Keep records of all fuel deliveries for tanks that supply fuel to each emission unit group in Conditions 24.1, 24.3, and 24.4. Add the cumulative volume of all fuel deliveries for a month to the cumulative volume for the first day of the month.

(iii) Calculate the difference in fuel volumes from the recorded last day each month in Condition 25.1.a(i), to determine the amount of fuel used each month.

[40 C.F.R. 71.6(c)(6)]

b. Utilize flow meters with an accuracy of at least plus or minus five percent if for two consecutive months the methods in Conditions 25.1.a(i) through 25.1.a(iii) show that fuel consumption is equal to or greater than 80% of the limits in Conditions 24.1, 24.3, and 24.4.

[Condition 8.1b, Minor Permit AQ1071MSS03, 1/23/2018]

25.2. The Permittee shall report the monthly and rolling 12-month quantity of fuel oil burned in EU IDs 1 – 3, 12 – 15, and 16 – 20 in the operating report required in Condition 90.

25.3. If the ***combined*** fuel oil burned for EU IDs 1 – 3 exceeds the limit in Condition 24.1, the Permittee shall report in accordance with Condition 89.

25.4. If the ***combined*** liquid fuel oil burned for EU IDs 12 – 15 exceeds the limit in Condition 24.3, the Permittee shall report in accordance with Condition 89.

25.5. If the ***combined*** liquid fuel oil burned for EU IDs 16 – 20 exceeds the limit in Condition 24.4, the Permittee shall report in accordance with Condition 89.

[Conditions 8.2 through 8.5, Minor Permit AQ1071MSS03, 1/23/2018]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)]

25.6. The Permittee shall equip EU IDs 10 and 11 with hour totalizers and monitor and maintain records of the monthly and rolling 12-month hours of operation for each emission unit in order to demonstrate compliance with Condition 24.2.

[Condition 8.6, Minor Permit AQ1071MSS03, 1/23/2018]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)]

a. The Permittee shall report each emissions unit's monthly and cumulative rolling 12-month hours of operation in the operating report required in Condition 90.

b. If the individual total hours of operation for EU ID 10 or 11 exceeds the limit in Condition 24.2, the Permittee shall report in accordance with Condition 89.

[Conditions 8.6a & 8.6b, Minor Permit AQ1071MSS03, 1/23/2018]

26. Maintenance Requirements. For EU IDs 22 through 31, the Permittee shall:

[Condition 2, Minor Permit AQ1071MSS04, 4/26/2019]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

26.1. Perform regular maintenance considering the manufacturer's or operator's maintenance procedures;

26.2. Keep records of any maintenance that would have a significant effect on emissions; and

26.3. Keep a copy of either the manufacturer's or operator's maintenance procedures onsite and make records available to Department personnel upon request. The records may be kept in electronic format.

[Conditions 2.1 through 2.3, Minor Permit AQ1071MSS04, 4/26/2019]
[40 C.F.R. 71.6(a)]

Insignificant Emissions Units

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

27.1. **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)]

27.2. **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)]

27.3. **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)]

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

a. Submit the compliance certifications of Condition 91 based on reasonable inquiry;

b. Comply with the requirements of Condition 72;

c. Report in the operating report required by Condition 90 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 27.1, 27.2, and 27.3.

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

Federal Requirements

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

NSPS Subpart A – General Provisions

28. NSPS Subpart A Notification. Unless exempted by a specific subpart, for any affected facility[9] or existing facility[10] regulated under NSPS requirements in 40 C.F.R. 60, the Permittee shall furnish the Administrator[11] 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]

28.1. 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]

28.2. 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]

28.3. 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[12]

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]

28.4. 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; and

[9] *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.

[10] *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.

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

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

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

28.5. a notification of any proposed replacement of components at 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.

29. 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 22 – 30, any malfunction of the air-pollution control equipment, or any periods during which a continuous monitoring system or monitoring device for EU IDs 22 – 30 is inoperative.

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

30. NSPS Subpart A Performance (Source) Tests. The Permittee shall conduct source tests according to §60.8 and Section 5 on any affected facility at such times as may be required by the Administrator, 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]

31. NSPS Subpart A Opacity Standards and Maintenance. For EU IDs 22 – 30, comply with the following:

31.1. Compliance with opacity standards in 40 C.F.R. 60 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 C.F.R. 60 or any alternative method that is approved by the Administrator.

[40 C.F.R. 60.11(b), Subpart A]

31.2. The opacity standards set forth in 40 C.F.R. 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

[40 C.F.R. 60.11(c), Subpart A]

31.3. For EU IDs 22 – 30, the owner or operator of an affected facility shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification.

