DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ0318TVP05 Issue Date: Public Comment - September 6, 2023
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, **United States Space Force (USSF)**, for the operation of the **Clear Space Force Station (Clear SFS)**.

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 Permit to Operate No. 9531-AA001 and Minor Permit Nos. AQ0318MSS02, AQ0318MSS03, AQ0318MSS04, AQ0318MSS05R1, AQ0318MSS06, AQ0318MSS07, and AQ0318MSS08, have been incorporated into this operating permit.

Upon effective date of this permit, Operating Permit No. AQ0318TVP04R03P expires.

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

James R. Plosay, Manager
Air Permits Program

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Abbreviations and Acronyms

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

Section 1. Stationary Source Information

Identification

Permittee:		**United States Space Force (USSF)** 200 A Street Stop 1 Clear Space Force Station, AK 99704-5360
Stationary Source Name:		**Clear Space Force Station (Clear SFS)**
Location:		64º 17′ 31" North; 149º 11′ 6" West
Physical Address:		200 A Street Stop 1 Clear Space Force Station, AK 99704-5360
Owner:		**United States Space Force (USSF)** 200 A Street Stop 1 Clear Space Force Station, AK 99704-5360
Operator:		United States Space Force (USSF) 200 A Street Stop 1 Clear Space Force Station, AK 99704-5360
Permittee's Responsible Official:		Station Commander, 13 SWS/CC 200 A Street Stop 1 Clear Space Force Station, AK 99704-5360
Designated Agent:		United States Space Force (USSF) 200 A Street Stop 1 Clear Space Force Station, AK 99704-5360
Stationary Source and Building Contact:		Jennifer Chambers, Environmental Coordinator 200 A Street Stop 500 Clear Space Force Station, AK 99704-5360 (907) 585-6525 jennifer.chambers.5.ctr@spaceforce.mil
Fee Contact:		Jennifer Chambers, Environmental Coordinator 200 A Street Stop 500 Clear Space Force Station, AK 99704-5360 (907) 585-6525 jennifer.chambers.5.ctr@spaceforce.mil
Permit Contact:		Jennifer Chambers, Environmental Coordinator 200 A Street Stop 500 Clear Space Force Station, AK 99704-5360 (907) 585-6525 jennifer.chambers.5.ctr@spaceforce.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	Emissions Unit Name	Emissions Unit Description	Rating/Size	Bldg No.	Installation or Construction Date
Boilers					
44	Liquid-fired Boiler #1	Burnham 3P-400-50-0-PF	16.74 MMBtu/hr	230	2015
45	Liquid-fired Boiler #2	Burnham 3P-400-50-0-PF	16.74 MMBtu/hr	230	2015
46	Liquid-fired Boiler #3	Burnham 3P-400-50-0-PF	16.74 MMBtu/hr	230	2015
300	MCF Heating Boiler	Fulton VTG 6000DF, #10013	6.0 MMBtu/hr	900	2019
301	MCF Heating Boiler	Fulton VTG 6000DF, #10009	6.0 MMBtu/hr	900	2019
302	MCF Heating Boiler	Fulton VTG 6000DF, #10012	6.0 MMBtu/hr	900	2019
303	MCF Heating Boiler	Fulton VTG 3000DF, #10017	3.0 MMBtu/hr	900	2019
304	MCF Heating Boiler	Fulton VTG 3000DF, #10019	3.0 MMBtu/hr	900	2019
305	Dormitory Boiler	TBD	3.0 MMBtu/hr		TBD
Emergency Diesel Engines					
9	Diesel Generator	Perkins LD50317, SN U896508F	30 kW (82 Hp)	37	2000
11A	Diesel Water Pump	Cummins QSB 6.7, CFP7EVS-F10 SN 74793751	174 bHp		1/19/2022
12	Diesel Water Pump	Continental RD5721621	200 Hp	5	1960
38	Diesel Well Pump	Caterpillar #1 03Z17016	196 Hp	800	1999
39	Diesel Well Pump	Caterpillar #2 03Z17011	196 Hp	800	1999
43	Emergency Generator	MTU 18V2000, DS1250	1,250 kW (1,865 Hp)	502	2015
101	Emergency Generator	MTU 20V4000 G83L	3,250 kW (4,680 Hp)	801	2012
102	Emergency Generator	MTU 20V4000 G83L	3,250 kW (4,680 Hp)	801	2012
103	Emergency Generator	MTU 20V4000G83L	3,250 kW (4,680 Hp)	801	2016

EU ID	Emissions Unit Name	Emissions Unit Description	Rating/Size	Bldg No.	Installation or Construction Date
Emergency Diesel Engines (cont'd)					
200	Stationary Power Generator	MTU 12V4000 G43 SN#: 5262012927	1,500 kWe (2,213 bHp)	907	2019
201	LPP Generator	Caterpillar C175-20	3,250 kW (4,700 Hp)	901	01/2021
202	LPP Generator	Caterpillar C175-20	3,250 kW (4,700 Hp)	901	01/2021
203	LPP Generator	Caterpillar C175-20	3,250 kW (4,700 Hp)	901	01/2021
204	LPP Generator	Caterpillar C175-20	3,250 kW (4,700 Hp)	901	01/2021
205	LPP Generator	Caterpillar C175-20	3,250 kW (4,700 Hp)	901	01/2021
206	LPP Generator	Caterpillar C175-20	3,250 kW (4,700 Hp)	901	01/2021
207	LPP Generator	Caterpillar C175-20	3,250 kW (4,700 Hp)	901	01/2021
208	Fire Dept. Generator	Caterpillar C9 ATAAC	300 kW (480 Hp)	241	2020
209	Emergency Generator	Caterpillar C4.4	100 kWe (173.5 Hp)	906	2020
210	RTE Generator	Cummins QSL9-G7	300 kW		2023
Gasoline Storage Tanks					
104	Tank 673	Bulk, Gasoline for Vehicles (Tank 3)	8,000 gallons	260	1994
105	Tank 674	Bulk, Gasoline for Vehicles (Tank 4)	8,000 gallons	260	1994

Notes:

1. EU 200 name changed from Temporary LPP Generator to Stationary Power Generator per MSS08.
2. EU 8 was removed from service 7/15/2021. EU 11 was removed from service January 2022, and replaced by EU ID 11A.

[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 9, 11A, 12, 38, 39, 43 – 46, 101 – 103, 200 – 210, and 300 – 305 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 43 – 46, 101 – 103, 200 – 209, and 300 – 302, monitor, record, and report in accordance with Conditions 2 – 4.

1.2. For each of EU IDs 38, 39, and 210, as long as the emissions unit does not exceed the limit(s) in Conditions 25 and 34 through 37, monitoring shall consist of an annual compliance certification under Condition 108 for the visible emissions standard based on reasonable inquiry. Otherwise, comply with Condition 1.3.

1.3. For each of EU IDs 9, 11A, 12, 38, 39, and 208 – 210, as long as actual emissions from the emissions unit are less than the significant emissions thresholds listed in 18 AAC 50.326(e) by operating each unit no greater than the 12-month rolling operating hour threshold in Table B, monitoring shall consist of an annual compliance certification under Condition 108 for the visible emissions standard based on reasonable inquiry. The Permittee shall report in the operating report under Condition 107 if any of EU IDs 9, 11A, 12, 38, 39, and 208 – 210 reaches any of the significant emissions thresholds listed in 18 AAC 50.326(e) and monitor, record, and report in accordance with Conditions 2 through 4 for the remainder of the permit term for that emissions unit.

Table B Thresholds for Visible Emissions Monitoring

EU ID	12-Month Rolling Operating Hour Threshold (per unit)
9	1,500
11A	4,000
12	645
38 & 39	650
208	600
209	5,000
210	1,250

1.4. For EU IDs 303 through 305, monitoring shall consist of an annual compliance certification under Condition 108 for the visible emissions standard based on reasonable inquiry.

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

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

Liquid Fuel-Burning Equipment

2. Visible Emissions Monitoring. When required by any of Conditions 1.1 through 1.3, or in the event of replacement[1] during the permit term, the Permittee shall observe the exhaust of EU IDs 9, 11A, 12, 43 – 46, 101 – 103, 200 – 210, and 300 – 302 for visible emissions using either the Method 9 Plan under Condition 2.3 or the Smoke/No-Smoke Plan under Condition 2.4.

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

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

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

a. First Method 9 Observation. Except as provided in Condition 2.2 or Condition 2.5.c(ii), observe the exhausts of EU IDs 9, 11A, 12, 43 – 46, 101 – 103, 200 – 210, and 300 – 302 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 43 – 46, 101 – 103, 200 – 209, and 300 – 302, observe exhaust within six months after the effective date of this permit.

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

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

(A) For EU IDs 43 – 46, 101 – 103, 200 – 209, and 300 – 302, continue with the monitoring schedule of the replaced emissions unit; and

(B) For EU IDs 9, 11A, 12, 38, 39, and 208 – 210 comply with Conditions 1.2 and/or 1.3, as applicable.

(iv) For each of EU IDs 9, 11A, 12, 38, 39, and 208 – 210, observe the exhaust of the emissions unit within 30 days after the end of the calendar month during which monitoring was triggered under Condition 1.3; or for an emissions unit with intermittent operations, within the first 30 days during the unit's next scheduled operation.

b. 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 that eliminates visible emissions and restart the Smoke/No Smoke Plan under Condition 2.4.a.

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

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

3.1. For all Method 9 observations,

a. the observer shall record the following:

(i) the name of the stationary source, emissions unit and location, emissions unit type, observer's name and affiliation, and the date on the Visible Emissions Observation Form in Section 12;

(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 12; 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 107 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 107 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 106:

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

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

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

Particulate Matter (PM) Emissions Standard

5. **Industrial Process and Fuel-Burning Equipment PM Emissions.** The Permittee shall not cause or allow particulate matter emitted from EU IDs 9, 11A, 12, 38, 39, 43 – 46, 101 – 103, 200 – 210, and 300 – 305 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)]

5.1. For EU IDs 43, 101 – 103, and 200 – 207, monitor, record and report in accordance with Conditions 6 through 8.

5.2. For EU IDs 44 – 46, and 300 – 305, monitor, record and report in accordance with Conditions 9 through 11.

5.3. For each of EU IDs 38, 39, and 210, as long as the emissions unit does not exceed the limits in Conditions 25 and 34 through 37, monitoring shall consist of an annual compliance certification under Condition 108 for the PM emissions standard based on reasonable inquiry. Otherwise, comply with Condition 5.4.

5.4. For each of EU IDs 9, 11A, 12, 38, 39, and 208 – 210, as long as actual emissions from the emissions unit are less than the significant emissions thresholds listed in 18 AAC 50.326(e) during any consecutive 12-month period, monitoring shall consist of an annual compliance certification under Condition 108 for the PM emissions standard based on reasonable inquiry. The Permittee shall report in the operating report under Condition 107 if any of EU IDs 9, 11A, 12, 38, 39, and 208 – 210 reaches any of the significant emissions thresholds and monitor, record and report in accordance with Conditions 6 through 8 and/or Conditions 9 through 11 for the remainder of the permit term for that emissions unit.

5.5. For EU IDs 303 through 305, the Permittee must annually certify compliance under Condition 108 for the PM emissions standard based on reasonable inquiry.

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

PM MR&R

Liquid Fuel-Burning Engines and Turbines

6. **PM Monitoring.** The Permittee shall conduct source tests on EU IDs 43, 101 – 103, and 200 – 207, and EU IDs 9, 11A, 12, 38, 39, 208, 209, and 210 (when required by Condition 5.4), 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)]

6.1. If the result of any Method 9 observation conducted under Condition 2.3 for any of EU IDs 43, 101 – 103, and 200 – 207 and EU IDs 9, 11A, 12, 38, 39, 208, 209, and 210 is greater than the criteria of Condition 6.2.a or Condition 6.2.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 6.2; or

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

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

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

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

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

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

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

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

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

7.1. Within 30 calendar days of startup, the Permittee shall record the exhaust stack diameters of EU IDs 11A, 209, and 210.

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

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

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

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

8.2. In each operating report under Condition 107, include:

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

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

8.3. Report the stack diameters of EU IDs 11A and 209 in the next operating report under Condition 107 following the deadline in Condition 7.1 for collecting the stack diameter records.

8.4. Report in accordance with Condition 106:

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

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

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

Liquid Fuel-Burning Boilers and Heaters

9. PM Monitoring. The Permittee shall conduct source tests on EU IDs 44 – 46, and 300 – 305 to determine the concentration of PM in the exhaust of each emissions unit as follows:

9.1. If the result of any Method 9 observation conducted under Condition 2.3 for any of EU IDs 44 – 46, and 300 – 305 results in an 18-minute average opacity greater than 20 percent opacity, the Permittee shall, within six months of that Method 9 observation, either:

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

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

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

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

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

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

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

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

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

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

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

11.2. In each operating report required by Condition 107, include:

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

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

11.3. Report in accordance with Condition 106 any time the results of a source test exceed the PM emission standard in Condition 5.

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

Sulfur Compound Emissions Standard

12. Sulfur Compound Emissions. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EU IDs 9, 11A, 12, 38, 39, 43 – 46, 101 – 103, 200 – 210, and 300 – 305 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[4] (EU IDs 9, 11A, 12, 38, 39, 43, and 200 – 210)

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

13.1. Comply with either Condition 13.1.a or Condition 13.1.b:

a. For each shipment of fuel:

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

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

(A) test the fuel for sulfur content; or

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

b. Test the sulfur content of the fuel in each storage tank that supplies fuel to EU IDs 9, 11A, 12, 38, 39, 43, and 200 – 210 at least monthly.

13.2. Fuel testing under Condition 13.1.a or Condition 13.1.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).

13.3. 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 13 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)]

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

14.1. If SO_2 emissions calculated under Condition 13.3 exceed 500 ppm, the Permittee shall report in accordance with Condition 106. When reporting under this condition, include the calculation under Condition 13.3.

14.2. The Permittee shall include in the operating report required by Condition 107 for each month covered by the report:

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

[4] *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.

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 13.1.a or Condition 13.1.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 13.3.

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

15. For EU IDs 44 – 46, 101 – 103, 200, 210, and 300 – 305, to ensure compliance with Condition 12, the Permittee shall comply with the fuel sulfur content limit and associated MR&R requirements in Conditions 27, 29, and 33.

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

Preconstruction Permit [5] Requirements

16. Provide all stationary source- and/or emissions unit-specific requirements from Construction Permit and Minor Permits that need to be carried forward to this operating permit. (Includes, but not limited to, NAAQS, PSD, BACT, ORLs).

[Conditions 12-15, Title V Permit AQ0318TVP01, Revision 2, April 18, 2003
Condition 8, Minor Permit No. AQ0318MSS03, 8/16/2011
Condition 5, Minor Permit No. AQ0318MSS05, Revision 1, 4/30/2015
Conditions 5 and 7, Minor Permit No. AQ0318MSS06, 6/6/2017
Conditions 20-22, 24-30, Minor Permit No. AQ0318MSS07, 8/25/2017
Condition 10, Minor Permit No. AQ0318MSS08, 07/31/2023]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

Stationary Source-Wide Specific Requirements

Ambient Air Quality Protection Requirements

17. To protect the annual nitrogen dioxide (NO_2) Alaskan Ambient Air Quality Standard (AAAQS), the Permittee shall comply with Conditions 19 through 22, 26, and 34 through 37.

[Condition 5, Minor Permit AQ0318MSS06, 6/6/2017,
Conditions 20-22 & 24-25, Minor Permit AQ0318MSS07, 8/25/2017,
Condition 10, Minor Permit AQ0318MSS08, 07/31/2023]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

[5] *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.

18. To protect the 1-hour, 3-hour, 24-hour, and annual SO_2 AAAQS, the Permittee shall comply with Conditions 23 and 24.

[Condition 11, Minor Permit AQ0318MSS08, 07/31/2023]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

19. Stack Configuration. The Permittee shall construct and maintain a vertical, uncapped exhaust stack for EU IDs 210 and 305, except as follows:

[Condition 21, Minor Permit AQ0318MSS07, 8/25/2017]
[18 AAC 50.040 (j) & 50.326(j)]
40 C.F.R. 71.6(a)(1)]

19.1. EU IDs 210 and 305 may use capped or horizontal releases;

19.2. All EUs may use flapper-style rain covers, or other similar designs, that do not hinder the vertical momentum of their exhaust plume; and

[Conditions 21.1 & 21.2, Minor Permit AQ0318MSS07, 8/25/2017]
[Condition 10.1.a – 10.1.c, Minor Permit AQ0318MSS08, 07/31/2023]

20. Stack Configuration Reporting. Report, in the first operating report required by Condition 107, a statement indicating whether or not the exhaust stacks for EU IDs 210 and 305 complies with Condition 19.

[Condition 22, Minor Permit AQ0318MSS07, 8/25/2017]
[Condition 10.1.d, Minor Permit AQ0318MSS08, 07/31/2023]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)]

21. Operational Limitations. The Permittee shall limit the operation of EU IDs

[Condition 24, Minor Permit AQ0318MSS07, 8/25/2017]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

21.1. 201 through 207 to no more than 275 hours-per-year (hr/yr) each; and

21.2. 208 to no more than 300 hr/yr.