[40 C.F.R. 60.11(e)(1), Subpart A]

31.4. The owner or operator of an affected facility to which an opacity standard in 40 C.F.R. 60 applies shall conduct opacity observations in accordance with Condition 31.1, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

[40 C.F.R. 60.11(e)(2), Subpart A]

32. 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 22 – 30 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 22 – 30.

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

33. NSPS Subpart A Credible Evidence. For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of the standards set forth in Conditions 42 – 46 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 22 – 30 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]

34. NSPS Subpart A Concealment of Emissions. The Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of a standard set forth in Conditions 35 – 41. 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 IIII[13] – Compression Ignition Internal Combustion Engines (CI ICE), EU IDs 16 – 20

35. NSPS Subpart IIII Applicability and General Compliance Requirements. For EU ID 16 – 20 listed in Table A, the Permittee shall comply with the applicable requirements for stationary CI ICE whose construction[14] commence after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006.

35.1. For EU IDs 16 – 20, 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 36 through 40.

[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)(2), 60.4218 and Table 8, Subpart IIII

36. NSPS Subpart IIII GAPCP. Except as permitted under Condition 39.1, the Permittee shall operate and maintain EU IDs 16 – 20 and control device according to the manufacturer's written instructions, change only those emission-related settings that are permitted by the manufacturer, and meet the requirements of 40 C.F.R. 1068, as applicable. In addition, the Permittee shall operate and maintain EU IDs 16 – 20 that achieves the emissions standards as required in Condition 38 over the entire life of the engine.

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

37. NSPS Subpart IIII Fuel Requirements. Beginning October 1, 2010, owners and operators of stationary CI ICE subject to NSPS Subpart IIII that use diesel fuel must use diesel fuel that meets the requirements of 40 C.F.R. 1090.305 for nonroad diesel fuel, except than any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.4207(b), Subpart IIII]

38. 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)]

38.1. Exhaust emissions from EU IDs 16 – 20 (non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder) shall not exceed the following applicable exhaust emission standards (Tier 2 emission factors) for new nonroad CI engines in 40 C.F.R. 1039 Appendix I for all pollutants, for the same displacement and maximum engine power, as follows:

a. 6.4 g/kW-hr (or 4.83. g/Hp-hr) for NMHC + NO_x;

[13] The provisions of NSPS Subpart IIII listed in Conditions 34 through 40 are current as amended through March 27, 2023. 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.

[14] 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).

b. 3.5 g/kW-hr (or 2.6 g/Hp-hr) for CO; and

c. 0.20 g/kW-hr (or 0.15 g/Hp-hr) for PM.

[40 C.F.R. 60.4201(a) & 60.4204(b), Subpart IIII]
[40 C.F.R. 1039 Appendix I, Table 2]

39. 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)]

39.1. If the Permittee does not install, configure, operate, and maintain EU IDs 16 – 20 and control devices according to the manufacturer's emission-related written instructions as required in Condition 36, 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 16 – 20:

(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, 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. 60.4209 and 60.4211(g)(2), Subpart IIII]

39.2. For EU IDs 16 – 20:

a. Conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first thereafter, to demonstrate compliance with the applicable emission standards; and

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

b. Conduct performance tests and meet the not-to-exceed (NTE) standards in accordance with the applicable requirements indicated in 40 C.F.R. 60.4212(a) and (c).

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

39.3. For EU IDs 16 – 20, demonstrate compliance with the emission standards by purchasing an engine certified to the applicable emission standards in Conditions 38.1. The engines must be installed and configured according to the manufacturer's specifications, except as permitted in Condition 39.1.

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

39.4. For EU IDs 16 – 20, demonstrate compliance with the fuel requirement in Condition 37 by retaining records of the fuel grade and quantity received.

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

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

40.1. Report in accordance with Condition 89 if any of the requirements in Conditions 35 through 41 was not met.

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

41. 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]

41.1. 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]

41.2. 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]

41.3. The requirements of Condition 41 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]

NSPS Subpart OOO – Nonmetallic Mineral Processing Plants

42. NSPS Subpart OOO Applicability. For EU IDs 22 – 30, the Permittee shall comply with the following applicable requirements of NSPS Subpart OOO.

[18 AAC 50.040(a)(2)(FF), 50.040(j)(4), & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.670, Subpart OOO]

42.1. Table 1 of NSPS Subpart OOO specifies the provisions of 40 C.F.R 60 Subpart A that do not apply to owners and operators of affected facilities subject to NSPS Subpart OOO or that apply with certain exceptions.

[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.670(f), Subpart OOO]

43. NSPS Subpart OOO Particulate Matter Standards.

43.1. Affected facilities must meet the fugitive emission limits and compliance requirements in Conditions 43.1.a, 43.1.b, and 43.2 within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under 40 C.F.R. 60.11. The requirements in Conditions 43.1.a, 43.1.b, and 43.2 apply for fugitive emissions from affected facilities without capture systems and for fugitive emissions escaping capture systems.

[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.672(b), Subpart OOO]

a. The owner or operator must meet the fugitive emissions limit of 7 percent opacity for grinding mills, screening operations (EU IDs 23 and 25), bucket elevators, transfer points on belt conveyors (EU IDs 26 through 30), bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility (as defined in 40 C.F.R. 60.670 and 60.671).

b. The owner or operator must meet the fugitive emissions limit of 12 percent opacity for crushers at which a capture system is not used (EU IDs 22 and 24).

[Table 3, Subpart OOO]

43.2. The owner or operator must demonstrate compliance with the limits in Conditions 43.1.a and 43.1.b by conducting

[40 C.F.R. 71.6(a)(3)]
[Table 3, Subpart OOO]

a. An initial performance test according to Condition 31 and Conditions 45.1 through 45.5; and

b. Periodic inspections of water sprays according to Conditions 44.1 and 46.1; and

c. A repeat performance test according to Condition 31 and Conditions 45.1 through 45.4 within 5 years from the previous performance test for fugitive emissions from affected facilities without water sprays. Affected facilities controlled by water carryover from upstream water sprays that are inspected according to the requirements in Conditions 44.1 and 46.1 are exempt from this 5-year repeat testing requirement.

[Table 3, Subpart OOO]

43.3. Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of 40 C.F.R. 60.672.

[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.672(d), Subpart OOO]

44. NSPS Subpart OOO Monitoring Requirements.

44.1. The owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses wet suppression to control emissions from the affected facility must perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The owner or operator must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the owner or operator finds that water is not flowing properly during an inspection of the water spray nozzles. The owner or operator must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under Condition 46.1.

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 60.674(b), Subpart OOO]

a. If an affected facility relies on water carryover from upstream water sprays to control fugitive emissions, then that affected facility is exempt from the 5-year repeat testing requirement specified in Condition 43.2.c provided that the affected facility meets the criteria in Conditions 44.1.a(i) and 44.1.a(ii):

[40 C.F.R. 60.674(b)(1), Subpart OOO]

(i) The owner or operator of the affected facility conducts periodic inspections of the upstream water spray(s) that are responsible for controlling fugitive emissions from the affected facility. These inspections are conducted according to Conditions 44.1 and 46.1, and

(ii) The owner or operator of the affected facility designates which upstream water spray(s) will be periodically inspected at the time of the initial performance test required under 40 C.F.R. 60.11 and Condition 45.1.

[40 C.F.R. 60.674(b)(1)(i) & (ii), Subpart OOO]

b. If an affected facility that routinely uses wet suppression water sprays ceases operation of the water sprays or is using a control mechanism to reduce fugitive emissions other than water sprays during the monthly inspection (for example, water from recent rainfall), the logbook entry required under Condition 46.1 must specify the control mechanism being used instead of the water sprays.

[40 C.F.R. 60.674(b)(2), Subpart OOO]

45. NSPS Subpart OOO Test Methods and Procedures.

45.1. In determining compliance with the particulate matter standards in Condition 43.1, the owner or operator shall use Method 9 of appendix A-4 of 40 C.F.R. 60 and the procedures in Condition 31, with the following additions:

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 60.675(c)(1), Subpart OOO]

a. The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

b. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9 of appendix A-4 of this part, Section 2.1) must be followed.

c. For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

[40 C.F.R. 60.675(c)(1)(i) through (iii), Subpart OOO]

45.2. When determining compliance with the fugitive emissions standard for any affected facility described under Condition 43.1, the duration of the Method 9 (40 C.F.R. part 60, appendix A-4) observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in Conditions 43.1.a and 43.1.b must be based on the average of the five 6-minute averages.

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 60.675(c)(3), Subpart OOO]

45.3. The owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 C.F.R. 60.675:

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 60.675(e), Subpart OOO]

a. For the method and procedure of Conditions 45.1 and 45.2, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:

[40 C.F.R. 60.675(e)(1), Subpart OOO]

(i) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.

(ii) Separate the emissions so that the opacity of emissions from each affected facility can be read.