[Conditions 24.1 & 24.2, Minor Permit AQ0318MSS07, 8/25/2017]

22. Operational Limitation Monitoring, Recordkeeping, and Reporting (MR&R). The Permittee shall monitor, record, and report, for each emissions unit listed in Condition 21 as follows:

[Condition 25, Minor Permit AQ0318MSS07, 8/25/2017]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)]

22.1. Install, maintain, and operate an hour meter on each emissions unit;

22.2. Record the hour meter reading for each emissions unit on the last day of each calendar month;

22.3. By the 15th day of each calendar month, calculate and record:

[Conditions 25.1 through 25.3, Minor Permit AQ0318MSS07, 8/25/2017]

a. The number of hours that each emissions unit operated during the previous calendar month, if the meter is not operational assume continuous operation for that period; and

b. The total number of hours each emissions unit operated during the previous 12-consecutive calendar months;

[Conditions 25.3a & 25.3b, Minor Permit AQ0318MSS07, 8/25/2017]

22.4. Report, in each operating report required by Condition 107, the following information for each month of the reporting period:

[Condition 25.4, Minor Permit AQ0318MSS07, 8/25/2017]

a. The hour meter reading obtained under Condition 22.2 for each emissions unit listed in Condition 21; and

b. The values determined under Condition 22.3 for each emissions unit listed in Condition 21; and

22.5. Report as excess emissions and permit deviation as described in Condition 106 whenever a limit in Condition 21 is exceeded, or if Conditions 22.1 through 22.4 are not met.

[Condition 25.5, Minor Permit AQ0318MSS07, 8/25/2017]

23. Fuel Limits. The Permittee shall combust only liquid fuel that meets the specifications of ultra-low sulfur diesel (ULSD) (i.e., less than 0.0015 percent sulfur by weight) in EU IDs 200 and 210.

[Condition 11.1, Minor Permit AQ0318MSS08, 07/31/2023]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

24. Fuel Limits Monitoring, Recordkeeping, and Reporting (MR&R). The Permittee shall monitor, record, and report as follows:

24.1. Obtain and keep certified receipts from fuel suppliers that confirm diesel fuel combusted in EU IDs 200 and 210 meet the fuel sulfur limit in Conditions 23.

24.2. Include copies of the records specified in Condition 24.1 in the operating report required by Condition 107.

24.3. Report as excess emissions and permit deviation as described in Condition 106 if any fuel combusted in EU IDs 200 and 210 exceeds the fuel sulfur content limit required by Condition 23, or if Conditions 24.1 and 24.2 are not met.

[Condition 11.2, Minor Permit AQ0318MSS08, 07/31/2023]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

Owner Requested Limit to Avoid Classification as PSD Major Modification

25. In any 12 consecutive months, do not burn more than 5,200 gallons of fuel in each of the 200 Hp diesel well pumps, EU IDs 38 and 39.

[Condition 12.4, Operating Permit 318TVP01, Revision 2, April 18, 2003]

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

25.1. Each month, for each of EU IDs 38 and 39, measure and record the fuel burned, and calculate and record the fuel burned during the most recent 12 consecutive months.

25.2. Submit copies of the records required by Condition 25.1 with the operating report required in Condition 107.

25.3. Report in accordance with Condition 106 when the fuel burned in any of EU IDs 38 or 39 exceeds the fuel consumption limit in Condition 25.

[Conditions 13 through 15, Operating Permit 318TVP01, Revision 2, April 18, 2003]
[40 C.F.R. 71.6(a)(3)]

Owner Requested Limit to Avoid Classification Under 18 AAC 50.306

26. The Permittee shall not allow EU IDs 101, 102, and 103 combined to emit more than 45 tons of NO_X in any 12 consecutive months by limiting the operation of EU IDs 101, 102, and 103 to a combined total of 2,100 hours in any 12 consecutive months.

[Condition 7, Minor Permit AQ0318MSS06, 6/6/2017]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

26.1. The Permittee shall monitor, record, and report the operating hours as follows:

[Condition 7.1, Minor Permit AQ0318MSS06, 6/6/2017]
[40 C.F.R. 71.6(a)(3)]

a. Install a non-resetting hour meter on EU IDs 101, 102, and 103 if one is not already installed.

b. On the last day of each calendar month, record the operating hours of each of EU IDs 101, 102, and 103. Within 15 days from the last day of each calendar month, calculate and record the combined operating hours for EU IDs 101, 102, and 103 for the preceding month and for the previous 12 consecutive calendar months.

c. Report the monthly and preceding consecutive 12 month totals calculated in Condition 26.1.b for each month of the reporting period in the operating report required in Condition 107.

d. If the combined operating hours for EU IDs 101, 102, and 103 exceed 2,100 hour in any 12 consecutive calendar months, submit an excess emission report in accordance with Condition 106.

[Conditions 7.1a through 7.1d, Minor Permit AQ0318MSS06, 6/6/2017]

Owner Requested Limits to Avoid Classification Under 18 AAC 50.502(c)(3)

27. The sulfur content of the diesel fuel burned in EU IDs 101, 102, and 103 shall not exceed 15 ppmw (parts per million by weight). The Permittee shall comply with Condition 23 as follows:

[Condition 8, Minor Permit AQ0318MSS03, 8/16/2011]

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

27.1. Only accept shipments of fuel for these emission units where the sulfur content of the diesel fuel does not exceed 15 ppmw.

27.2. Keep receipts of each fuel delivery that specify the grade of fuel burned in EU IDs 101, 102, and 103. If receipts that specify the grade are not available, the Permittee shall test a sample of the fuel as follows:

[Conditions 8.1 and 8.2, Minor Permit AQ0318MSS03, 8/16/2011]
[40 C.F.R. 71.6(a)(3)]

a. Test the fuel for sulfur content using an appropriate method listed in 18 AAC 50.035 or 40 C.F.R. 60.17; 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.

[Conditions 8.2a and 8.2b, Minor Permit AQ0318MSS03, 8/16/2011]

27.3. In each operating report required by Condition 107, the Permittee shall include copies of the records required by Condition 27.2 for the reporting period.

27.4. If the sulfur content of the fuel exceeds 15 ppmw, submit a permit deviation report to the Department per Condition 106.

27.5. If EU IDs 101, 102, or 103 consume a fuel with the sulfur content of the fuel exceeding 15 ppmw, submit an excess emission report to the Department per Condition 106.

[Conditions 8.3 through 8.5, Minor Permit AQ0318MSS03, 8/16/2011]
[40 C.F.R. 71.6(a)(3)]

Owner Requested Limits to Avoid Classification Under 18 AAC 50.502(c)(4)

28. Avoidance Limits for 18 AAC 50.502(c)(4) Classification. The Permittee shall limit their emissions of SO_2 to less than 40 TPY to avoid a minor source classification under 188 AAC 50.502(c)(4) by complying with Conditions 29 through 32.

[Condition 26, Minor Permit AQ0318MSS07, 8/25/2017]
[18 AAC 50.040(j) & 50.326(j)]

29. Avoidance Limit. The Permittee shall limit the sulfur content of the fuel fired in EU IDs 300 through 305 listed in Table A to no more than 15 parts-per-million by weight (ppmw).

[Condition 27, Minor Permit AQ0318MSS07, 8/25/2017]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

30. Avoidance Limit Monitoring. The Permittee shall monitor EU IDs 300 through 305 listed in Table A for sulfur compound emissions as follows:

[Condition 28, Minor Permit AQ0318MSS07, 8/25/2017]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)]

30.1. Monitor the wt% sulfur, for each shipment of fuel delivered to the stationary source that will be allocated to day-tank storage or firing in the aforementioned emission units, as determined from

[Condition 28.1, Minor Permit AQ0318MSS07, 8/25/2017]

a. ASTM approved testing methods such as D129-00, D1266-09, D1552-95, D1552-98, D2622-98, D4294-98, and D4045-99, D-4294, or an alternative method approved by the Department;

b. Certified test results from supplier or refinery; or

c. Fuel grade receipts.

[Conditions 28.1a through 28.1c, Minor Permit AQ0318MSS07, 8/25/2017]

31. Avoidance Limits Recordkeeping. The Permittee shall maintain records, for EU IDs 300 through 305 listed in Table A, of the results of the sulfur compound monitoring performed under Condition 30.

[Condition 29, Minor Permit AQ0318MSS07, 8/25/2017]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)]

32. Avoidance Limits Reporting. The Permittee shall report, for EU IDs 300 through 305 listed in Table A, the sulfur compound records as follows:

[Condition 30, Minor Permit AQ0318MSS07, 8/25/2017]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)]

32.1. Include in each operating report under Condition 107, a list detailing the wt% sulfur of each applicable fuel shipment recorded under Condition 31; and

32.2. Report under Condition 106 a list detailing the wt% sulfur of each applicable fuel shipment recorded under Condition 31 that exceeds 0.0015 wt% sulfur.

[Conditions 30.1 & 30.2, Minor Permit AQ0318MSS07, 8/25/2017]

Owner Requested Limits to Avoid PSD Permitting under 18 AAC 50.306

33. The Permittee shall limit the combined SO_2 emissions for EU IDs 44 through 46 to no more than 0.22 TPY by using ultra-low sulfur diesel (ULSD). Monitor, record and report as follows:

[Condition 5, Minor Permit AQ0318MSS05, Rev 1, 4/30/2015]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1) & (3)]

33.1. For each shipment of fuel delivered to the stationary source, obtain and record the wt% S, as determined from:

a. ASTM approved testing methods such as D129-00, D1552-98, D2622-98, D4294-98, and D4045-99;

b. Certified test results from supplier or refinery; or

c. Fuel grade receipts.

[Conditions 5.1a through 5.1c, Minor Permit Aq0318MSS05, Rev 1, 4/30/2015]

33.2. Report:

a. In the operating report required by Condition 107, the fuel sulfur or fuel grade of all shipments received at the stationary source during the reporting period.

b. Under the Excess Emissions and Permit Deviation Reports requirements of Condition 106, the fuel sulfur content of any shipment recorded under Condition 33.1 that exceeds 0.0015 wt% S.

[Conditions 5.2a & 5.2b, Minor Permit AQ0318MSS05, Rev 1, 4/30/2015]

Owner Requested Limit to Avoid Classification under 18 AAC 50.502(c)(3)(A)

34. Avoidance Limits for 18 AAC 50.502(c)(3)(A) Classification. The Permittee shall limit the combined emissions of NO_X for EU IDs 200 and 210 to not exceed 9.9 tons per year (TPY) to avoid a minor source classification under 18 AAC 50.502(c)(3)(A) by complying with Conditions 35 through 37.

[Condition 13, Minor Permit AQ0318MSS08, 7/31/2023]
[18 AAC 50.040(j) & 50.326(j)]

35. Avoidance Limit. For EU ID 200, limit the operation to no more than 575 hours per consecutive 12-month period. For EU ID 210, limit the operation to no more than 300 hours per consecutive 12-month period.

[Condition 14, Minor Permit AQ0318MSS08, 7/31/2023]

36. Avoidance Limit Monitoring and Recordkeeping. For EU IDs 200 and 210:

36.1. Install, maintain, and operate either a dedicated, non-resettable hour meter or another Department approved methodology to monitor the monthly hours of operation for each EU listed in Condition 36.

36.2. Monitor and record the hours of operation for each EU listed in Condition 36 by the end of each calendar month for the previous month.

36.3. Calculate and record, for each EU listed in Condition 36 operated during the previous month, the total hours of operation for each calendar month and the 12 consecutive month total by the end of each calendar month for the period covering the previous month.

36.4. If operating hours are not recorded for a calendar day, the Permittee shall manually track and record the hours of operation for which the non-resettable hour-meter data is unavailable. Otherwise, the Permittee shall assume 24 hours of operation for the calendar day in which it operated.

36.5. If the non-resettable hour-meter requires maintenance or repair during operation of the equipment, the Permittee shall manually track and record the hours of operation for which the non-resettable hour-meter data is unavailable.

36.6. During the initial twelve months of data collection, use the available data to date as a substitute for the 12-month period.

[Condition 15, Minor Permit AQ0318MSS08, 7/31/2023]

37. Avoidance Limits Reporting. Report in the operating report under Condition 107 the information required by Condition 36.3.

37.1. If the total hours of operation exceed the limits listed in Condition 35 or any of the monitoring requirements under Condition 36 are not met, report as excess emissions and permit deviation under Condition 106.

[Condition 16, Minor Permit AQ0318MSS08, 7/31/2023]

Insignificant Emissions Units

38. 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:

38.1. **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)]

38.2. **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)]

38.3. **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)]

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

a. Submit the compliance certifications of Condition 108 based on reasonable inquiry;

b. Comply with the requirements of Condition 89;

c. Report in the operating report required by Condition 107 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 38.1, 38.2, and 38.3.

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

Section 4. Federal Requirements

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

NSPS Subpart A – General Provisions

39. NSPS Subpart A Notification. Unless exempted by a specific subpart, for any affected facility[6] or existing facility[7] regulated under NSPS requirements in 40 C.F.R. 60, the Permittee shall furnish the Administrator[8] 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]

39.1. 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]

39.2. 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]

39.3. 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: [9]

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]

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

[6] *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.

[7] *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.

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

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

[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.

40. NSPS Subpart A Startup, Shutdown, & Malfunction Requirements. The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of EU IDs 44 – 46, any malfunction of the air-pollution control equipment, or any periods during which a continuous monitoring system or monitoring device for EU IDs 44 – 46 is inoperative.

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

41. NSPS Subpart A Performance (Source) Tests. The Permittee shall conduct source tests according to Section 6 and as required in this condition on any affected facility.

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

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

[40 C.F.R. 60.8(a), Subpart A]

41.2. Conduct source tests and reduce data as set out in 40 C.F.R. 60.8(b), and provide the Department copies of any EPA waivers or approvals of alternative methods.

[40 C.F.R. 60.8(b), Subpart A]

41.3. Conduct source tests under conditions specified by EPA to be based on representative performance of EU IDs 11A, 43 – 46, 101 – 103, and 200 – 210. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

[40 C.F.R. 60.8(c), Subpart A]

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

[40 C.F.R. 60.8(d), Subpart A]

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

a. Sampling ports adequate for test methods applicable to EU IDs 43 – 46, 101 – 103, and 200 – 209. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

b. Safe sampling platform(s),

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

d. Utilities for sampling and testing equipment.

[40 C.F.R. 60.8(e), Subpart A]

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

a. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply.

b. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the EPA's approval, be determined using the arithmetic mean of the results of the two other runs.

c. Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, the report for a performance test shall include the elements identified in 40 C.F.R. 60.8(f)(2)(i) through (vi).

[40 C.F.R. 60.8(f), Subpart A]

42. 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 44 – 46 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 44 – 46.

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

43. 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 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 44 – 46 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]

44. 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 46 and 53. 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 Dc – Small Steam Generating Units, EU IDs 44 – 46

45. NSPS Subpart Dc Applicability. For EU IDs 44 – 46 listed in Table A, the Permittee shall comply with the following applicable requirements of NSPS Subpart Dc for each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

[18 AAC 50.040(a)(2)(D), 50.040(j)(4), & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.40c, Subpart Dc]

46. NSPS Subpart Dc Emission Standards

46.1. On and after the date on which the initial performance test is completed or required to be completed under 40 C.F.R. 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weigh percent sulfur.

[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.42c(d), Subpart Dc]

46.2. Except as provided in Condition 46.3, compliance with fuel oil sulfur limits of Condition 46.1 shall be determined on a 30-day rolling average basis.

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 60.42c(g), Subpart Dc]

46.3. Compliance with the fuel oil sulfur limits under Condition 46.1 may be determined based on a certification from the fuel supplier, as described under Condition 49.2.c(i), as applicable.

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 60.42c(h) & (h)(1), Subpart Dc]

46.4. The fuel oil sulfur limits under Condition 46.1 apply at all times, including periods of startup, shutdown, and malfunction.

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 60.42c(i), Subpart Dc]

47. NSPS Subpart Dc Compliance and Performance Test Methods and Procedures

47.1. For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under Condition 46.1 based on shipment fuel sample, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil received, as described under Condition 48.1.

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 60.44c(g), Subpart Dc]

47.2. Where the owner or operator seeks to demonstrate compliance with the SO_2 standards based on fuel supplier certification, the performance test shall consist of the certification from the fuel supplier, as described in Condition 49.2.c(i), as applicable.

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 60.44c(h), Subpart Dc]

48. NSPS Subpart Dc Emission Monitoring

48.1. As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weigh percent sulfur or less.

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 60.46c(d)(2), Subpart Dc]

48.2. The monitoring requirements of Condition 48.1 shall not apply to affected facilities where the owner or operator of the affected facility seeks to demonstrate compliance with SO_2 standards based on fuel supplier certification, as describe under Condition 49.2.c(i), as applicable.

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 60.46c(e), Subpart Dc]

49. NSPS Subpart Dc Reporting and Recordkeeping

49.1. The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by 40 C.F.R. 60.7. This notification shall include the notification in 40 C.F.R. 60.48c(a)(1) through (4).

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 60.48c(a), Subpart Dc]

49.2. The owner or operator of each affected facility subject to the fuel oil sulfur limits under Condition 46.1 shall keep records and submit reports to the Administrator, including the following information, as applicable.

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 60.48c(d) & (e), Subpart Dc]

a. Calendar dates covered in the reporting period.

[40 C.F.R. 60.48c(e)(1), Subpart Dc]

b. Each 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

[40 C.F.R. 60.48c(e)(2), Subpart Dc]

c. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under Condition 49.2.c(i), as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

[40 C.F.R. 60.48c(e)(11), Subpart Dc]

(i) For distillate oil, fuel supplier certification shall include the following information:

[40 C.F.R. 60.48c(f) & (f)(1), Subpart Dc]

(A) The name of the oil supplier;

(B) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 C.F.R. 60.41c; and

(C) The sulfur content or maximum sulfur content of the oil.

[40 C.F.R. 60.48c(f)(1)(i) through (iii), Subpart Dc]

49.3. Except as provided under Conditions 49.3.a and 49.3.b, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 60.48c(g)(1), Subpart Dc]

a. As an alternative to meeting the requirements of Condition 49.3, the owner or operator of an affected facility that combusts only fuels using fuel certification in Condition 49.2.c(i) to demonstrate compliance with the SO_2 standard may electro to record and maintain records of the amount of each fuel combusted during each calendar month.

b. As an alternative to meeting the requirements of Condition 49.3, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including the steam generating units not subject to NSPS Subpart Dc) at that property are distillate oil meeting the most current requirements in Condition 46.3 to use fuel certification to demonstrate compliance with the SO_2 standard may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

[40 C.F.R. 60.48c(g)(2) & (3), Subpart Dc]

NSPS Subpart IIII[10] – Compression Ignition Internal Combustion Engines (CI ICE), EU IDs 11A, 43, 101 – 103, and 200 – 209

50. NSPS Subpart IIII Applicability and General Compliance Requirements. For EU IDs 11A, 43, 101 – 103, and 200 – 210 listed in Table A, the Permittee shall comply with the applicable requirements in 40 C.F.R. 60 Subpart IIII for stationary CI ICE whose construction[11] commence after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006 (for the emergency engines, EU IDs 43, 101 – 103 and 200 – 210) and manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006 (EU ID 11A).

50.1. For EU IDs 11A, 43, 101 – 103, and 200 – 210, 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 51 through 55.

[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]

51. NSPS Subpart IIII GAPCP. Except as permitted under Condition 54.4, the Permittee shall operate and maintain EU IDs 11A, 43, 101 – 103, and 200 – 210 and control device according to the manufacturer's written instructions, may change only those emission-related settings that are permitted by the manufacturer, and shall meet the requirements of Condition 53 and the applicable requirements of 40 C.F.R. 1068. In addition, the Permittee shall operate and maintain EU IDs 11A, 43, 101 – 103, and 200 – 210 that achieves the emissions standards as required in Condition 53 over the entire life of the engine.

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

52. NSPS Subpart IIII Fuel Requirements. For EU IDs 11A, 43, 101 – 103, and 200 – 210, the Permittee must use diesel fuel that meets the requirements of 40 C.F.R. 1090.305 for nonroad diesel fuel with the following specifications:

52.1. Maximum sulfur content of 15 ppm.

52.2. Diesel fuel must meet one of the following standards:

a. Minimum cetane index of 40.

b. Maximum aromatic content of 35 volume percent.

[40 C.F.R. 60.4207(b), Subpart IIII]
[40 C.F.R. 1090.305, Subpart D]

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

[10] The provisions of NSPS Subpart IIII listed in Conditions 50 through 56 are current as amended through August 10, 2022. 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.

[11] 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).

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

53.1. Exhaust emissions from EU IDs 43, 101 – 103, and 200 – 210 (stationary CI ICE with a displacement of less than 30 liters per cylinder) shall not exceed the following applicable exhaust emission standards (Tier 3 emission factors) for new nonroad CI engines in 40 C.F.R. 89.112 for all pollutants, for the same model year and maximum engine power, as follows:

a. 4.0 g/kW-hr (or 3.0 g/Hp-hr) for NMHC + NO_x;

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.

[60.4205(b) & 60.4202(a)(2) & (b)(2), Subpart IIII]
[40 C.F.R. 1039, Appendix 1, Table 2 and 3]

53.2. Unless EU IDs 43, 101 – 103, and 200 – 210 are exempt per 40 C.F.R. 1039.105(a), exhaust opacity must not exceed

a. 20 percent during the acceleration mode;

b. 15 percent during the lugging mode; and

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

[40 C.F.R. 60.4205(b) & 60.4202(a)(2) & (b)(2), Subpart IIII]
[40 C.F.R. 1039.105(a) & (b), Subpart B]

53.3. Exhaust emissions from EU ID 11A (stationary fire pump CI ICE) shall not exceed the following applicable exhaust emission standards:

a. 4.0 g/kW-hr (or 3.0 g/Hp-hr) for NMHC + NO_x;

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. 60.4205(c) & Table 4, Subpart IIII]

54. 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)]

54.1. If the emergency stationary CI internal combustion engine does not meet the standards applicable to non-emergency engines, the Permittee must install a non-resettable hour meter prior to startup of the engine, if one is not already installed.

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

54.2. If the emergency stationary CI internal combustion engine is equipped with a diesel particulate filter to comply with the emission standards in Conditions 53.1 and 53.2, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

a. Keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

[40 C.F.R. 60.4209(b) & 60.4214(c), Subpart IIII]

54.3. If the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

[40 C.F.R. 60.4214(b), Subpart IIII]

54.4. If the Permittee does not install, configure, operate, and maintain EU IDs 11A, 43, 101 – 103, and 200 – 210 and control devices according to the manufacturer's emission-related written instructions as required in Condition 51, 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 11A, 43, 101 – 103, and 200 – 210:

(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]

54.5. For EU IDs 43, 101 – 103, 200 – 207, and 210:

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.

[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]

54.6. For EU IDs 43, 101 – 103, and 200 – 210, demonstrate compliance with the emission standards by purchasing an engine certified to the applicable emission standards in Conditions 53.1 and 53.2. The engines must be installed and configured according to the manufacturer's specifications, except as permitted in Condition 54.1.

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

54.7. For EU ID 11A, demonstrate compliance with the emission standards by keeping records of engine manufacturer data indicating compliance with the applicable emission standards in Condition 53.3.

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

54.8. For EU IDs 43, 101 – 103, and 200 – 210, the Permittee shall comply with the following requirements for emergency stationary CI ICE under Subpart IIII:

a. Operate EU IDs 43, 101 – 103, and 200 – 210 according to the requirements in Conditions 54.8.a(i) through 54.8.a(iii). In order for the engine to be considered an emergency stationary ICE, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in Conditions 54.8.a(i) through 54.8.a(iii), is prohibited. If the Permittee does not operate the engine according to the requirements in Conditions 54.8.a(i) through 54.8.a(iii), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(i) There is no time limit on the use of emergency stationary ICE in emergency situations.

(ii) The Permittee may operate EU IDs 43, 101 – 103, and 200 – 210 for the purpose specified in Conditions 54.8.a(ii)(A) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition 54.8.a(iii) counts as part of the 100 hours per calendar year allowed by this Condition 54.8.a(ii).

(A) EU IDs 43, 101 – 103, and 200 – 210 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 Permittee 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 Permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(iii) EU IDs 43, 101 – 103, and 200 – 210 may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in Condition 54.8.a(ii). The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 C.F.R. 60.4209 and 60.4211(f)(1) – (3), Subpart IIII]

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

55.1. Report in accordance with Condition 106 if any of the requirements in Conditions 50 through 56 were not met.

55.2. Include with the operating report under Condition 107 records of the operational hours and the reason the engine was in operation as required in Condition 54.3 for the period covered in the report.

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

56. 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]

56.1. 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]

56.2. 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]

56.3. The requirements of Condition 56 do not apply to stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

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

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

NESHAP Subpart A – General Provisions

57. 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

57.1. Table 8 to NESHAP Subpart ZZZZ for EU IDs 9, 11A, 12, 38, 39, 43, 101 – 103, and 200 – 210, listed in Table A; and

57.2. Table 8 to Subpart JJJJJJ for EU IDs 44 – 46 and 300 – 305 listed in Table A; and

57.3. Table 3 to Subpart CCCCCC for EU IDs 104 and 105 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]
[40 C.F.R. 63.11130 & Table 3, Subpart CCCCCC]

NESHAP Subpart ZZZZ[12] – Stationary RICE, EU IDs 9, 11A, 12, 38, 39, 43, 101 – 103, and 200 – 210

58. NESHAP Subpart ZZZZ Applicability. The Permittee shall comply with applicable requirements for EU IDs 9, 11A, 12, 38, 39, 43, 101 – 103, and 200 – 210, stationary compression ignition reciprocating internal combustion engines (CI RICE) located at an area source of hazardous air pollutant (HAP) emissions.

58.1. For EU IDs 9, 12, 38, and 39, the Permittee shall at all times comply with Conditions 59 through 63.

58.2. For EU IDs 11A, 43, 101 – 103, and 200 – 210, 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 50 through 56. 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]

59. 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)]

[12] The provisions of NESHAP Subpart ZZZZ listed in Conditions 57 through 61 are current as amended through August 10, 2022. 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.

[40 C.F.R. 71.6(a)(1) & (3)(i)]

59.1. At all times, operate and maintain EU IDs 9, 12, 38, and 39, 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 9, 12, 38, and 39.

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

59.2. 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]

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

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

60. NESHAP Subpart ZZZZ Work and Management Practices Standards and Monitoring. For EU IDs 9, 12, 38, and 39, 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]

60.1. For EU IDs 9, 12, 38, and 39:

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 60.4;

(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 1 & Footnote 1), Subpart ZZZZ]

60.2. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Condition 60.1.a, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state, or local law under which the risk was deemed unacceptable.

[Table 2d, Item 4, Subpart ZZZZ]

60.3. During periods of startup, the Permittee shall comply with Condition 59.3.

[Table 2d item 1, Subpart ZZZZ]

60.4. The Permittee has the option to utilize an oil analysis program in order to extend the specified oil change requirements in Condition 60.1.a(i), as described below:

a. The oil analysis must be performed at the same frequency specified for changing the oil in Conditions 60.1.a(i).

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

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

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

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

c. If all of the condemning limits in Conditions 60.4.b(i) through 60.4.b(iii) are not exceeded, the Permittee is not required to change the oil.

d. If any of the limits in Conditions 60.4.b(i) through 60.4.b(iii) are 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]

61. NESHAP Subpart ZZZZ Requirements for Demonstration of Continuous Compliance with Emission Limitations, Operating Limitations, and Other Requirements. The Permittee shall comply with the following:

61.1. Demonstrate continuous compliance with the requirements in Condition 60.1 by complying with Condition 59.2.

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

61.2. For EU IDs 9, 12, 38, and 39, the Permittee shall operate the emergency stationary RICE according to the requirements in Conditions 61.2.a through 61.2.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, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in Conditions 61.2.a through 61.2.c, is prohibited. If the Permittee does not operate the engine according to the requirements in 61.2.a through 61.2.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. 71.6(a)(1)]
[40 C.F.R. 63.6640(f), Subpart ZZZZ]

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

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

b. The Permittee may operate the emergency stationary RICE for the purposes specified in Condition 61.2.b(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition 61.2.c counts as part of the 100 hours per calendar year allowed by this condition.

[40 C.F.R. 63.6640(f)(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 provided in Condition 61.2.b. Except as provided in Condition 61.2.c(i), the 50 hours per year for non-emergency situations cannot be used to generate income for a facility to supply power 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 hour 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]

62. 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)]

62.1. If electing to operate and maintain EU IDs 9, 12, 38, and 39 according to a maintenance plan developed by the Permittee as allowed under Condition 59.2.b, keep records of the maintenance conducted on EU IDs 9, 12, 38, and 39 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]

62.2. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. 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 61.2.c(i), 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. 71.6(a)(3)]
[40 C.F.R. 63.6655(f), Subpart ZZZZ]

62.3. If electing to utilize the oil analysis program described in Condition 60.4, 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]

62.4. 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]

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

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

63.1. Include in the operating report required by Condition 107 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]

63.2. Notify the Department in accordance with Condition 106 if any of the requirements in Conditions 57 through 63 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[13] - Industrial, Commercial, and Institutional (ICI) Boilers, EU IDs 44 – 46, and 300 – 305

64. NESHAP Subpart JJJJJJ Applicability. For EU IDs 44 – 46 and 300 – 305 listed in Table A, the Permittee shall comply with applicable requirements of NESHAP Subpart JJJJJJ for existing[14] oil industrial boilers located at an area source of HAP emissions.

[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]

65. NESHAP Subpart JJJJJJ Good Air Pollution Control Practices. At all times, the Permittee shall operate and maintain EU IDs 44 – 46 and 300 – 305, 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]

66. NESHAP Subpart JJJJJJ Work and Management Practices. For each of EU IDs 44 – 46 and 300 – 305, 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)]

[13] The provisions of NESHAP Subpart JJJJJJ listed in Conditions 57.2 and 64 through 68.7 are current as amended through September 14, 2016. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

[14] 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.

[40 C.F.R. 63.11201(b) & (d), 63.11223(a) & (b), and Table 2; Subpart JJJJJJ]

66.1. For affected boilers that switch fuels or make a physical change to the boiler that results in the applicability of a different subcategory within Subpart JJJJJJ or the boiler becoming subject to 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 67.3.

[40 C.F.R. 63.11210(h)]

66.2. For EU IDs 44 – 46, minimize each boiler's startup and shutdown periods and conduct startups and shutdowns according to the manufacturer's recommended procedures. If manufacturer's recommended procedures are not available, follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available.

[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.11201(b) & Table 2, Item 1, Subpart JJJJJJ]

66.3. For EU IDs 44 – 46 and 300 – 302, conduct a tune-up of each boiler biennially in accordance with Condition 66.4. 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]

66.4. 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 7 through 10 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 44 – 46 and 300 – 302 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.

66.5. For EU IDs 303 – 305, conduct a tune-up of each boiler every 5 years in accordance with Condition 66.6. Each 5 year tune-up must be conducted no more than 61 months after the previous tune-up. The first 5-year tune-up must be no later than 61 months after the initial startup of the new boiler.

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

66.6. 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 72 months for EU IDs 303 – 305 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 72 months for EU IDs 303 – 305 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.

67. NESHAP Subpart JJJJJJ Notification Requirements. The Permittee shall submit to the Department and EPA all the applicable notifications, including the following:

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

67.1. the notifications specified in Conditions 67.1.a and 67.1.b.

[40 C.F.R. 63.11225(a)]

a. all of the notifications in 40 C.F.R. 63.8(f), 63.9(b)(1) & (5), and 63.9(h) that apply to the Permittee by the dates specified in those sections except as specified in Condition 67.1.b.

[40 C.F.R. 63.11225(a)(1)]

b. the Notification of Compliance Status no later than 120 days after the source becomes subject to the standard. Submit the Notification of Compliance Status in accordance with Conditions 67.1.b(i) and 67.1.b(iv). The Notification of Compliance Status must include the information and certification(s) of compliance in Conditions 67.1.b(i) through 67.1.b(iii), as applicable, and signed by a responsible official.

[40 C.F.R. 63.11225(a)(4)]

(i) the information required in 40 C.F.R. 63.9(h)(2), except the information listed in 40 C.F.R. 63.9(h)(2)(i)(B), (D), (E), and (F).

[40 C.F.R. 63.11225(a)(4)(i)]

(ii) ‘‘This facility complies with the requirements in 40 C.F.R. 63.11214 to conduct an initial tune-up of the boiler.’’

[40 C.F.R. 63.11225(a)(4)(ii)]

(iii) for units that do not qualify for a statutory exemption as provided in Section 129(g)(1) of the Clean Air Act: ‘‘No secondary materials that are solid waste were combusted in any affected unit.’’

[40 C.F.R. 63.11225(a)(4)(v)]

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

[40 C.F.R. 63.11225(a)(4)(vi)]

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

[40 C.F.R. 63.11225(f)]

67.3. If the Permittee switches fuels or makes a physical change to the boiler and the fuel switch or change that results in the applicability of a different subcategory within subpart JJJJJJ, in the boiler becoming subject to subpart JJJJJJ, or in the boiler switching out of subpart JJJJJJ due to a change to 100 percent natural gas, or they take a permit limit that results in being subject to Subpart JJJJJJ, provide notice of the date upon which fuels were switched, physical change(s) made, or a permit limit taken within 30 days of the change. The notification must identify the following:

a. The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice; and

b. The date upon which the fuel switch, physical change, or permit limit occurred.

[40 C.F.R. 63.11225(g)]

68. NESHAP Subpart JJJJJJ Recordkeeping Requirements. For each of EU IDs 44 – 46 and 300 – 305, 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]

68.1. 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.

68.2. Keep records to document conformance with the work practice standards and management practices as specified in Condition 68.2.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.

b. For operating units that combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 C.F.R. 241.3(b)(1)[15], keep a record which documents how the secondary material meets each of the legitimacy criteria under 40 C.F.R. 241.3(d)(1). If combusting a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 C.F.R. 241.3(b)(4), keep records as to how the operations that produced the fuel satisfies the definition of processing in 40 C.F.R. 241.2 and each of the legitimacy criteria in 40 C.F.R. 241.3(d)(1). If the fuel received a non-waste determination pursuant to the petition process submitted under 40 C.F.R. 241.3(c), keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust nonhazardous secondary materials as fuel per 40 C.F.R. 241.4, keep records documenting that the material is a listed non-waste under 40 C.F.R. 241.4(a).

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

68.4. Keep records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in Condition 65, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

[15] Non-hazardous secondary materials used as a fuel in a combustion unit that remain within the control of the generator and that meet the legitimacy criteria specified in 40 C.F.R. 241.3(d)(1).

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

68.5. Maintain on-site a record containing the information in Conditions 68.5.a and 68.5.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.

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]

68.6. 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]

68.7. Within 60 days after the date of completing each performance test (as defined in 40 C.F.R. 63.2) required by NESHAP Subpart JJJJJJ, submit the results of the performance tests, including any associated fuel analyses, following the procedure specified in either C.F.R. 63.11225(e)(1)(i) or (ii).

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 63.11225(e)(1), Subpart JJJJJJ]

69. NESHAP Subpart JJJJJJ Reporting Requirements. For each of EU IDs 44 -46 and 300 – 305, 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)]

69.1. For EU IDs 44 – 46 and 300 – 302, the Permittee shall 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 69.1.a and 69.1.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:

(i) "This facility complies with the requirements in 40 C.F.R. 63.11223 to conduct a biennial tune-up for each of EU IDs 44 – 46 and 300 – 302."

(ii) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clear Air Act: "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]

69.1. For EU IDs 303 – 305, the Permittee shall prepare, by March 1, and submit to the EPA and the Department upon request, a 5-year Compliance Certification report containing the information specified in Conditions 69.1.a and 69.1.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:

(i) "This facility complies with the requirements in 40 C.F.R. 63.11223 to conduct a 5-year tune-up for each of EU IDs 303 – 305."