[40 C.F.R. 60.675(e)(1)(i) & (ii), Subpart OOO]

b. 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 if the following conditions are met:

[40 C.F.R. 60.675(e)(2), Subpart OOO]

(i) No more than three emission points may be read concurrently.

(ii) All three emission points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

(iii) If an opacity reading for any one of the three emission points equals or exceeds the applicable standard, then the observer must stop taking readings for the other two points and continue reading just that single point.

[40 C.F.R. 60.675(e)(2)(i) through (iii), Subpart OOO]

45.4. For performance tests involving only Method 9 (40 C.F.R. part 60 appendix A-4) testing, the owner or operator may reduce the 30-day advance notification of performance test in 40 C.F.R. 60.7(a)(6) and 60.8(d) to a 7-day advance notification.

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 60.675(g), Subpart OOO]

45.5. If the initial performance test date for an affected facility falls during a seasonal shut down (as defined in 40 C.F.R. 60.671 of NSPS Subpart OOO) of the affected facility, then with approval from the permitting authority, the owner or operator may postpone the initial performance test until no later than 60 calendar days after resuming operation of the affected facility.

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 60.675(i), Subpart OOO]

46. NSPS Subpart OOO Reporting and Recordkeeping Requirements.

46.1. Owners or operators of affected facilities (as defined in 40 C.F.R. 60.670 and 60.671) for which construction, modification, or reconstruction commenced on or after April 22, 2008, must record each periodic inspection required under Condition 44.1, including dates and any corrective actions taken, in a logbook (in written or electronic format). The owner or operator must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Administrator upon request.

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 60.676(b)(1), Subpart OOO]

46.2. The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in Condition 43.1, including reports of opacity observations made using Method 9 (40 C.F.R. part 60, appendix A-4) to demonstrate compliance with Condition 43.1.

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 60.676(f), Subpart OOO]

46.3. The subpart A requirement under 40 C.F.R. 60.7(a)(1) for notification of the date construction or reconstruction commenced is waived for affected facilities under NSPS Subpart OOO.

[40 C.F.R. 71.6(a)(3)]

[40 C.F.R. 60.676(h), Subpart OOO]

46.4. A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator.

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 60.676(i), Subpart OOO]

a. For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Administrator. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.

b. For portable aggregate processing plants, the notification of the actual date of initial startup shall include both the home office and the current address or location of the portable plant.

[40 C.F.R. 60.676(i)(1) & (2), Subpart OOO]

40 C.F.R. Part 63 National Emission Standards for Hazardous Air Pollutants (NESHAP)

NESHAP Subpart A – General Provisions

47. 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

47.1. Table 8 to NESHAP Subpart ZZZZ for EU IDs 10 – 15 listed in Table A; and

47.2. Table 8 to Subpart JJJJJJ for EU IDs 1 – 3 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[15] – Stationary RICE, EU IDs 10 – 20

48. NESHAP Subpart ZZZZ Applicability. The Permittee shall comply with applicable requirements for existing[16] (EU IDs 10 – 15) and new[17] (EU IDs 16 – 20) stationary reciprocating internal combustion engines (RICE) located at an area source of hazardous air pollutant (HAP) emissions.

[15] The provisions of NESHAP Subpart ZZZZ listed in Conditions 46 through 50 are current as amended through May 30, 2023. 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.

[16] 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.

[17] In accordance with 40 C.F.R. 63.6590(a)(2)(iii), a stationary RICE located at an area source of HAP emissions is *new* if you commenced construction of the stationary RICE on or after June 12, 2006.

48.1. For EU IDs 10 – 15, existing stationary RICE units, the Permittee shall at all times comply with Conditions 49 through 52.

48.2. For EU IDs 16 – 20, new stationary RICE unit, the Permittee shall meet the requirements of 40 C.F.R. 63 Subpart ZZZZ by meeting the requirements of 40 C.F.R. 60 Subpart IIII in Conditions 35 through 41. No further requirements apply for such engines under 40 C.F.R. 63.

[18 AAC 50.040(c)(23) & (j)(4) and 50.326(j)]
40 C.F.R. 71.6((a)(1)
[40 C.F.R. 63.6585(c), 63.6590(a)(1)(iii), (a)(2)(iii) & (c)(1), and 63.6605(a), Subpart ZZZZ]

49. NESHAP Subpart ZZZZ GAPCP, Operation and Maintenance Requirements. 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)]

49.1. If electing to operate EU IDs 10 – 15 for the purpose specified in Condition 50.6.c(i), use diesel fuel that meets the requirements in 40 C.F.R. 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchases (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

[63.6604(b), Subpart ZZZZ]
[40 C.F.R. 71.6(a)(1)]

49.2. At all times, operate and maintain EU IDs 10 – 15, 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 EU IDs 10 – 15.

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

49.3. 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 instructions for operation and maintenance; or

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

[40 C.F.R. 63.6625(e)(4), 63.6640(a), & Table 6 (item 9), Subpart ZZZZ]

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

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

50. NESHAP Subpart ZZZZ Work and Management Practices Standards and Monitoring. For EU IDs 10 – 15, the Permittee shall comply with the following work and management practices and monitoring requirements:

[18 AAC 50.040(c)(23) & (j)(4) and 50.326(j)]
[40 C.F.R. 71.6(a)(1) & (3)(i)]
[40 C.F.R. 63.6603(a) & (b)(1), 63.6640(a), and 63.6625(i), Subpart ZZZZ]
[Table 2d and Table 6, Subpart ZZZZ]

50.1. For EU IDs 10 – 15, the Permittee must install a non-resettable hour meter if one is not already installed.

[40 C.F.R. 63.6625(f), Subpart ZZZZ]
[40 C.F.R. 71.6(a)(3)]

50.2. For EU IDs 10 – 15:

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

(i) Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed by Condition 50.5;

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

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

[Table 2d (item 4), Subpart ZZZZ]

50.3. During periods of startup, the Permittee shall comply with Condition 49.4.

[Table 2d item 1, Subpart ZZZZ]

50.4. Demonstrate continuous compliance with the requirements in Condition 50.2.a by complying with Condition 49.3.

[40 C.F.R. 63.6640(a) & Table 6 (item 9), Subpart ZZZZ]

50.5. The Permittee has the option to utilize an oil analysis program in order to extend the specified oil change requirements in Condition 50.2.a(i), as described below:

a. The oil analysis must be performed at the same frequency specified for changing the oil in Conditions 50.2.a(i).

b. The analysis program must, at a minimum, analyze the following three parameters: Total Base Number (for CI 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 50.5.b(i) through 50.5.b(iii) are not exceeded, the Permittee is not required to change the oil.

d. If any of the limits in Conditions 50.5.b(i) through 50.5.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]

50.6. For EU IDs 10 – 15, the Permittee must operate the emergency stationary RICE according to the requirements in Conditions 50.6.a through 50.6.c. In order for the engine to be considered an emergency stationary RICE under NESHAP Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in Conditions 50.6.a through 50.6.c, is prohibited. If the engine is not operated according to the requirements in Conditions 50.6.a through 50.6.c, the engine will not be considered an emergency engine under NESHAP Subpart ZZZZ and must meet all requirements for non-emergency engines.

[40 C.F.R. 63.6640(f), Subpart ZZZZ]
[40 C.F.R. 71.6(a)(1)]

a. There is no time limit on the use of emergency stationary RICE in emergency situations.

b. Emergency stationary RICE may operate for the purpose specified in Condition 50.6.b(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition 50.6.c counts as part of the 100 hours per calendar year allowed by this paragraph.

[40 C.F.R. 63.6640(f)(1) & (2), Subpart ZZZZ]

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

[40 C.F.R. 63.6640(f)(2)(i), Subpart ZZZZ]

c. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in Condition 50.6.b. Except as provided in Condition 50.6.c(i), the 50 hours per year for non-emergency situations cannot be used to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 C.F.R. 63.6640(f)(4), Subpart ZZZZ]

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

[40 C.F.R. 63.6640(f)(4)(ii), Subpart ZZZZ]

51. 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)]

51.1. If electing to operate and maintain EU IDs 10 – 15 according to a maintenance plan developed by the Permittee as allowed under Condition 49.3.b, keep records of the maintenance conducted on EU IDs 10 – 15 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]

51.2. If electing to operate EU IDs 10 – 15 as emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in Condition 50.6.c(i), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

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

51.3. If electing to utilize the oil analysis program described in Condition 50.5, 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]

51.4. 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]

52. 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(a)(3)(iii) & (c)(6)]

52.1. If electing to operate EU IDs 10 – 15 as emergency stationary RICE that operates for the purpose specified in Condition 50.6.c(i), submit an annual report according to the requirements in Conditions 52.1.a through 52.1.c.

[40 C.F.R. 63.6650(h), Subpart ZZZZ]

a. The report must contain the information in 40 C.F.R. 63.6650(h)(1)(i) through (ix).

b. Annual reports for each calendar year must be submitted by no later than March 31 of the following calendar year.

c. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 C.F.R. 63.13.