(ii) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clear Air Act: "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]

69.2. If requested by the Administrator, submit a performance tune up report containing the information in Conditions 68.5.a through 68.5.c.

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

NESHAP Subpart CCCCCC – Gasoline Dispensing Facilities

70. NESHAP Subpart CCCCCC Applicability. For EU IDs 104 and 105 listed in Table A, the Permittee shall comply with the following applicable requirements of NESHAP Subpart CCCCCC for the loading of gasoline storage tanks at gasoline dispensing facilities (GDF):

[18 AAC 50.040(c)(35) & (j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.11111(a), Subpart CCCCCC]

71. NESHAP Subpart CCCCCC General Requirements

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

[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.11115(a), Subpart CCCCCC]

72. NESHAP Subpart CCCCCC Requirements for Facilities with Monthly Throughput of 10,000 Gallons or More

72.1. The Permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.11116(a), Subpart CCCCCC]

a. Minimize gasoline spills;

b. Clean up spills as expeditiously as practicable;

c. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;

d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devises, such as oil/water separators.

[40 C.F.R. 63.11116(a)(1) through (4), Subpart CCCCCC]

72.2. The Permittee must only load gasoline into storage tanks at the facility by utilizing submerged filling[16] and as specified in Condition 72.2.a. The distance in Condition 72.2.a shall be measured from the point in the opening of the submerged fill pipe that is greatest distance from the bottom of the storage tank.

[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.11117(b), Subpart CCCCCC]

a. Submerged fill pipes installed after November 9, 2006, must be no more than 6 inches from the bottom of the tank.

[40 C.F.R. 63.11117(b)(2), Subpart CCCCCC]

72.3. Portable gasoline containers that meet the requirements of 40 C.F.R. 59 Subpart F are considered acceptable for compliance with Condition 72.1.c.

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

[16] *Submerged filling* means, for the purposes of 40 C.F.R. 63 Subpart CCCCCC, the filling of a gasoline storage tank through a submerged fill pipe whose discharge is no more than the applicable distance specified in 40 C.F.R. 63.11117(b) from the bottom of the tank. Bottom filling of gasoline storage tanks is included in this definition.

[40 C.F.R. 63.11116(d), Subpart CCCCCC]

73. NESHAP Subpart CCCCCC Recordkeeping

73.1. An affected source shall, upon request by the Administrator, demonstrate that their monthly throughput is less than the 10,000-gallon or the 100,000-gallon threshold level, as applicable. Records required under this paragraph shall be kept for a period of 5 years.

[40 C.F.R. 71.6(a)(3)]
[40 C.F.R. 63.11111(e), Subpart CCCCCC]

a. Monthly throughput is the total volume of gasoline loaded into, or dispensed from, all the gasoline storage tanks located at a single affected GDF. If an area source has two or more GDF at separate locations within the area source, each GDF is treated as a separate affected source.

[40 C.F.R. 63.11111(h), Subpart CCCCCC]

b. The Permittee is not required to submit notifications or reports as specified in 40 C.F.R. 63.11125, 40 C.F.R. 63.11126, or 40 C.F.R. 63 Subpart A, but must have records available within 24 hours of a request by the Administrator to document gasoline throughput.

[40 C.F.R. 63.11116(b), Subpart CCCCCC]

73.2. The owner or operator of an affected source under NESHAP Subpart CCCCCC shall keep records as specified in Conditions 73.2.a and 73.2.b.

[40 C.F.R. 71.6(a)(3)(iii)]
[40 C.F.R. 63.11125(d) & 63.11115(b), Subpart CCCCCC]

a. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

b. Records of actions taken during periods of malfunction to minimize emissions in accordance with Condition 71.1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[40 C.F.R. 63.11125(d)(1) & (2), Subpart CCCCCC]

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

Subpart A – General Provisions & Subpart M – Asbestos

74. 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

75. 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]

76. 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]

77. 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

78. 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).

78.1. 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).

78.2. 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).

78.3. After the effective date of any relevant standard promulgated by the Administrator under this part, an owner or operator who constructs a new affected source that is not major-emitting or reconstructs an affected source that is not major-emitting that is subject to such standard, or reconstructs a source such that the source becomes an affected source subject to the standard, must notify the Administrator and the Department of the intended construction or reconstruction. The notification must be submitted in accordance with the procedures in 40 C.F.R. 63.9(b).

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

Section 5. General Conditions

Standard Terms and Conditions

79. 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)]

80. 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)]

81. 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)]

82. 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]

83. 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:

83.1. potential to emit of 242.788 TPY; or

83.2. 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]

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

84.1. 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 83.2. 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/.

84.2. 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.

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

84.4. If no estimate or waiver letter is submitted on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit in Condition 83.1.

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

85. Good Air Pollution Control Practice (GAPCP). The Permittee shall do the following for EU IDs 9, 12, 38, 39, 104, 105, and 300 – 305:

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

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

85.3. Keep a copy of either the manufacturer's or the operator's maintenance procedures.

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

86. 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)]

87. 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.

87.1. 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 87.1.a or to address the results of Department inspections that found potential problems; and

(ii) to prevent future dust problems.

87.2. The Permittee shall report according to Condition 89.3.

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

88. 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)]

89. 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)]

89.1. **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 89.

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 89; or

(ii) the Department notifies the Permittee that it has found a violation of Condition 89.

89.2. **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 89; and

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

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

a. With each stationary source operating report under Condition 107, 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 106.

90. 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[17] listed in Condition(s) 45, 50, and 75 (refrigerants), the Permittee shall

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

90.2. report in accordance with Condition 106.1.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

91. 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:

[17] 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.

91.1. 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

91.2. Include this condition in the annual certification required under Condition 108.

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

Section 6. General Source Testing and Monitoring Requirements

92. 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)]

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

[18 AAC 50.220(b)]

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

93.2. 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.

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

94.1. 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]

94.2. 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]

94.3. 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]

94.4. 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 12 to record data.

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

94.5. 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]

94.6. 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]

94.7. 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]

95. 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)]

96. Test Exemption. The Permittee is not required to comply with Conditions 98, 99 and 100 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)]

97. 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)]

98. Test Plans. Except as provided in Condition 96, 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 92 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)]

99. Test Notification. Except as provided in Condition 96, 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)]

100. Test Reports. Except as provided in Condition 96, 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 103. 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)]

101. Particulate Matter Calculations. In source testing for compliance with the particulate matter standards in Conditions 5 and 38.2, the three-hour average is determined using the average of three one-hour test runs.

[18 AAC 50.220(f)]

Section 7. General Recordkeeping and Reporting Requirements

Recordkeeping Requirements

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

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

102.2. 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

103. 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.

103.1. 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)]

104. 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.

104.1. 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)]

105. 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)]

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

106.1. **Excess Emissions Reporting.** Except as provided in Condition 89, 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 106.1.d.

d. Report all other excess emissions not described in Conditions 106.1.a, 106.1.b, and 106.1.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 107 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)]

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

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

b. Report all other permit deviations within 30 days after the end of the month during which the deviation occurred or as part of the next routine operating report in Condition 107 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)]

106.3. **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 14 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)]

107. Operating Reports. During the life of this permit[18], the Permittee shall submit to the Department an operating report in accordance with Conditions 103 and 104 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.

107.1. 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.

107.2. When excess emissions or permit deviations that occurred during the reporting period are not included with the operating report under Condition 107.1, the Permittee shall identify

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

b. the equipment involved;

c. the permit condition affected;

[18] *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

107.3. when excess emissions or permit deviation reports have already been reported under Condition 106 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.

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

a. the date of the emissions;

b. the equipment involved;

c. the permit condition affected; and

d. the monitoring result which triggered the additional monitoring.

107.5. **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)]

108. 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 104.

108.1. Certify the compliance status of the stationary source over the preceding calendar year consistent with the monitoring required by this permit, as follows:

a. identify each term or condition set forth in Section 3 through Section 9, that is the basis of the certification;

b. briefly describe each method used to determine the compliance status;

c. state whether compliance is intermittent or continuous; and

d. identify each deviation and take it into account in the compliance certification.

108.2. **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.

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

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

109. 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:

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

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

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

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

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

(i) 0.5 TPY of actual Pb; or

(ii) 1,000 TPY of CO; or

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

b. For stationary sources located in Nonattainment Areas:

(i) 0.5 TPY of actual Pb; or

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

(iii) 100 TPY of SO_2, NH_3, PM_{10}, $PM_{2.5}$, NO_x, or VOC; or as specified in Conditions 109.2.b(iv) through 109.2.b(viii);

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

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

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

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

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

109.3. For reporting under Condition 109.2, the Permittee shall report the annual emissions and the required data elements under Condition 109.4 every third year for the previous calendar year as scheduled by the EPA.[19].

109.4. For each emissions unit and the stationary source, include in the report the required data elements[20] 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.

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

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

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

110.1. **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 107 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.

110.2. **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)]

[19] 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.).

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

Section 8. Permit Changes and Renewal

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

111.1. 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;

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

111.3. 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

111.4. 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)]

112. 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)]

113. 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:

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

113.2. 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;

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

113.4. 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)]

114. Operational Flexibility. The Permittee may make CAA Section 502(b)(10)[21] 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).

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

114.2. For each such change, the notification required by Condition 114.1 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.

114.3. The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made pursuant to Condition 114.

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

115. Permit Renewal. To renew this permit, the Permittee shall submit to the Department[22] 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)]

[21] 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.

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

Section 9. National Security Emergencies

The following conditions provide an affirmative defense against an enforcement action based on noncompliance with permit terms and/or conditions and/or non-permitted emission sources caused by a national security emergency surge condition.

116. National Security Emergency includes action necessary to support:

116.1. Operations of Unites States forces introduced into hostilities or introduced into situations where involvement in hostilities is indicated or a possibility;

116.2. Peacekeeping operations;

116.3. Homeland defense activities;

116.4. Responses to civil disturbances and/or terrorist acts.

[Presidential Executive Order 12656 Part 5 Department of Defense, 10/18/88]
[18 AAC 50.235]
[AS 46.14.540]

117. A "surge condition" occurs when the temporary response to a National Security Emergency, as defined in Condition 116 above, requires a change in operations and/or an emissions increase above and beyond the permitted operating levels of a military stationary source and such change and/or increase cannot be accommodated within the terms of the applicable permit.

[Presidential Executive Order 12656 Part 5 Department of Defense, 10/18/88]
[18 AAC 50.235]
[AS 46.14.540]

118. National Security Emergency Provisions.

118.1. A surge condition shall constitute an affirmative defense to an enforcement action based on noncompliance with permit terms and/or conditions and/or non-permitted emission sources caused by a national security emergency when the following conditions are met:

a. Properly signed, contemporaneous, operating logs or other credible evidence documenting relevant usage and activities during the surge condition are kept at the facility;

b. The military facility owner/operator demonstrates that a surge condition, as defined in Condition 117, has occurred and that the facility owner/operator can identify the cause(s) of the surge condition, if known;

c. During the period of the surge condition, the stationary source owner/operator took all reasonable steps to minimize violations of emission limits, permit terms, or other requirements applicable to the stationary source;

d. The military stationary source owner/operator submitted a written notice of the surge condition to the District within five working days after the start of the surge condition, unless otherwise prohibited by law. This notice shall contain a description of the surge condition, the date of the start of the surge condition, estimated duration (if known), equipment involved, an estimate of the excess emissions related to the surge condition (if applicable), and any steps taken to mitigate emissions; and

e. The military stationary source's affected air emission source(s) was/were being operated properly (i.e., operated and maintained in accordance with the manufacturer's specifications or site specific operations and maintenance plans and in compliance with all applicable regulatory requirements or a compliance plan) before the surge condition began.

118.2. The commander of the military facility responding to a National Security Emergency, as defined in Condition 116 above, shall determine when a surge condition exists at the facility.

118.3. The commander of the military facility shall determine that surge condition exists only after making reasonable efforts to accommodate operational changes and/or emission increases within the terms of the applicable permit.

[Presidential Executive Order 12656 Part 5 Department of Defense, 10/18/88]
[18 AAC 50.235]
[AS 46.14.540]

119. National Security Emergency Enforcement

119.1. It shall be the responsibility of the stationary source owner/operator to provide the Department with sufficient information to demonstrate that a surge condition did occur. If the facility owner/operator fails to provide sufficient information, the Department may investigate and take any appropriate enforcement action. The Department may exercise inherent enforcement discretion, choose not to penalize a source that has exceeded emissions limits, or otherwise been in noncompliance with a requirement due to a surge condition.

119.2. It shall constitute a separate violation of Section 9 for any person to file with the Department a notification that falsely, or without probable cause, claims that a surge condition has occurred.

119.3. If at any time the Department requires additional information to verify that the surge condition is due to a National Security Emergency, as defined in Condition 118, the stationary source owner/operator shall provide the Department the required information within 30 calendar days after receiving notice from the Department. If the required information is not provided, the Department may take an appropriate enforcement action, including but not limited to seeking fines, an abatement order, or an injunction against further operation.

[Presidential Executive Order 12656 Part 5 Department of Defense, 10/18/88]
[18 AAC 0.235]
[AS 46.14.540]

Section 10. Compliance Requirements

General Compliance Requirements

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

120.1. included and specifically identified in the permit; or

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

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

121. 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

121.1. an enforcement action;

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

121.3. denial of an operating permit renewal application.

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

122. 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)]

123. 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)]

124. 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

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

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

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

124.4. 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

125. 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)]

126. The Permittee shall achieve compliance with the requirements to notify the Department of startup for EU 209, and submit completed biennial compliance certification reports for EU IDs 44 – 46 and 300 – 302 with all required language, by following the compliance schedule described below:

126.1. The Permittee shall follow the compliance schedule, as follows:

a. Draft and submit a notification of startup for EU 209 to the Department immediately, if not already performed, per Condition 31 in AQ0318TVP04 Revision 3, and

b. Submit completed biennial compliance certification reports for EU IDs 44 – 46 and 300 – 302 with all required language to the Department by March 1st 2023, per Condition 42.10 in AQ0318TVP04 Revision 3.

126.2. This compliance schedule shall be supplemental to, and shall not sanction non-compliance with the applicable requirements on which it is based.

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

Section 11. 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.

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

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

127.2. 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)]

128. Table C 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 C 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 C - Permit Shields Granted

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
44 – 46, 300 – 305	40 C.F.R. 60 Subpart Db	Units are rated at less than 100 MMBtu/hr and therefore are not subject to this rule per 40 C.F.R. 60.40b(a).
44 – 46, 300 – 305	40 C.F.R. 60 Subpart Da	Units are not electric utility steam generating units and have a rating less than 250 MMBtu/hr; therefore are not subject to this rule per 40 C.F.R. 60.40a(a)(1).
44 – 46, 300 – 305	40 C.F.R. 60 Subpart D	Units are rated at less than 250 MMBtu/hr and therefore not subject to this rule per 40 C.F.R. 60.40(a)(1).
300 – 305	40 C.F.R. 60 Subpart Dc	Units are rated at less than 10 MMBtu/hr and therefore are not subject to this rule per 40 C.F.R. 60.40c(a).
9, 12, 38, 39	40 C.F.R. 60 Subpart IIII	The engine was constructed prior to 11 July 2005; therefore is not subject to this rule per 40 C.F.R. 60.4200(a)(2).
104, 105	40 C.F.R. 60 Subpart Kb	These storage tanks contain a volatile organic liquid and were constructed after 1984, but each tank has a capacity less than 75 cubic meters (19,813 gal) and are therefore not subject to this rule per 40 C.F.R. 60.110b(a).
Stationary Source-Wide	40 C.F.R. 60 Subpart Y	Certification by the Permittee that (since shutdown of the coal power plant in 2016) no coal is processed or used at the facility.
Stationary Source-Wide	40 C.F.R. 63 Subpart GG	Certification by the Permittee that Aerospace Manufacturing and Rework are not performed at the facility.

Section 12. Visible Emissions Forms

VISIBLE EMISSIONS OBSERVATION FORM

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

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

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

Page No.____________

Stationary Source Name	Type of Emission Unit	
Emission Unit Location		
City	State	Zip
Phone # (Key Contact)	Stationary Source ID Number	
Process Equipment	Operating Mode	
Control Equipment	Operating Mode	
Describe Emission Point/Location		
Height above ground level	Height relative to observer	Clinometer Reading
Distance From Observer Start End	Direction From Observer Start End	
Describe Emissions & Color Start	End	
Visible Water Vapor Present? 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:		
I have received a copy of these opacity observations Print Name: Signature:		
Title	Date	

Observation Date		Start Time		End Time

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

Range of Opacity: Minimum	Maximum
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		Comments
	Start	End		Sum	Average	

Section 13. SO_2 Material Balance Calculation

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

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

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

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

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

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

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

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

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

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

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

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

The fuel weight percent of sulfur ($wt\%S_{fuel}$) is obtained pursuant to Condition 13.1.a(ii) or Condition 13.1.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 14. Notification Form[23]

Clear Space Force Station (Clear SFS) **AQ0318TVP05**

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

United States Space Force (USSF)

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[24], CO[25], or Settlement Agreement - Complete Section 2 and Certify

[23] Revised as of July 22, 2020.

[24] Compliance Order By Consent

[25] Compliance Order

Section 1. Excess Emissions

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

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

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

(c) **Description**

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

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

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

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

(e) **Type of Incident:** (Please check all that apply and provide the value requested, if any):

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

(f) **Corrective Actions:**

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

(g) **Unavoidable Emissions:**

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

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

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

Section 2. Permit Deviations

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

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

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

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

EU ID	EU Name	Permit Condition /Potential Deviation

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

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

(d) **Corrective Actions:**

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

Certification:

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

Printed Name:_____Title_____Date _____

Signature:_____ Phone number_____

NOTE: *This document must be certified in accordance with 18 AAC 50.345(j). Read and sign the certification in the bottom of the form above. (See Condition 103.)*

Beginning September 7, 2023, Excess Emissions and Permit Deviations must be submitted through the AOS Permittee Portal at http://dec.aalaska.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. Submit this report in accordance with the submission instructions on the Department's Standard Permit Conditions web page at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-iii-and-iv-submission-instructions/.