[40 C.F.R. 63.6650(h)(1) through (3), Subpart ZZZZ]

52.2. Include in the operating report required by Condition 90 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]

52.3. Notify the Department in accordance with Condition 89 if any of the requirements in Conditions 47 through 52 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[18] - Industrial, Commercial, and Institutional (ICI) Boilers, EU IDs 1 - 3

53. NESHAP Subpart JJJJJJ Applicability. For EU IDs 1 – 3 listed in Table A, the Permittee shall comply with applicable requirements of NESHAP Subpart JJJJJJ for existing[19] oil industrial boilers located at an area source of HAP emissions.

[18] The provisions of NESHAP Subpart JJJJJJ listed in Conditions 47.2 and 53 through 57 are current as amended through July 2, 2018. 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.

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

[18 AAC 50.040(c)(39) & (j) and 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.11193, 63.11194(a)(1) & (b), 63.11200(c) & 63.11237, Subpart JJJJJJ]

53.1. For affected boilers that switch fuels or make a physical change to the boiler that results in the applicability of a different subcategory within NESHAP Subpart JJJJJJ or the boiler becoming subject to NESHAP Subpart JJJJJJ, demonstrate compliance within 180 days of the effective date of the fuel switch or the physical change. Notification of such changes must be submitted according to Condition 57.4.

[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.11210(i), Subpart JJJJJJ]

54. NESHAP Subpart JJJJJJ Good Air Pollution Control Practices. At all times, the Permittee shall operate and maintain EU IDs 1 – 3, 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(c)(39) & (j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.11205(a), Subpart JJJJJJ]

55. NESHAP Subpart JJJJJJ Work and Management Practices. For each of EU IDs 1 – 3, the Permittee shall comply with the following work and management practices at all times and demonstrate continuous compliance, as follows:

[18 AAC 50.040(c)(39) & (j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.11201(b) & (d), 63.11223(a) & (b), and Table 2; Subpart JJJJJJ]

55.1. For EU IDs 1 – 3, conduct a tune-up of each boiler biennially in accordance with Condition 55.2. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.

[Table 2 (item 4), Subpart JJJJJJ]
[40 C.F.R. 63.11223(a) & (b), Subpart JJJJJJ]

55.2. 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:

[40 C.F.R. 63.11223(b)(1) – (5) & (7), Subpart JJJJJJ]

a. 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 36 months for EU IDs 1 – 3 from the previous inspection).

b. 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.

c. 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 36 months for EU IDs 1 – 3 from the previous inspection).

d. 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.

e. 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.

f. 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.

56. NESHAP Subpart JJJJJJ Recordkeeping Requirements. For each of EU IDs 1 – 3, the Permittee shall keep records as follows:

[18 AAC 50.040(c)(39) & (j) and 50.326(j)]
[40 C.F.R. 71.6(c)(3)(iii)]
[40 C.F.R. 63.11223(a) & (b)(6) and 63.11225(c), Subpart JJJJJJ]

56.1. 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.

56.2. Keep records to document conformance with the work practice standards and management practices as specified in Conditions 56.2.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.

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

56.4. Keep records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in Condition 54, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

[40 C.F.R. 63.11223(a) and 63.11225(c), Subpart JJJJJJ]

56.5. Maintain on-site a record containing the information in Conditions 56.5.a through 56.5.c.

a. 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;

b. A description of any corrective actions taken as part of the tune-up of the boiler; and

c. The type and amount of fuel used over the 12 months prior to the tune-up of the boiler. Units sharing a fuel meter may estimate the fuel use by each unit.

[40 C.F.R. 63.11223(b)(6), Subpart JJJJJJ]

56.6. 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 keep each record onsite or accessible from a central location by computer or other means that instantly provide access at the site 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(d), Subpart JJJJJJ]

57. NESHAP Subpart JJJJJJ Reporting Requirements. For each of EU IDs 1 – 3, the Permittee shall report, as follows:

[18 AAC 50.040(c)(39) & (j) and 50.326(j)]
[40 C.F.R. 71.6(c)(3)(iii)]

57.1. Prepare, by March 1, and submit to the EPA and the Department upon request, a biennial Compliance Certification report for the previous calendar year containing the information specified in Conditions 57.1.a and 57.1.b.

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 NESHAP Subpart JJJJJJ. The notification must include the following certifications of compliance, and signed by a responsible official: *"This facility complies with the requirements in 40 C.F.R. 63.11223 to conduct a biennial tune-up for each of EU IDs 1 – 3. No secondary materials that are solid waste were combusted in any affected unit."*

[40 C.F.R. 63.11225(b)(1) through (2)(ii), Subpart JJJJJJ]

57.2. If requested by the Administrator, submit a performance tune up report containing the information in Conditions 56.5.a through 56.5.c.

[40 C.F.R. 63.11223(b)(6), Subpart JJJJJJ]

57.3. If electing to commence or recommence combustion of solid waste, provide 30 days prior notice of the date upon which solid waste combustion will commence or recommence. The notification must identify the items in 40 C.F.R. 63.11225(f)(1) through (4).

[40 C.F.R. 71.6(a)(3)(iii)]
[40 C.F.R. 63.11225(f), Subpart JJJJJJ]

57.4. If the Permittee has switched fuels or made a physical change to the boiler and the fuel switch or change resulted in the applicability of a different subcategory within NESHAP Subpart JJJJJJ, in the boiler becoming subject to NESHAP Subpart JJJJJJ, or in the boiler switching out of NESHAP Subpart JJJJJJ due to a fuel change that results in the boiler meeting the definition of gas-fired boiler, as defined in 40 C.F.R. 63.11237, or the Permittee has taken a permit limit that resulted in becoming subject to NESHAP Subpart JJJJJJ or no longer being subject to NESHAP Subpart JJJJJJ, the Permittee must provide notice of the date upon which the Permittee switched fuels, made the physical change, or took a permit limit within 30 days of the change. The notification must identify the items in 40 C.F.R. 63.11225(g)(1) and (2).

[40 C.F.R. 71.6(a)(3)(iii)]
[40 C.F.R. 63.11225(g), Subpart JJJJJJ]

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

Subpart A – General Provisions & Subpart M – Asbestos

58. 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

59. 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]

60. 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]

61. 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

62. 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).

62.1. 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).

62.2. 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).

62.3. 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 4. General Conditions

Standard Terms and Conditions

63. 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)]

64. 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)]

65. 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)]

66. 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]

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

67.1. potential to emit of 326.82 TPY; or

67.2. 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]

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

68.1. 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 67.2. 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/.

68.2. 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.

68.3. 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 67.1.

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

69. 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)]

70. 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.

70.1. 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 70.1.a or to address the results of Department inspections that found potential problems; and

(ii) to prevent future dust problems.

70.2. The Permittee shall report according to Condition 72.3.

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

71. 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)]

72. 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)]

72.1. **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 72.

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 72; or

(ii) the Department notifies the Permittee that it has found a violation of Condition 72.

72.2. **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 72; and

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

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

a. With each stationary source operating report under Condition 90, 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 89.

73. 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[20] listed in Conditions 38 and 59 (refrigerants), the Permittee shall

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

73.2. report in accordance with Condition 89.1.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

74. 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:

74.1. 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

74.2. Include this condition in the annual certification required under Condition 91.

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

[20] 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 5. General Source Testing and Monitoring Requirements

75. 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)]

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

[18 AAC 50.220(b)]

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

76.2. 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.

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

77.1. 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]

77.2. 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]

77.3. 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]

77.4. 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 10 to record data.

[18 AAC 50.030 and 50.220(c)(1)(D)]

77.5. 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]

77.6. 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]

77.7. 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]

78. 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)]

79. Test Exemption. The Permittee is not required to comply with Conditions 81, 82 and 83 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)]

80. 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)]

81. Test Plans. Except as provided in Condition 79, 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 75 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)]

82. Test Notification. Except as provided in Condition 79, 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)]

83. Test Reports. Except as provided in Condition 79, 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 86. 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)]

84. Particulate Matter Calculations. In source testing for compliance with the particulate matter standards in Conditions 8 and 27.2, the three-hour average is determined using the average of three one-hour test runs.

[18 AAC 50.220(f)]

Section 6. General Recordkeeping and Reporting Requirements

Recordkeeping Requirements

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

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

85.2. 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

86. 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.

86.1. 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)]

87. 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.

87.1. 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)]

88. 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)]

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

89.1. **Excess Emissions Reporting.** Except as provided in Condition 72, 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 89.1.d.

d. Report all other excess emissions not described in Conditions 89.1.a, 89.1.b, and 89.1.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 90 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)]

89.2. **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 11.3.b).

b. Report all other permit deviations within 30 days after the end of the month during which the deviation occurred or as part of the next routine operating report in Condition 90 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)]

89.3. **Reporting Instructions.** When reporting either excess emissions or permit deviations, the Permittee shall report using the Department's online form for all such submittals, beginning no later than September 7, 2023. The form can be found at the Division of Air Quality's Air Online Services (AOS) system webpage http://dec.alaska.gov/applications/air/airtoolsweb using the Permittee Portal option. Alternatively, upon written Department approval, the Permittee may submit the form contained in Section 12 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), and 50.270(a), (b), & (c)]

90. Operating Reports. During the life of this permit[21], the Permittee shall submit to the Department an operating report in accordance with Conditions 86 and 87 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.