[18 AAC 50.346(b)(3)]

Alaska Department of Environmental Conservation
Air Permits Program

Public Comment - September 6, 2023
United States Space Force (USSF)
Clear Space Force Station (Clear SFS)

STATEMENT OF BASIS
for the terms and conditions of
Permit No. AQ0318TVP05

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INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. AQ0318TVP05.

STATIONARY SOURCE IDENTIFICATION

Section 1 of Operating Permit No. AQ0318TVP05 contains information on the stationary source as provided in the Title V permit application.

The Clear Space Force Station (Clear SFS) is owned and operated by, United States Space Force (USSF) and United States Space Force (USSF) is the Permittee for the stationary source's operating permit. The SIC code for this stationary source is 9711 - National Security.

The stationary source is located in Denali Borough, near the city limits of Anderson, Alaska. It is 78 miles southwest of Fairbanks. USSF describes the stationary source as Ground-Based Radars and support facilities. It encompasses approximately 11,500 acres, 3,800 of which are under structures, roadways, and other improvements. Clear SFS is divided into three main areas: the Composite Area where most administrative, recreation, and living quarters are located along with the CSP (Central Steam Plant) and Civil Engineering; the Camp Area composed of maintenance shops and Security Police Forces; and the Operations Area for the Solid-State Phased Array Radar System (SPPARS), Long Range Discrimination Radar (LRDR) Power Plant (LPP), and Tech Site. The Central Heat Power Plant (CHPP) has been shut down.

The main stationary emission-generating activities at Clear SFS are fuel combustion sources. Typical fugitive sources at Clear SFS include firefighting training exercises and general miscellaneous chemical usage (e.g., emissions that result from the use of paints). Other fugitive dust sources include activities such as site preparation ("grading"), construction and/or demolition. Stack emissions include units such as combustion sources (e.g., boilers and emergency generators), where emissions are exhausted through a stack/vent to the atmosphere. Air emissions at Clear SFS are generated primarily from operation of the boilers and furnaces, emergency power generators, and water pumps.

EMISSIONS UNIT INVENTORY AND DESCRIPTION

Under 18 AAC 50.326(a), the Department requires operating permit applications to include identification of all emissions-related information, as described under 40 C.F.R. 71.5(c)(3).

The emissions units at the Clear Space Force Station (Clear SFS) that have specific monitoring, recordkeeping, and reporting requirements are listed in Table A of Operating Permit No. AQ0318TVP05. The USSF replaced EU ID 11 with a newer unit, 11A. The USSF also added EU IDs 209 and 210, emergency generators rated at 60 kW and 300kW, respectively. The Department did not include EU ID 8 because USSF removed this unit.

Table A of Operating Permit No. AQ0318TVP05 contains information on the emissions units regulated by this permit as provided in the application. The table is provided for informational and identification purposes only. Specifically, the emissions unit rating/size provided in the table is not intended to create an enforceable limit.

EMISSIONS

A summary of the potential to emit (PTE)[1] and assessable PTE as calculated by the Department from the Clear Space Force Station (Clear SFS) is shown in the table below.

Table D - Emissions Summary, in Tons Per Year (TPY)

Emissions	NO_x	CO	PM_{10}	SO_2	VOC	CO_2e[1]	HAPs	Total[2]
PTE	176.868	49.214	8.498	0.518	7.690	53,624	0.28	242.788
Assessable PTE	176.868	49.214	8.498	0.518	7.690	0	0	242.788

Notes:

1. CO_2e emissions are defined as the sum of the mass emissions of each individual GHG adjusted for its global warming potential.
2. Total PTE and total assessable PTE shown in the table do not include CO_2e and HAPs.
3. HAP emissions are a subset of either VOC emissions or PM_{10} emissions and are excluded from the assessable emissions total to avoid double counting.

The assessable PTE listed under Condition 83.1 is the sum of the PTE of each individual air pollutant, other than greenhouse gases (GHGs). The emissions listed in Table D are estimates that are for informational use only. The listing of the emissions does not create an enforceable limit for the stationary source.

For criteria pollutants and GHGs, emissions are as provided in the renewal permit for AQ0318TVP04, with the following revisions:

Hours of operation per year (limited) were changed for EU IDs 9, 11A, 12, and 209. The new annual operation limit is 500 hours.

Fuel feed rates for EU IDs 101 – 103 were changed from 207 to 223 gal/hr to match 3250kW engine vendor data. The emission factor for NO_X was changed from 5.613 to 5.1 g/kW-hr to match vendor data.

Fuel feed rates for EU IDs 201 – 207 were changed from 275 to 218 gal/hr to match vendor data at 100% load, continuous operation. Emission factors were changed from nominal to more conservative selection from vendor.

The kilowatt rating for EU 209 was changed from 60kW to 100kW to match vendor data in Standby operation.

Emission factors for EU 200 were changed to match vendor data in MSS08. Horsepower was calculated by converting from kilowatts electric and using an efficiency loss factor of 90%. Emissions in tons per year had a safety factor of 1.25 included by the Permittee.

Emission factors for EU 210 followed EPA Tier 3 emergency engine NTE values. SO_2 emissions were calculated by mass balance equations. Emissions in tons per year had a safety factor of 1.25 included.

[1] *Potential to Emit* or *PTE* means the maximum capacity of a stationary source to emit a pollutant under its physical or operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source, as defined in AS 46.14.990(22).

The Applicant calculated HAP emissions as provided in the application.

BASIS FOR REQUIRING AN OPERATING PERMIT

In accordance with AS 46.14.130(b), an owner or operator of a Title V source[2] must obtain a Title V permit consistent with 40 C.F.R. Part 71, as adopted by reference in 18 AAC 50.040.

Except for sources exempted or deferred by AS 46.14.120(e) or (f), AS 46.14.130(b) lists the following categories of sources that require an operating permit:

- A major source;
- A stationary source, including an area source, subject to federal New Source Performance Standards (NSPS) under Section 111 of the Clean Air Act or National Emission Standards for Hazardous Air Pollutants (NESHAP) under Section 112 of the CAA;
- Another stationary source designated by the Federal Administrator by regulation.

The Permittee is required to obtain an operating permit for the Clear Space Force Station (Clear SFS) as specified under 18 AAC 50.326(a) and 40 C.F.R. 71.3(a), because the stationary source is:

- A major source. This stationary source is a major source because
  - as defined in Section 302 of the CAA, it directly emits, or has the potential to emit, 100 TPY or more of any air pollutant subject to regulation; and
  - it is a major stationary source as defined in Part D of Title I of the Act.
- A source, including an area source, subject to a standard, limitation or other requirement under Section 111 of the Act (NSPS) not exempted or deferred under AS 46.14.120(e) or (f);
- A source, including an area source, subject to a standard or other requirement under Section 112 of the Act (NESHAP) not exempted or deferred under AS 46.14.120(e) or (f);
- A source designated by the Federal Administrator by regulation, or the Department under a finding that public health or air quality effects provide a reasonable basis to regulate the source.

AIR QUALITY PERMITS

Permits to Operate

The last permit to operate issued for this stationary source is Permit to Operate No. 9531-AA001. This permit to operate included all construction authorizations issued through November 9, 1994, and was issued before January 18, 1997 (the effective date of the divided Title I/Title V permitting program). All stationary source-specific requirements established in this permit were included in Operating Permit No. 000318TVP01.

[2] *Title V source* means a stationary source classified as needing a permit under AS 46.14.130(b) [ref. 18 AAC 50.990(111)].

Title I (Construction and Minor) Permits

Construction Permit No. 318CPT01. The Department issued this permit on February 1, 2005. The Department established requirements to allow the stationary source to avoid source classification as a HAP major source.

Minor Permit No. AQ0318MSS01. The Department issued this permit on October 11, 2005. The minor permit rescinded Construction Permit No. 318CPT01 and established requirements that revised the coal monitoring requirements of Construction Permit No. 318CPT01 and authorized owner requested limits (ORLs) to avoid source classification as a HAP major source.

Minor Permit No. AQ0318MSS02. The Department issued this permit on August 19, 2010 to authorize the installation and operation of three new 2,500 kW diesel backup generators, EU IDs 101, 102, and 103. This permit also established an ORL of 450 combined total operating hours for EU IDs 101, 102, and 103 in any rolling 12-month period in order to avoid minor permit requirements under 18 AAC 50.502(c)(3) and classification as a Prevention of Significant Deterioration (PSD) major modification.

Minor Permit No. AQ0318MSS03. The Department issued this permit on August 16, 2011. The minor permit rescinded Minor Permit No. AQ0318MSS02 and authorizes the installation and operation of three new 3,490 kW diesel backup generators in place of the previously proposed 2,500 kW diesel backup generators. This permit also included the ORL of 450 combined total operating hours for EU IDs 101, 102, and 103 in any rolling 12-month period in order to avoid minor permit requirements under 18 AAC 50.502(c)(3) and classification as a Prevention of Significant Deterioration (PSD) major modification. The permit additionally requires the use of ultra-low sulfur diesel (ULSD) in EU IDs 101 through 103.

Minor Permit No. AQ0318MSS04. The Department issued this permit on November 5, 2013. The minor permit rescinded Minor Permit No. AQ0318MSS01 and revised the coal monitoring requirements.

Minor Permit No. AQ0318MSS05. The Department issued this permit on July 30, 2014 to authorize removal of three large coal-fired boilers (EU IDs 1 through 3), coal crushing facility (EU ID 40), ash collection system and storage (EU ID 4), and two diesel generators (EU IDs 5 and 10) and installation of three oil-fired boilers (EU IDs 44 through 46) and one diesel generator (EU ID 43).

- Revision No. 1. The Department issued the revision on April 30, 2015. The revision rescinded Minor Permit No. AQ0318MSS05 while including the conditions of the permit and also authorizes installation of two portable oil-fired boilers (EU IDs 47 and 48) and one portable diesel engine (EU ID 49) for emergency use.

Minor Permit No. AQ0318MSS06. The Department issued this permit on June 6, 2017 to revise Minor Permit No. AQ0318MSS03 and increase the allowable operating hours of EU IDs 101 through 103 from a combined 450 hours per year (hr/yr) to a combined 2,100 hr/yr.

Minor Permit No. AQ0318MSS07. The Department issued this permit on August 25, 2017 for the construction of the Long-Range Discrimination Radar Project.

Minor Permit No. AQ0318MSS08. The applicant submitted an application for Minor Permit AQ0318MSS08 on January 04, 2023. The applicant amended this application on April 13, 2023. The application requested the Department establish an ORL and revise AQ0318MSS07 conditions

to permit the use of EU ID 200 as a stationary, emergency power generator not exceeding 575 hours per year, and to install, maintain, and operate a new EU ID 210 stationary emergency power generator not exceeding 300 hours per year. The permit additionally requires the use of ULSD in EU IDs 200 and 210. The Department issued this permit on July 31, 2023.

Title V Operating Permits

Operating Permit No. 000318TVP01. The Department issued this permit on January 21, 2000. The Permittee requested an ORL for fuel consumption limits for each of EU IDs 38 and 39 that corresponds to 500 operational hours. The 500-hour annual limit corresponds to 5,200 gallons for each of EU IDs 38 and 39. These limits allow the Permittee to avoid the need for a construction permit and a PSD review.

Operating Permit No. AQ0318TVP02. The Department issued this permit on September 7, 2006.

Operating Permit No. AQ0318TVP03. The Department issued this permit on October 2, 2012.

- Revision No. 1. Incorporated requirements of Minor Permit AQ0318MSS04 to revise the coal monitoring strategy, updated emission limits and work practices for Hg and CO to reflect the April 24, 2013 revisions to NESHAP Subpart JJJJJJ and revised the CAM monitoring approach commensurate with the practice adopted at the source.
- Revision No. 2. Revision to correct the emission inventory reporting timeline error.
- Revision No. 3. Revision to correct a typographical error in calculation of moles of oxygen in Standard Operating Permit Condition XIII – Coal Fired Boilers adopted into 18 AAC 346(c) Table 7 pursuant to AS 46.14.010(e).

Operating Permit No. AQ0318TVP04. The Department issued this permit on June 13, 2018.

- Revision No. 1. The Department issued an administrative amendment to update Table A of the operating permit to include information for installed units. Additionally, the Department corrected a typographical error in Condition 42.4 of the operating permit by including the 5-year tune-up language for EU IDs 300 through 305 since those units are subject to 5-year rather than biennial tune-up requirements.
- Revision No. 2. On August 27, 2020, the Department received an application from the US Air Force (USAF) for an administrative amendment to update the emission unit inventory at the Clear Air Force Station, operating under Title V Permit AQ0318TVP04 Rev. 1. On September 1, 2020 the Department received an updated notification that the USAF wishes to treat the updated emission unit as an off-permit change instead of an administrative amendment to the Title V Permit. The off-permit change indicated that the USAF is planning to add new emission unit (EU) 209, an EPA nonroad Tier 3 certified 60 kW Caterpillar C4.4 emergency diesel engine generator. The Department concurred with the off-permit change.
- Revision No. 3. The United States Air Force submitted a name change request on July 1, 2021 to reflect the name change of the Permittee from United States Air Force (USAF) to United States Space Force (USSF) and the name change of the Stationary Source from Clear Air Force Station (Clear AFS) to Clear Space Force Station (Clear SFS). The Department issued Administrative Amendment 3 effective on June 15, 2021 reflecting the name change of the Permittee and stationary source.

Permit No. AQ0318TVP05. United States Space Force (USSF) submitted an application to renew Operating Permit No. AQ0318TVP04 under a December 1, 2022 cover letter. The Department received the application on December 5, 2022. The Department deemed the application complete on December 13, 2022 and issued Operating Permit No. AQ0318TVP05 on Public Comment - September 6, 2023.

COMPLIANCE HISTORY

The stationary source has operated at its current location since 1959.

The Department received a source test report for EU ID 40, coal crusher with mechanical vent, on August 7, 2013 that showed an exceedance of the 0.010 gr/dscf particulate matter limit in 40 C.F.R. 60.254(b)(2). The Department and USAF entered a settlement agreement in May 2015, and the Department issued a letter on June 26, 2015 to close the compliance case. Additionally, EU ID 40 has since been decommissioned.

The Department issued a notice of violation (NOV) on May 29, 2015 alleging that USAF violated 18 AAC 50.502(c)(3) and AS 46.14.120(g) by installing a 1.5 MW portable Caterpillar generator and two 10 MMBtu/hr York Shipley steam boilers without first obtaining a required air quality minor permit. The Department and USAF entered a settlement agreement in February 2016, and the Department issued a letter on March 7, 2016 to close the compliance case.

Other than the issues noted above, review of the permit files for this stationary source, which includes the past inspection reports and compliance evaluations, indicates a stationary source generally operating in compliance with its operating permit.

APPLICABLE REQUIREMENTS FROM PRECONSTRUCTION PERMITS

Incorporated by reference at 18 AAC 50.326(j), 40 C.F.R. Part 71.2 defines "applicable requirement" to include the terms and conditions of any preconstruction permit issued under rules approved in Alaska's State Implementation Plan (SIP).

Alaska's SIP includes the following types of preconstruction permits:

- Permit 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.

Preconstruction permit terms and conditions include both source-specific conditions and conditions derived from regulatory applicable requirements such as standard conditions, generally applicable conditions, and conditions that quote or paraphrase requirements in regulation.

These requirements include, but are not limited to, each emissions unit- or source-specific requirement established in these permits issued under 18 AAC 50 that are still in effect at the time of issuance of Operating Permit No. AQ0318TVP05.

Table E and Table F below list the requirements carried into Operating Permit No. AQ0318TVP05 to ensure compliance with the preconstruction permit requirements.

Table E - Comparison of Permit to Operate No. 9531-AA001 Conditions to Operating Permit No. AQ0318TVP05 Conditions[1]

9531-AA001 Condition No.	Description of Requirement	AQ0318TVP05 Condition No.	How Condition was Revised
1	Comply with AAAQS	17	Includes AAAQS, PSD, and ORLs
2	Comply with emission standards	Multiple	Revised into numerous conditions
3	Coal fines limits	Removed	All coal-fired EU IDs have been decommissioned
7	Source testing	92	Standard condition per 18 AAC 50.345(a)
8	Excess emissions report	106	Incorporated SPC III
10	Operating report	107	Incorporated SPC VII
13	Opacity MR&R	2	Incorporated SPC IX

Note:

1. This table does not include all standard and general conditions.

Table F - Comparison of Minor Permit Nos. AQ0318MSS03 through AQ0318MSS08 Conditions to Operating Permit No. AQ0318TVP05 Conditions[1]

MSS No.	Condition No.	Description of Requirement	AQ0318TVP05 Condition No.	How Condition was Revised
MSS03	8	ORL for SO_2 under 50.502(c)(3)	24	Edited for clarity.
MSS05	5	ORL for NO_X under 50.306	33	Not revised.
MSS06	7	ORL for NO_X under 50.306	26	Not revised.
MSS07	20 – 22	Conditions to uphold AAAQS	19 – 20	Revised to remove EU IDs that have performed these requirements.
MSS07	24 – 25	Limits to uphold AAAQS	21 – 22	Not revised.
MSS07	26 – 30	ORL under 50.502(c)(4)	28 – 32	Removed language circumventing the public review of MR&R requirements.
MSS08	10 – 11	Conditions to uphold AAAQS	23 – 24	Not revised.
MSS08	13	ORL for NO_X under 50.502(c)(3)(A)	34 – 37	Added references to Operating Report, Excess Emissions Report Conditions.

Note:

1. This table does not include all standard and general conditions.

NON-APPLICABLE REQUIREMENTS

This section discusses standard conditions that have not been included in the permit and other requirements that are not included for specific reasons.

- 40 C.F.R. 64 Compliance Assurance Monitoring (CAM): None of the emissions units at the stationary source use a control device to achieve compliance with emission limits or standards. Therefore, CAM requirements are not applicable.

- 40 C.F.R. 68 Chemical Accident Prevention Provisions: The Risk Management Plan (RMP) requirements do not apply because the stationary source has no threshold quantities of a regulated substance used in a process as defined in 40 C.F.R. 68.10.

STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The Department adopted regulations from 40 C.F.R. 71, as specified in 18 AAC 50.040(j), to establish operating permit regulations. The EPA fully approved the Alaska Operating Permit Program on November 30, 2001, as noted in Appendix A to 40 C.F.R. 70. This Statement of Basis, required under 40 C.F.R. 71.11(b), provides the legal and factual basis for each condition of Operating Permit No. AQ0318TVP05. Additionally, and as required by 40 C.F.R. 71.6(a)(1)(i), the state and federal regulations for each permit condition are cited in the permit.

Conditions 1 through 4, Visible Emissions Standard and MR&R

Legal Basis: These conditions require compliance with the applicable requirements in 18 AAC 50.055(a).

- 18 AAC 50.055(a) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 9, 11A, 12, 38, 39, 43 – 46, 101 – 103, 200 – 210, and 300 – 305 are fuel-burning equipment or industrial processes.

U.S. EPA approved the addition of these standards to the SIP, as noted in 40 C.F.R. 52.70. The Department included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: Condition 1 prohibits the Permittee from causing or allowing visible emissions in excess of the applicable standard in 18 AAC 50.055(a)(1). MR&R requirements are listed in Conditions 2 through 4 (for liquid fuel-burning equipment) of the permit. These conditions have been adopted into regulation as Standard Permit Condition (SPC) IX – Visible Emissions and Particulate Matter Monitoring Plan for Liquid Fuel-Burning Equipment and Flares. The Department has modified these conditions, as follows:

- Made the last two sentences in Condition 2 subconditions (Conditions 2.1 and 2.2) to facilitate cross-referencing of specific statements.

Beyond as noted above, the Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emissions unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard conditions, as modified, meet the requirements of 40 C.F.R. 71.6(a)(3).

The Permittee must establish by visual observations of emissions unit exhaust, which may be supplemented by other means (e.g., a defined stationary source operation and maintenance program), that the stationary source is in continuous compliance with the state emission standards for visible emissions.

These conditions detail a stepwise process for monitoring to determine compliance with the state's visible emissions standard for liquid fuel-burning equipment. Equipment types covered by these conditions are stationary internal combustion engines, turbines, heaters, boilers, and flares. Initial monitoring frequency schedules are established along with subsequent reductions or increases in frequency depending on the results of the self-monitoring program.

Reasonable action thresholds are established in these conditions that require the Permittee to progressively address potential visible emission problems from emissions units either through maintenance programs and/or more rigorous tests that will quantify whether a specific emission standard has been exceeded.

Liquid Fuel- Burning Equipment:

Monitoring – The emissions unit exhaust must be observed by either the Method 9 Plan or the Smoke/No Smoke Plan as detailed in Condition 2. Corrective actions such as maintenance procedures or more frequent observations may be required depending on the results of the observations.

Recordkeeping - The Permittee is required to record the results of all observations of emissions unit exhaust and record any actions taken to reduce visible emissions.

Reporting - The Permittee is required to report emissions in excess of the state visible emissions standard and deviations from permit conditions. The Permittee is also required to include in the operating report a statement of which visible emissions plan was used for each emissions unit and copies of the results of all visible emission observations.

Significant Emissions Units under 18 AAC 50.326(d)(1):

EU IDs 9, 11A, 12, 208, 209, and 210 do not qualify as insignificant per 18 AAC 50.326(d)(1), because they are subject to requirements in 40 C.F.R. 63 Subpart ZZZZ. These units are otherwise insignificant because actual emissions (for EU IDs 9 and 12) and potential emissions (for EU IDs 11A, 208, 209, and 210) are less than the significant emissions thresholds in 18 AAC 50.326(e). Therefore, the Department has waived the requirement to conduct observations for visible emissions from EU IDs 9, 11A, 12, 208, 209, and 210, but these units are subject to compliance certification requirements in accordance with Department Policy and Procedure No. 04.02.103, Topic #3.

EU IDs 38 and 39 do not qualify as insignificant per 18 AAC 50.326(d)(1), because they are subject to requirements in 40 C.F.R. 63 Subpart ZZZZ. These units are otherwise insignificant because permit conditions limit emissions for each unit to less than the significant emissions thresholds in 18 AAC 50.326(e). Therefore, the Department has waived the requirement to conduct observations for visible emissions from EU IDs 38 and 39, but these units are subject to compliance certification requirements in accordance with Department Policy and Procedure No. 04.02.103, Topic #3.

For EU IDs 303 through 305, no visible emissions monitoring is required because these emissions units are insignificant under 18 AAC 50.326(e) based on potential emissions. The Permittee must annually certify whether or not the emissions units are in compliance with the opacity standard based on reasonable inquiry.

Conditions 5 through 11, PM Standard and MR&R

Legal Basis: These conditions require compliance with the applicable requirement in 18 AAC 50.055(b).

- 18 AAC 50.055(b)(1) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 9, 11A, 12, 38, 39, 43 – 46, 101 – 103, 200 – 210, and 300 – 305 are fuel-burning equipment or industrial processes.

This PM standard applies because it is contained in the federally-approved SIP. The Department included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: Condition 5 prohibits emissions in excess of the applicable state PM standard. MR&R requirements are listed in Conditions 6 through 11 of the permit. These conditions have been adopted into regulation as SPC IX.

The Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emissions unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard conditions meet the requirements of 40 C.F.R. 71.6(a)(3).

The Permittee must establish by visual observations, which may be supplemented by other means (e.g., a defined stationary source operation and maintenance program), that the stationary source is in continuous compliance with the state's emission standards for PM.

Liquid Fuel-Burning Equipment:

Monitoring – The Permittee is required to either take corrective action or conduct PM source testing, if opacity threshold values are exceeded. For liquid fuel-burning engines and turbines, the Department set opacity threshold values of 15 percent for stack diameters less than 18 inches and 20 percent for stack diameters equal to or greater than 18 inches. These opacity thresholds are based on a study conducted by the Department in an effort to establish a correlation between opacity and PM. The data was collected from diesel engines of various stack sizes and the results are as follows:

- For stacks normalized to 21 inches – 0.05 gr/dscf corresponds to 27% opacity
- For stacks normalized to 18 inches – 0.05 gr/dscf corresponds to 23% opacity
- For stacks normalized to 12 inches – 0.05 corresponds to 16.8 % opacity
- For stacks normalized to 10 inches – 0.05 corresponds to 14.3 %

This means that the trend line for the complete data set predicts that 20% opacity corresponds to a little less than the PM limit for an 18-inch stack. There may be engines that exceed the thresholds but the intent of the standard condition is not to guarantee that each engine that might exceed the PM standard will be tested. The Department expects few, if any, engines to actually be tested under this condition. What the Department does expect is that with the adopted condition in place, operators that find an opacity above or near the testing threshold will take corrective action necessary to reduce PM emissions. This would achieve the desired environmental outcome without the added cost of testing. The Department expects this to be the case with both thresholds.

The method is premised on the fact that a five percent difference in opacity is distinguishable. The conditions mean that if opacity readings as measured using Method 9 – with all of its limitations – exceed the threshold, the Permittee must either take corrective action or conduct a PM source test. The compliance conditions for PM do not draw a legal conclusion about whether the method shows compliance with the visible emissions standard.

Recordkeeping - The Permittee is required to record the results of PM source tests and visible emissions observations conducted during the source tests.

Reporting - The Permittee is required to report incidents when emissions in excess of the opacity threshold are observed and the results of PM source tests. The Permittee is also required to include copies of the results of all visible emission observations taken during PM source testing in the operating report.

Significant Emissions Units under 18 AAC 50.326(d)(1):

EU IDs 9, 11A, 12, 208, 209, and 210 do not qualify as insignificant per 18 AAC 50.326(d)(1), because they are subject to requirements in 40 C.F.R. 63 Subpart ZZZZ. These units are otherwise insignificant because actual emissions (for EU IDs 9 and 12) and potential emissions (for EU IDs 11A, 208, 209, and 210) are less than the significant emissions thresholds in 18 AAC 50.326(e). Therefore, the Department has waived the requirement to conduct observations for particulate matter from EU IDs 9, 11A, 12, 208, 209, and 210, but these units are subject to compliance certification requirements in accordance with Department Policy and Procedure No. 04.02.103, Topic #3.

EU IDs 38 and 39 do not qualify as insignificant per 18 AAC 50.326(d)(1), because they are subject to requirements in 40 C.F.R. 63 Subpart ZZZZ. These units are otherwise insignificant because permit conditions limit emissions for each unit to less than the significant emissions thresholds in 18 AAC 50.326(e). Therefore, the Department has waived the requirement to conduct observations for particulate matter from EU IDs 38 and 39, but these units are subject to compliance certification requirements in accordance with Department Policy and Procedure No. 04.02.103, Topic #3.

For EU IDs 303 through 305, no visible emissions monitoring is required because these emissions units are insignificant under 18 AAC 50.326(e) based on potential emissions. The Permittee must annually certify whether or not the emissions units are in compliance with the opacity standard based on reasonable inquiry.

Condition 12 through 15, Sulfur Compound Emissions Standard and MR&R

Legal Basis: This condition requires compliance with the sulfur compound emissions standard under 18 AAC 50.055(c).

- 18 AAC 50.055(c) applies to the operation of fuel-burning equipment and industrial processes. EU IDs 9, 11A, 12, 38, 39, 43 – 46, 101 – 103, 200 – 210, and 300 – 305 are fuel-burning equipment or industrial processes.

The sulfur compound standard applies because it is contained in the federally-approved SIP. The Department included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: The Permittee may not cause or allow the affected equipment to violate the applicable sulfur compound standard. Sulfur dioxide comes from the sulfur in the fuel (e.g., fuel oils).

Liquid Fuels:

For the liquid fuel-burning equipment, EU IDs 9, 11A, 12, 38, 39, 43, and 200 – 210, the MR&R conditions are SPCs XI and XII adopted into regulation pursuant to AS 46.14.010(e). Sulfur dioxide comes from the sulfur in the liquid, hydrocarbon fuel (e.g., diesel or No.2 fuel oil). Fuel sulfur testing will verify compliance. Fuel containing no more than 0.00075 percent sulfur by weight will always comply with the emission standard. For fuels with a sulfur content higher than 0.00075 percent, the condition requires the Permittee to use the equations in Section 13, or Method 19 of 40 C.F.R. 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a)(3), to calculate the sulfur-dioxide concentration to show that the standard is not exceeded.

The Department has determined that the standard permit conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emissions unit or stationary source operational or compliance factors indicate the unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard conditions, as modified, meet the requirements of 40 C.F.R. 71.6(a)(3).

Condition 16 through 37, Preconstruction Permit Requirements

Legal Basis: The Permittee is required to comply with all stationary source-specific requirements that were carried forward from previous SIP-approved Permits to Operate (PTO) issued on or before January 17, 1997 and operating permits issued between January 18, 1997 and September 30, 2004, and with all stationary source-specific requirements in EPA PSD permits, SIP-approved construction permits, SIP-approved minor permits, and owner requested limits (ORLs) established under 18 AAC 50.225. These requirements include Best Available Control Technology (BACT) limits to ensure compliance with the attainment or maintenance of ambient air quality standards or maximum allowable ambient concentrations, and owner requested limits. Requirements from the permits listed above apply because they were originally developed through case-by-case action under a federally-approved SIP or approved operating permit program.

Factual Basis: Conditions 16 through 37 reflect the emissions unit- or stationary source-specific requirements that are in effect from Title I Minor Permits AQ0318MSS03 through AQ0318MSS08. The Air Quality Permits section and Table E through Table F in the SOB describe which emissions units were authorized and how the terms and conditions have been revised, rescinded, and replaced in the Title I permits issued for the stationary source and how they are carried forward into the Title V permit. Background information details for these requirements are found in the corresponding Technical Analysis Report (TAR) for the Title I permits.

Conditions 23 and 24 are Ambient Air Quality Protection Requirements established in Minor Permit No. AQ0318MSS08, limiting the fuel combusted in EU IDs 200 and 210 to ultra-low sulfur diesel (ULSD). MR&R requirements are included in Condition 24.

Condition 25 is an ORL established in Operating Permit No. AQ0318TVP01, to avoid classification as PSD major modification. The condition requires limiting the fuel burned by EU IDs 38 and 39 to no more than 5,200 gallons. MR&R requirements are included in the condition.

Condition 26 is an ORL established in Minor Permit No. AQ0318MSS06, to avoid classification under 18 AAC 50.306. The condition requires limiting NO_x emissions from EU IDs 101, 102, and 103 to no more than 45 TPY by limiting the combined 12-month consecutive hours to 2,100 hours. MR&R requirements are included in the condition.

Condition 27 is an ORL established in Minor Permit No. AQ0318MSS03, to avoid classification under 18 AAC 50.502(c)(3) for SO_2. The condition requires limiting sulfur content burned from EU IDs 101, 102, and 103 to no more than 15 ppmw. MR&R requirements are included in the condition.

Conditions 28 through 32 are an ORL established in Minor Permit No. AQ0318MSS07, to avoid classification under 18 AAC 50.502(c)(4) for SO_2. The conditions require limiting SO_2

emissions from EU IDs 300 through 305 to less than 40 TPY by limiting the sulfur fuel content of the fuel used to no more than 15 ppmw. MR&R requirements are included in the condition.

Condition 33 is an ORL established in Minor Permit No. AQ0318MSS05, to avoid PSD permitting under 18 AAC 50.306 for SO_2. The condition requires limiting SO_2 emissions for EU IDs 44 through 46 to no more than 0.22 TPY by limiting the fuel burned to ULSD. MR&R requirements are included in the condition.

Conditions 34 through 37 are an ORL established in Minor Permit No. AQ0318MSS08, to avoid classification under 18 AAC 50.502(c)(3) for NO_x. The conditions require limiting NO_X emissions from EU IDs 200 and 210 to less than 10 TPY by limiting the 12-month consecutive hours to 575 and 300 hours, respectively. MR&R requirements are included in the conditions.

Condition 38, Insignificant Emissions Units

Legal Basis: The Permittee is required to meet the state emission standards in 18 AAC 50.055 for all industrial processes and fuel-burning equipment regardless of size. 18 AAC 50.050(a) and 50.055 are contained in the federally-approved SIP. The Department also added permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: The condition requires insignificant emissions units to comply with the state emission standards for visible emissions, particulate matter emissions, and sulfur-compound emissions. Insignificant emissions units are not generally listed in operating permits unless specific monitoring, recordkeeping, and reporting are necessary to ensure compliance with the state emission standards. However, the Permittee may not cause or allow insignificant emissions units at the stationary source to violate these standards whether or not they are listed in the operating permit.

The Department finds that the insignificant emissions units at this stationary source do not require specific monitoring, recordkeeping and reporting to ensure compliance under these conditions.

Condition 38.4.a requires certification that the insignificant emissions units did not exceed state emission standards during the previous year and did not emit any prohibited air pollution, based on reasonable inquiry.

The Department used the language in SPC V, adopted by reference under 18 AAC 50.346(b)(4), for the permit condition.

Conditions 39 through 44, NSPS Subpart A Requirements

Legal Basis: The EPA approved Alaska's Part 70 Program granted on November 30, 2001 (40 C.F.R. 70 Appendix A). The Department is the permitting authority for the Part 70 program. As the permitting authority, the Department requires compliance with all permit conditions. Although the EPA has not delegated to the Department the authority to administer the New Source Performance Standard (NSPS) program, NSPS requirements are included in the definition for "applicable requirement" under 40 C.F.R. 71.2, which has been adopted by the Department under 18 AAC 50.040(j)(1).

The NSPS provisions under Subparts Dc and IIII apply to the stationary source. Therefore, the Department requires compliance with those standards in a Part 70 permit issued under the approved program. However, the Department is unable to change the actual wording of the relevant standard to substitute "the Department" for "the Administrator" in those standards.

Since the Department expects access to any permit-related information provided by the Permittee to the EPA, the Department will act on its responsibility as the permitting authority to determine compliance with the standard. To reflect this relationship and for the purposes of this permit, the Department has defined "the Administrator" to mean the "EPA and the Department" for conditions implementing the federal emission standards under Section 4.

Most affected facilities (with the exception of some storage tanks) subject to an NSPS are subject to Subpart A. At this stationary source, EU IDs 44 through 46 are subject to NSPS Subpart Dc and EU IDs 11A, 43, 101 through 103, and 200 through 210 are subject to NSPS Subpart IIII. Therefore, these units are subject to Subpart A.

Conditions 39.1 through 39.3 – The Permittee has already complied with the notification requirements in 40 C.F.R. 60.7 (a)(1) – (4) for EU IDs 11A and 209. However, the Permittee is still subject to these requirements in the event of a new NSPS affected facility[3] or in the event of a modification or reconstruction of an existing facility[4] into an affected facility.

Condition 39.4 – The requirements to notify the EPA and the Department of any proposed replacement of components of an existing facility (40 C.F.R. 60.15) apply in the event that 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.

Condition 40 – The requirements in 40 C.F.R. 60.7(b) to maintain startup, shutdown, or malfunction records are applicable to all NSPS affected facilities subject to Subpart A.