90.1. 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.

90.2. When excess emissions or permit deviations that occurred during the reporting period are not included with the operating report under Condition 90.1, the Permittee shall identify

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

b. the equipment involved;

c. the permit condition affected;

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

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

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

90.3. when excess emissions or permit deviation reports have already been reported under Condition 89 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.

90.4. 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, 9.2, and 12.1, 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.

90.5. **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)]

91. 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 87.

91.1. 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 8, 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.

91.2. **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.

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

92. 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:

92.1. **Every-year inventory.** Each year by April 30, if the stationary source's potential to emit (PTE) 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.

92.2. **Triennial inventory.** Every third year by April 30, if the stationary source's PTE for the previous calendar year does not meet any of the emission thresholds in Condition 92.1.

92.3. For reporting under Condition 92.2, the Permittee shall report the annual emissions and the required data elements under Condition 92.4 every third year for the previous calendar year as scheduled by the EPA.[22].

92.4. For each emissions unit and the stationary source, include in the report the required data elements[23] 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.

92.5. 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, 50.275, 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]

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

[22] 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.).

[23] 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.

93.1. For the purposes of reporting actual or assessable emissions required under Condition 92 and Condition 67.2, the Permittee shall use consistent pollutant-specific emission factors and calculation methods for all reporting requirements for the stationary source.

[18 AAC 50.040(j)(4), 50.200, 50.275, 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]

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

94.1. **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 90 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.

94.2. **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)]

Section 7. Permit Changes and Renewal

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

95.1. 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;

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

95.3. 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

95.4. 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)]

96. 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)]

97. 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:

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

97.2. 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;

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

97.4. 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)]

98. Operational Flexibility. The Permittee may make CAA Section 502(b)(10)[24] 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).

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

98.2. For each such change, the notification required by Condition 98.1 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.

98.3. The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made pursuant to Condition 98.

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

99. Permit Renewal. To renew this permit, the Permittee shall submit to the Department[25] 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)]

[24] 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.

[25] 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 8. Compliance Requirements

General Compliance Requirements

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

100.1. included and specifically identified in the permit; or

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

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

101. 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

101.1. an enforcement action;

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

101.3. denial of an operating permit renewal application.

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

102. 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)]

103. 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)]

104. 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

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

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

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

104.4. 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)]

Compliance Schedule

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

[18 AAC 50.040(j) and 50.326(j)]
[40 C.F.R. 71.6(c)(3) and 71.5(c)(8)(iii)(B)]

Section 9. 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.

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

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

106.2. 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)]

107. 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

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
Source-Wide	40 C.F.R. 61 Subpart D	Fort Greely is not a rocket motor test facility covered by 40 C.F.R. 61, Subpart D.
Source-Wide	40 C.F.R. 63, Subpart GG	Fort Greely will not be engaged in the production, reworking or repair of aerospace vehicles or components. A limited amount of assembly of pre-manufactured missile components will occur, but this does not fall within the scope of 40 C.F.R. 60, Subpart GG.
Source-Wide	40 C.F.R. 60.757(a)(1)(ii)	Permittee submitted the one-time initial design capacity report to the EPA.
Storage Tanks	40 C.F.R. 60 Subpart K	Subpart K does not apply to vessels with a capacity less than 151,412 liters (40,000 gallons).
Storage Tanks	40 C.F.R. 60 Subpart Kb	Subpart Kb does not apply to vessels with a capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure less than 15.0 kPa.
Storage Tanks	40 C.F.R. 60 Subpart Kb	Subpart Kb does not apply to vessels with a capacity less than 75 cubic meters.

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

Section 10. 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.

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AIR PERMITS PROGRAM - VISIBLE EMISSIONS OBSERVATION FORM

Page No.

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

Print Observer's Name
Observer's Signature | Date
Observer's Affiliation:

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		
	Start	End		Sum	Average	Comments

Section 11. 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 17.1.a(ii) or Condition 17.1.b. 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 12. Notification Form[26]

Missile Defense Complex **AQ1071TVP04**

Stationary Source Name **Air Quality Permit Number.**

Missile Defense Agency

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[27], CO[28], or Settlement Agreement - Complete Section 2 and Certify

[26] Revised as of July 22, 2020.

[27] Compliance Order By Consent

[28] 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 /Limit Exceeded /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 86.)*

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

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

[18 AAC 50.346(b)(3)]