Condition 41 – The NSPS general recordkeeping requirements under 40 C.F.R. 60.7(f) requires records retention for at least two years of the measurements required to be maintained by this Part. This requirement is satisfied by Condition 102, which requires at least five years of records retention, in accordance with 40 C.F.R 71.6(a)(3)(ii)(B) adopted under 18 AAC 50.040(j)(4).

Condition 41 – The Permittee is subject to the initial performance test requirements in the event of a new NSPS affected facility, in the event of a modification or reconstruction of an existing facility into an affected facility or at such other times as may be required by EPA.

Condition 42 – Good air pollution control practices in 40 C.F.R. 60.11 are applicable to most NSPS affected facilities subject to Subpart A (EU IDs 44 through 46).

Condition 43 – The condition states that any credible evidence may be used to demonstrate compliance or to establish violations of relevant NSPS standards for EU IDs 44 through 46.

Condition 44 – Concealment of emissions prohibitions in 40 C.F.R. 60.12 are applicable to EU IDs 11A, 43 through 46, 101 through 103, and 200 through 210.

Factual Basis: Subpart A contains general requirements applicable to all affected facilities (emissions units) subject to NSPS. In general, the intent of NSPS is to provide technology-based emission control standards for new, modified, and reconstructed affected facilities.

[3] *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.

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

Conditions 45 through 49, NSPS Subpart Dc Requirements

Legal Basis: The requirements of 40 C.F.R. 60 are applicable requirements for Title V permitting purposes, as stated in the "applicable requirement" definition under 40 C.F.R. 71.2. The Department has incorporated by reference the requirements of NSPS Subpart Dc, as listed in 18 AAC 50.040(a). Subpart Dc applies to steam generating units for which construction, modification, or reconstruction commenced after Jun 9, 1989 and have maximum design heat input capacities of 29 MW (100 MMBtu/hr) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr). EU IDs 44 through 46 were constructed after June 9, 1989 and have maximum design heat input capacities greater than 10 MMBtu/hr.

Factual Basis: The conditions require the Permittee to comply with the Subpart Dc sulfur standard. The Permittee has two options for complying with SO_2 emissions: one is to comply with a sulfur emission limit and the other is to comply with a fuel sulfur limit.

EU IDs 44 through 46 are not subject to the particulate matter standard in 40 C.F.R. 60.43c because each emissions unit maximum design heat input is less than 30 MMBtu/hr.

Conditions 50 through 56, NSPS Subpart IIII Requirements

Legal Basis: NSPS Subpart IIII applies to stationary compression ignition internal combustion engines (CI ICE) that commence construction, modification, or reconstruction after July 11, 2005 where the stationary CI ICEs are manufactured after April 1, 2006 for non-fire pump engines and manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006 for fire pump engines.

EU IDs 43, 101 through 103, and 200 through 210 are non-fire pump engines manufactured after April 1, 2006. EU ID 11A is a certified fire pump emergency engine. These EUs meet the applicability criteria of Subpart IIII under 40 C.F.R. 60.4200(a)(2)(i) and (ii).

Factual Basis: These conditions incorporate the Subpart IIII emissions standards applicable to EU IDs 11A, 43, 101 through 103, and 200 through 210. The Permittee may not cause or allow these emissions units to violate these standards. These conditions also provide MR&R specifically called out for the EUs within the Subpart. The Permittee is required to operate and maintain the stationary CI ICE according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer.

Emission standards that apply to Subpart IIII-affected CI ICE depend on several factors, including, but not limited to, the unit's purpose (whether emergency or non-emergency), model year, displacement in liters/cylinder (L/cyl), and location. Some of this information are provided in Table A of the permit.

The Department added Condition 55 to gap-fill the operating and excess emissions and permit deviation reporting requirements.

The NSPS GAPCP requirements provided in 40 C.F.R. 60.4211(a), as reflected in Condition 51, suffices the State GAPCP requirement under 18 AAC 50.346(b)(5). MR&R requirements are provided in Conditions 54 through 55. Provisions for importing or installing stationary CI ICE in previous model years required under 40 C.F.R. 60.4208 are provided in Condition 56.

The provisions of NSPS Subpart IIII listed in Conditions 50 through 56 are current as amended through August 10, 2022. 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.

Condition 57, NESHAP Subpart A Requirements

Legal Basis: Most sources subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) requirements are subject to NESHAP Subpart A. This stationary source is subject to 40 C.F.R. 63 Subparts ZZZZ, JJJJJJ, and CCCCCC, and therefore is subject to the general provisions of Subpart A as specified in the provisions for the applicability of NESHAP Subpart A in Table 8 to NESHAP Subpart ZZZZ, Table 8 to NESHAP Subpart JJJJJJ, and in Table 3 to NESHAP Subpart CCCCCC.

Factual Basis: Subpart A contains the general requirements applicable to all affected sources subject to NESHAP. In general, the intent of NESHAP is to regulate specific categories of stationary sources that emit or have the potential to emit one or more hazardous air pollutants.

Conditions 58 through 63, NESHAP Subpart ZZZZ Requirements

Legal Basis: The Department has incorporated by reference the NESHAP requirements for specific industrial activities, as listed in 18 AAC 50.040(c). NESHAP Subpart ZZZZ applies to owners and operators of any existing, new, or reconstructed stationary reciprocating internal combustion engines (RICE), whose construction commenced before June 12, 2006, located at major and area sources of HAP emissions, excluding stationary RICE units being tested at a stationary RICE test cell/stand. Clear Space Force Station (Clear SFS) is an area source that owns and operates RICE units, EU IDs 9, 11A, 12, 38, 39, 43, 101 – 103, and 200 – 210, subject to NESHAP Subpart ZZZZ.

Factual Basis: These conditions incorporate the current (as amended through August 10, 2022) NESHAP Subpart ZZZZ requirements applicable to the existing stationary RICE, EU IDs 9, 11A, 12, 38, 39, 43, 101 – 103, and 200 – 210.

EU IDs 9, 12, 38, and 39 are existing, emergency compression ignition (CI) RICE that do not have to meet numerical emission limitations in Subpart ZZZZ, but must meet the work and management practices for stationary emergency CI RICE in Table 2d, Item 4. If any of the engines no longer meet the criteria for an emergency engine, as defined in 40 C.F.R. 63.6675, the emissions unit will need to meet all applicable requirements for non-emergency engines.

The Permittee must comply with the recordkeeping requirements of 40 C.F.R. 63.6655(e), 63.6625(i), and 63.6660, as set out in Condition 61. The reporting requirements are provided in Condition 63. The Permittee is required to include reports of deviations from NESHAP Subparts A and ZZZZ requirements with the semiannual operating reports, per 40 C.F.R. 63.6650(f). The Department also added an excess emissions and permit deviation gap-fill reporting requirement in Condition 63.2.

Per 40 C.F.R. 63.6645(a)(5), initial notification is not required for existing stationary CI RICE that are not subject to any numerical emission standards. In addition, the fuel requirements under 40 C.F.R. 63.6604 are not applicable per 63.6604(d).

EU IDs 11A, 43, 101 through 103, and 200 through 210 are new CI RICE and must comply with the requirements of 40 C.F.R. 60 Subpart IIII as required by 40 C.F.R. 63.6590(c) and (c)(1). There are no other requirements under Subpart ZZZZ for these units.

The provisions of NESHAP Subpart ZZZZ listed in Conditions 57 through 61 are current as amended through August 10, 2022. 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.

Conditions 64 through 68.7, NESHAP Subpart JJJJJJ

Legal Basis: NESHAP Subpart JJJJJJ is a federal rule that took effect on May 20, 2011. This subpart applies to owners and operators of industrial, commercial, or institutional boiler as defined in 40 C.F.R. 63.11237 that is located at, or is part of, an area source of HAP emissions. The Clear Space Force Station (Clear SFS) is an area source of HAP emissions that operates boilers (EU IDs 44 through 46 and 300 through 305) subject to the provisions of NESHAP Subpart JJJJJJ under 40 C.F.R. 63.11194(a)(1) and (b) for existing industrial boilers whose construction or reconstruction commenced on or before June 4, 2010.

Factual Basis: These conditions incorporate the Subpart JJJJJJ work or management practices applicable to EU IDs 44 through 46 and 300 through 305. The Permittee is required to operate and maintain the emissions units according to the manufacturer's emission-related operation and maintenance instructions which provides for the maintenance and operation of the emissions units in a manner consistent with good air pollution control practice for minimizing emissions.

The Generally Available Control Technology (GACT) work or management practice standard applicable to EU IDs 44 through 46 are those of new oil-fired units with a heat input capacity of greater than 10 MMBtu/hr, and a heat input capacity of greater than 5 MMBtu/hr for EU IDs 300 through 302, as set forth in Condition 66.3. The GACT work or management practice standard applicable to EU IDs 303 through 305 are those of new oil-fired units with a heat input capacity of less than 5 MMBtu/hr, as set forth in Condition 66.5. As such, biennial tune-ups for EU IDs 44 through 46 and 303 through 305 (greater than 5 MMBtu/hr) and tune-ups every 5 years for EU IDs 300 through 302 (less than 5 MMBtu/hr) are required.

Minor Permit AQ0318MSS05 requires the use of ultra-low sulfur diesel (ULSD) in EU IDs 44 through 46. Therefore, in accordance with 40 C.F.R. 63.11210(f), these units are not subject to the PM emission limit in Table 1 of Subpart JJJJJJ.

Recordkeeping and reporting requirements that apply to EU IDs 44 through 46 and 300 through 305 are provided in Conditions 67 and 69.

The provisions of NESHAP Subpart JJJJJJ listed in Conditions 57.2 and 64 through 68.7 are current as amended through September 14, 2016. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

Conditions 70 through 73, NESHAP Subpart CCCCCC Requirements

Legal Basis: The requirements of 40 C.F.R. 63 are applicable requirements for Title V permitting purposes, as stated in item 4 of the “applicable requirement” definition under 40 C.F.R. 71.2. The Department has incorporated by reference the requirements of NESHAP Subpart CCCCCC, as listed in 18 AAC 50.040(c). The affected source to which this subpart applies is each gasoline dispensing facility (GDF) that is located at an area source of HAP emissions. The affected source includes each gasoline cargo tank during the delivery of

product to a GDF and also includes each storage tank. At Clear SFS, which is an area source, EU IDs 104 and 105 are gasoline storage tanks that meet the applicability criteria.

Factual Basis: NESHAP Subpart CCCCCC establishes emission limitations and management practices for HAP emissions from the loading of gasoline storage tanks at GDFs. This subpart also establishes requirements to demonstrate compliance with the emission limitations and management practices.

EU IDs 104 and 105 are existing gasoline storage tanks with a monthly throughput of less than 10,000 gallons. As such, the Permittee is subject only to the work practices standards in 40 C.F.R. 63.11116 and the general duties to minimize emissions in 40 C.F.R. 63.11115. The Permittee is not required to submit notifications or reports but is required to have records available within 24 hours of a request by the EPA or the Department to document the stationary source's gasoline throughput.

Condition 74, Asbestos NESHAP

Legal Basis: The requirements of 40 C.F.R. 61 are applicable requirements for Title V permitting purposes, as stated in item 4 of the "applicable requirement" definition under 40 C.F.R. 71.2. The condition requires the Permittee to comply with asbestos demolition or renovation requirements in 40 C.F.R. 61, Subpart M and associated general provisions under Subpart A, as adopted by reference under 18 AAC 50.040(b)(1) and (2)(F). The asbestos demolition and renovation requirements apply if the Permittee engages in asbestos demolition or renovation. ADEC received delegation for §61.145 and §61.154 of Subpart M (Asbestos), along with other sections and appendices which are referenced in §61.145, as §61.145 applies to sources required to obtain an operating permit under Alaska's regulations. ADEC has not received delegation for Subpart M for sources not required to obtain an operating permit under Alaska's regulations.

Factual Basis: Because these regulations include adequate monitoring and reporting requirements and because the Permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient to ensure compliance with these federal regulations.

Conditions 75 through 77, Protection of Stratospheric Ozone, 40 C.F.R. 82

Legal Basis: The requirements of 40 C.F.R. 82 are applicable requirements for Title V permitting purposes, as stated in item 12 of the "applicable requirement" definition under 40 C.F.R. 71.2.

Condition 75 requires compliance with the applicable requirements in 40 C.F.R. 82, as adopted by reference under 18 AAC 50.040(d). The requirements apply if the Permittee engages in the recycling or disposal of certain refrigerants. The condition requires the Permittee to comply with the standards for recycling and emission reduction of refrigerants in 40 C.F.R. 82, Subpart F.

Conditions 76 and 77 also require compliance with the applicable requirement adopted under 18 AAC 50.040(d). Condition 76 prohibitions apply to all stationary sources that use substitutes for ozone-depleting compounds. Condition 77 prohibitions apply to all stationary sources that use halon for extinguishing fires and inert gas to reduce explosion risk. These conditions prohibit the Permittee from causing or allowing violations of these requirements.

Factual Basis: These conditions incorporate applicable 40 C.F.R. 82 requirements. Because these regulations include adequate monitoring and reporting requirements and because the Permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient to require compliance with this federal regulation.

Condition 78, NESHAP Applicability Determinations

Legal Basis: This condition requires the Permittee to determine rule applicability of NESHAP, and requires record keeping for those determinations if required by the source classification.

Factual Basis: The Permittee has conducted an analysis of the stationary source and determined that it is not a major HAPs stationary source based on emissions. This condition requires the Permittee to notify the Department and EPA if the stationary source becomes an affected source subject to a standard promulgated by EPA under 40 C.F.R. 63 and to keep records of applicability determinations and make those records available to the Department.

Conditions 79 through 81, Standard Terms and Conditions

Legal Basis: These are standard conditions required for all operating permits under 18 AAC 50.345(a) and (e)-(g). As stated in 18 AAC 50.326(j)(3), the standard permit conditions of 18 AAC 50.345 replace the provisions of 40 C.F.R. 71.6(a)(5) – (7).

Factual Basis: These are standard conditions that apply to all permits.

Condition 82, Administration Fees

Legal Basis: This condition requires compliance with the applicable fee requirements in 18 AAC 50.400-403. As stated in 18 AAC 50.326(j)(1), the provisions of 18 AAC 50.400 through 50.430 are applicable and 40 C.F.R. 71.9 is not applicable.

Factual Basis: Paying administration fees is required as part of obtaining and holding a permit with the Department or as a fee for a Department action. The regulations in 18 AAC 50.400-403 specify the amount, payment period, and the frequency of fees applicable to a permit action.

Conditions 83 and 84, Emission Fees

Legal Basis: These conditions require compliance with the applicable fee requirements in 18 AAC 50.410-420. The regulations specify the time period for the assessable emissions and the methods the Permittee may use to calculate assessable emissions. As stated in 18 AAC 50.326(j)(1), the provisions of 18 AAC 50.400 through 50.430 are applicable and 40 C.F.R. 71.9 is not applicable.

Factual Basis: The Department used the language in SPC I, adopted by reference under 18 AAC 50.346(b), for the permit. SPC I requires the Permittee to pay fees in accordance with the Department's billing regulations. The billing regulations set the due dates for payment of fees based on the billing date.

SPC I also allows the Permittee to recalculate the stationary source's assessable emissions based on previous actual annual emissions. According to AS 46.14.250(h)(1), assessable emissions are based on each air pollutant. Therefore, fees shall be paid on any pollutant emitted whether or not the permit contains any limitation for that pollutant.

This standard condition specifies that, unless otherwise approved by the Department, calculations of assessable emissions must be based on actual emissions for the previous calendar year. Since each current year's assessable emissions are based on the previous year, the Department will not give refunds or make additional billings at the end of the current year if the estimated emissions and current year actual emissions do not match.

As indicated in Condition 84.3, if the stationary source has not commenced construction or operation on or before March 31st, the Permittee may submit a waiver letter certified by the responsible official under 18 AAC 50.205 indicating that the assessable emissions for the source is zero for the previous fiscal year.

The Department has modified Condition 83 by deleting the phrase "in quantities 10 tons per year or greater" to match the revision made in 18 AAC 50.410 effective September 7, 2022. Beyond as noted, the Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3).

Condition 85, Good Air Pollution Control Practice

Legal Basis: This condition requires compliance with the requirements in 18 AAC 50.346(b)(5) and applies to all emissions units, **except** those subject to an emission standard in 40 C.F.R. 60, 61, or 63, those subject to continuous emission or parametric monitoring requirements, and insignificant emissions units; i.e., except EU IDs 11A, 43 – 46, 101 – 103, and 200 – 210.

Factual Basis: The condition requires the Permittee to comply with good air pollution control practices for all units.

The Department adopted this condition under 18 AAC 50.346(b) as SPC VI pursuant to AS 46.14.010(e). Records kept in accordance with Condition 85.2 for units subject to GAPCP need to be maintained for 5 years in accordance with Condition 102 even if a unit is no longer subject to this condition.

Maintaining and operating equipment in good working order is fundamental to preventing unnecessary or excess emissions. Standard conditions for monitoring compliance with emission standards are based on the assumption that good maintenance is performed. Without appropriate maintenance, equipment can deteriorate more quickly than with appropriate maintenance. If appropriate maintenance is not applied to the equipment, the Department may have to apply more frequent periodic monitoring requirements (unless the monitoring is already continuous) to ensure that the monitoring results are representative of actual emissions.

The Permittee is required to keep maintenance records to show that proper maintenance procedures were followed, and to make the records available to the Department. The Department may use these records as a trigger for requesting source testing if the records show that an adequate maintenance schedule is not maintained.

Condition 86, Dilution

Legal Basis: This condition reiterates 18 AAC 50.045(a), which prohibits the Permittee from using dilution as an emission control strategy. 18 AAC 50.045 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2.

Factual Basis: The condition prohibits the Permittee from diluting emissions as a means of compliance with any standard in 18 AAC 50.

Condition 87, Reasonable Precautions to Prevent Fugitive Dust

Legal Basis: This condition reiterates 18 AAC 50.045(d), which requires a person to use reasonable precautions when handling, storing or transporting bulk materials or engaging in an industrial activity. 18 AAC 50.045 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2.

This requirement applies because the Permittee has an emission unit or activity listed under Table 7 of 18 AAC 50.346(c). The listed emission units and activities in Table 7 are: coal-fired boilers; coal handling facilities; construction of gravel pads or roads that are part of a permitted stationary source or other construction that has the potential to generate fugitive dust that reaches ambient air; commercial/industrial/municipal solid waste, air curtain, and medical waste incinerators; sewage sludge incinerators not using wet methods to handle that ash; mines; urea manufacturing; soil remediation units; or dirt roads under the control of the operator with frequent vehicle traffic.

Factual Basis: The Department used the language in SPC X for the permit. The condition requires the Permittee to take reasonable action to prevent particulate matter from being emitted into the ambient air in accordance with 18 AAC 50.045(d).

Condition 88, Stack Injection

Legal Basis: This condition reiterates 18 AAC 50.055(g), which prohibits the Permittee from releasing materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack (i.e., disposing of material by injecting it into a stack). 18 AAC 50.055 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2.

Stack injection requirements apply to stacks of emissions units at a stationary source constructed or modified after November 1, 1982.

Factual Basis: No specific monitoring for this condition is practical. Compliance is verified by inspections, because the unit or stack would need to be modified to accommodate stack injection.

Condition 89, Air Pollution Prohibited

Legal Basis: This condition requires compliance with 18 AAC 50.110. 18 AAC 50.110 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2. The condition prohibits the Permittee from causing 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. The Department also included permit conditions for MR&R as required by 40 C.F.R. 71.6(a)(3) and 71.6(c)(1).

Factual Basis: The Department used the language in SPC II for the permit. This condition spells out how to monitor, record, and report prohibited air pollution. While the other permit conditions and emissions limitations should ensure compliance with this condition, unforeseen emission impacts can cause violations of this standard. These violations would go undetected except for complaints from affected persons. Therefore, to monitor compliance, the Permittee must monitor and respond to complaints.

The Permittee is required to report any complaints and injurious emissions. The Permittee must keep records of the date, time, and nature of all complaints received and summary of the

investigation and corrective actions undertaken for these complaints, and must submit copies of these records upon request of the Department.

Condition 90, Technology-Based Emission Standard

Legal Basis: The Permittee is required to take reasonable steps to minimize emissions if unavoidable emergency, malfunction, or non-routine repair activities cause an exceedance of any technology-based emission standard in this permit. This condition requires compliance with the requirement in 18 AAC 50.235. Technology-Based Emission Standard requirements apply because the stationary source contains equipment subject to a technology-based emission standard, such as BACT, MACT, LAER, NSPS or any other similar standard for which the stringency of the standard is based on determinations of what is technologically feasible, considering relevant factors.

Factual Basis: The conditions of this permit list applicable technology-based emission standards and require excess emission reporting for each standard in accordance with Condition 106. Excess emission reporting under Condition 106 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 106.

Condition 91, Open Burning

Legal Basis: The condition requires the Permittee to comply with the regulatory requirements in 18 AAC 50.065 when conducting open burning at the stationary source. 18 AAC 50.065 is included in the SIP approved by EPA and, therefore, is an applicable requirement, per 40 C.F.R. 71.2. The state open burning regulation in 18 AAC 50.065 applies to the Permittee if the Permittee conducts open burning at the stationary source.

Factual Basis: The Permittee may conduct open burning by following the provisions of 18 AAC 50.065 and by following the Department guidelines posted at the website http://dec.alaska.gov/air/air-permit/open-burn-info. Condition 91.1 requires the Permittee to keep records to demonstrate compliance with the standards for conducting open burning.

More extensive monitoring and recordkeeping is not warranted because the Permittee does not conduct open burning as a routine part of their business. Also, most of the requirements are prohibitions, which are not easily monitored. Compliance is demonstrated through annual certification required under Condition 108.

Condition 92, Requested Source Tests

Legal Basis: The Permittee is required to conduct source tests as requested by the Department. This requirement is under 18 AAC 50.220(a) and 50.345(k), which are included in the SIP approved by EPA.

Factual Basis: This condition applies because this is a standard condition to be included in all operating permits, as specified in 18 AAC 50.345(a). Compliance is demonstrated through the submission of the required source test plan and report.

Conditions 93 through 95, Operating Conditions, Reference Test Methods, Excess Air Requirements

Legal Basis: Conditions 93 and 95 require compliance with the applicable requirements in 18 AAC 50.220(b) and (c)(3), which are included in the SIP approved by EPA. Condition

94 specifies source test methods, as required by 40 C.F.R. 71.6(a)(3)(i) and 71.6(c)(1). These requirements apply because the Permittee is required by the permit to conduct source tests or a source test may be requested by the Department. The Permittee is required to conduct source tests in the manner set out in Conditions 93 through 95.

Factual Basis: These conditions supplement the specific monitoring requirements stated elsewhere in this permit.

Condition 96, Test Exemption

Legal Basis: This condition incorporates the source test exemption in 18 AAC 50.345(a) regarding visible emissions observations. 18 AAC 50.345(a) is included in the SIP approved by EPA.

Factual Basis: As provided in 18 AAC 50.345(a), the requirements for test plans, notifications and reports do not apply to visible emissions observations by smoke readers, except in connection with required particulate matter testing.

Conditions 97 through 100, Test Deadline Extension, Test Plans, Notifications and Reports

Legal Basis: Conditions 98 through 100 require compliance with the applicable requirements in 18 AAC 50.345(m) through (o), which are included in the SIP approved by EPA. Condition 97 contains the requirement in 18 AAC 50.345(l). The requirements in 18 AAC 50.345(l) through (o) constitute standard conditions that must be included in each operating permit, as specified in 18 AAC 50.345(a). These requirements apply because the Permittee is required to conduct source tests as set out by this permit or as requested by the Department.

Factual Basis: These standard conditions supplement specific monitoring requirements stated elsewhere in this permit.

Condition 101, Particulate Matter Calculations

Legal Basis: This condition requires the Permittee to reduce particulate matter data in accordance with 18 AAC 50.220(f), which is included in the SIP approved by EPA. It applies when the Permittee tests for compliance with the particulate matter standards in 18 AAC 50.050 or 50.055.

Factual Basis: The condition incorporates a regulatory requirement for particulate matter source tests. This condition supplements specific monitoring requirements stated elsewhere in this permit.

Condition 102, Recordkeeping Requirements

Legal Basis: This condition requires the Permittee to keep records in accordance with 40 C.F.R. 71.6(a)(3)(ii), which the Department adopted by reference under 18 AAC 50.040(j)(4). It also incorporates the general NSPS recordkeeping requirement under 40 C. F. R. 60.7(f), which the Department adopted by reference under 18 AAC 50.040(a)(1).

Factual Basis: The condition restates the regulatory requirements for recordkeeping, and supplements the recordkeeping defined for specific conditions in the permit. The records being kept provide evidence of compliance with this requirement.

40 C.F.R. 60.7(f) requires records retention for at least two years of the measurements required to be maintained by this Part while 40 C.F.R. 71.6(a)(3)(ii) requires at least five years of records retention. The five-year records retention requirement in Condition 102 satisfies both 40 C.F.R. 60.7(f) and 40 C.F.R. 71.6(a)(3)(ii).

Condition 103, Certification

Legal Basis: All operating permits must contain a requirement to certify permit applications, reports, affirmations, or compliance certification, per 18 AAC 50.345(j). The requirement is a part of the SIP approved by EPA.

Factual Basis: The Department used the language in SPC XVII, adopted by reference under 18 AAC 50.346(b)(10), for the permit condition. The requirement in 18 AAC 50.345(j) is a standard condition that must be included in each operating permit, as specified in 18 AAC 50.345(a). 18 AAC 50.345(j) allows the excess emissions reports to be certified with the operating report. However, the Department reminds the Permittee that excess emissions reports must be submitted according to the applicable deadline given in Condition 106 and must not be withheld from the Department until the deadline for submittal of an operating report. This condition supplements the reporting requirements of this permit. The certification statement through electronic signature and options for submittal provide paperless options for reporting without compelling Permittees to any specific means of submission.

Condition 104, Submittals

Legal Basis: This condition applies because the Permittee is required to send reports to the Department and supplements the standard reporting and notification requirements of this permit.

Factual Basis: The Department used the language in SPC XVII, adopted by reference under 18 AAC 50.346(b)(10), for the permit condition. This condition lists the Department's appropriate address for reports and written notices. This condition states that the Department requires one certified copy of submitted reports (except as otherwise required by the Department or other conditions of the permit) and provides an allowance for either electronic or hard copy document submittals. The condition also directs the Permittee to refer to the submission instructions on the Department's Standard Permit Conditions webpage for additional information regarding document submittals (e.g., the appropriate Department address).

Condition 105, Information Requests

Legal Basis: All operating permits must include a condition that requires the Permittee to furnish certain information upon request, per 18 AAC 50.345(i). The requirement is part of the SIP approved by EPA.

Factual Basis: The requirement in 18 AAC 50.345(i) is a standard condition that must be included in each operating permit, as specified in 18 AAC 345(a). This condition requires the Permittee to submit information requested by the Department.

Condition 106, Excess Emission and Permit Deviation Reports

Legal Basis: This condition requires the Permittee to comply with the requirements in 18 AAC 50.235(a)(2) and 18 AAC 50.240(c). Also, the Permittee is required to notify the Department when emissions or operations deviate from the requirements of the permit.

Factual Basis: This condition satisfies two state regulations related to excess emissions: the technology-based emission standard regulation and the excess emission regulation. Although there are some differences between the regulations, the condition satisfies the requirements of each regulation.

The Department used the language in SPC III, adopted by reference under 18 AAC 50.346(b)(2), for the permit condition. In accordance with 18 AAC 50.270, beginning September 7, 2023, the Department requires electronic notification of excess emissions and permit deviations. Therefore, the notification form in SPC IV adopted by reference under 18 AAC 50.346(b)(3), may only be used for the notification requirements upon written Department approval (see Section 14).

Condition 107, Operating Reports

Legal Basis: The condition specifies reporting requirements as required by 40 C.F.R. 71.6(a)(3)(iii)(A) which the Department has adopted by reference under 18 AAC 50.040(j)(4).

Factual Basis: The Department used the language in SPC VII, adopted by reference under 18 AAC 50.346(b)(6), for the permit condition. The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements identified elsewhere in the permit.

The condition specifies that for the transition periods between an expiring permit and a renewal permit, the Permittee shall ensure that there is date-to-date continuity between the expired permit and the renewal permit such that the Permittee reports against the permit terms and conditions of the permit that was in effect during those partial date periods of the transition. No format is specified. The Permittee may provide one report accounting for each permit term or condition and the effective permit at that time. Alternatively, the Permittee may choose to provide two reports: one accounting for reporting elements of permit terms and conditions from the end date of the previous operating report until the date of expiration of the old permit, and a second operating report accounting for reporting elements of terms and conditions in effect from the effective date of the renewal permit until the end of the reporting period.

Condition 108, Annual Compliance Certification

Legal Basis: This condition requires compliance with the requirements in 40 C.F.R. 71.6(c)(5), which the Department adopted by reference under 18 AAC 50.040(j).

Factual Basis: This condition specifies the periodic compliance certification requirements, and specifies a due date for the annual compliance certification.

Condition 108.2 provides clarification of transition periods between an expiring permit and a renewal permit to ensure that the Permittee certifies compliance with the permit terms and conditions of the permit that was in effect during those partial date periods involved in the transition. No format is specified. The Permittee may provide one report certifying compliance with each permit term or condition for each of the effective permits during the certification period, or may choose to provide two reports: one certifying compliance with permit terms and conditions from January 1 until the date of expiration of the old permit, and a second report certifying compliance with terms and conditions in effect from the effective date of the renewal permit until December 31.

The Permittee is required to submit to the Department an annual compliance certification report. The Permittee may submit the required report electronically at their discretion.

Condition 109, Emission Inventory Reporting

Legal Basis: This condition requires the Permittee to submit emissions data to the state so the state is able to satisfy the federal requirement to submit emission inventory data from point sources to the EPA as required under 40 C.F.R. 51.15 and 51.321. The emission inventory requirement applies to sources defined as point sources in 40 C.F.R. 51.50. The state must report emissions data as described in 40 C.F.R 51.15 and the data elements in Tables 2a and 2b to Appendix A of 40 C.F.R. 51 Subpart A to EPA.

Factual Basis: The Department used the language in SPC XV, as adopted by reference under 18 AAC 50.346(b)(8), for the permit condition.

The emission inventory data is due to EPA 12 months after the end of the reporting year (40 C.F.R. 51.30(a)(1) and (b)(1)). Permittees have until April 30th to compile and submit the data to the Department. To expedite the Department's process of transferring data into EPA's electronic reporting system, the Department encourages Permittees to submit the emission inventory through the Department's electronic emission inventory submission system in the Permittee Portal on the Department's Air Online Services webpage http://dec.alaska.gov/Applications/Air/airtoolsweb/. A myAlaska account and profile are needed to gain access to the Permittee Portal. Other options are to submit the emission inventory via mail, email, or fax.

Detailed instructions on completing and submitting the emission inventory and the report form are available at the Point Source Emission Inventory page http://dec.alaska.gov/Applications/Air/airtoolsweb/PointSourceEmissionInventory by clicking the Emission Inventory Instructions button. The emission inventory instructions and report form may also be obtained by contacting the Department.

To ensure that the Department's electronic system reports complete information to the National Emissions Inventory, Title V stationary sources are required to submit with each report emissions data described in 40 C.F.R. 51.15 and the data elements in Tables 2a and 2b to Appendix A of 40 C.F.R. 51 Subpart A, as applicable. Title V stationary sources with potential annual emissions greater than or equal to any of the emission thresholds shown in Condition 109.1 for Type A (large) sources, as listed in Table 1 to Appendix A of 40 C.F.R. 51 Subpart A, are required to report emission inventory data every year for the previous calendar year (also known as the inventory year). For triennial inventory years, Type A sources only need to submit one report, not both an annual report and a separate triennial report.

Title V stationary sources with potential annual emissions greater than or equal to any of the emission thresholds for Type B (small) sources shown in Condition 109.2.a (for attainment and unclassifiable areas) and Condition 109.2.b (for nonattainment areas), as listed in Table 1 to Appendix A of 40 C.F.R. 51 Subpart A, are required to report emission inventory data every third year (i.e., triennially) for the previous inventory year. The emission thresholds for nonattainment areas listed in Condition 109.2.b vary depending on the nonattainment status of the area. As of June 9, 2017, Fairbanks and North Pole urban area have been designated by the federal administrator as "serious nonattainment" for $PM_{2.5}$. Therefore, a stationary source located in Fairbanks and North Pole urban area is subject to the triennial reporting requirement

if its potential to emit is greater than or equal to any of the threshold values in Conditions 109.2.b(i), 109.2.b(ii), 109.2.b(iii) (PM_{10} only), and 109.2.b(iv).

As of the issue date of this permit, the Clear Space Force Station (Clear SFS) is a Type B stationary source.

Condition 110, NSPS and NESHAP Reports

Legal Basis: The Permittee is required to provide the Department a copy of each report submitted to EPA as required for emissions units subject to NSPS or NESHAP federal regulations under 18 AAC 50.326(j)(4). Appendix A to 40 C.F.R. 70 documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

Factual Basis: The condition supplements the specific reporting requirements in 40 C.F.R. 60, 40 C.F.R. 61, and 40 C.F.R. 63. The reports themselves provide monitoring for compliance with this condition.

Condition 111, Permit Applications and Submittals

Legal Basis: 40 C.F.R. 71.10(d)(1), adopted by reference by the Department under 18 AAC 50.040(j)(7), requires submission of a copy of each permit application to EPA.

Factual Basis: The Department used the language in SPC XIV, adopted by reference under 18 AAC 50.346(b)(7), for the permit condition. The condition directs the applicant to send a copy of each application for modification or renewal of this permit to the EPA. The information may be submitted in electronic format, if practicable. This condition shifts the burden of compliance with 40 C.F.R. 71.10(d)(1) from the Department to the Permittee as allowed under 40 C.F.R. 71.10(d)(1).

Conditions 112 through 114, Permit Changes and Revisions Requirements

Legal Basis: The Permittee is obligated to notify the Department of certain off-permit source changes and operational changes under18 AAC 50.326(j)(4). 40 C.F.R. 71.6(a)(8), (12), and (13), incorporated by reference under 18 AAC 50.040(j), require that these provisions be included in operating permits.

Factual Basis: 40 C.F.R. 71.6(a)(12) and (13), as reflected in Conditions 113 and 114, respectively, specify changes that may be made without a permit revision, and 40 C.F.R. 71.6(a)(8) (Condition 112) states permit revisions are not required for some emissions trading and similar programs.

The Permittee did not request trading of emission increases and decreases as described in 40 C.F.R. 71.6(a)(13)(iii); therefore, language addressing these provisions has not been included in this permit as part of Condition 112.

Condition 115, Permit Renewal

Legal Basis: The Permittee must submit a timely and complete operating permit renewal application if the Permittee intends to continue source operations in accordance with the operating permit program. The obligations for a timely and complete operating permit application are in 40 C.F.R. 71.5(a) – (c), adopted by reference in 18 AAC 50.040(j)(3), and 18 AAC 50.326(c).

Factual Basis: In accordance with AS 46.14.230(a), this operating permit is issued for a fixed term of five years after the date of issuance, unless a shorter term is requested by the permit applicant. The Permittee is required to submit an application for permit renewal by the specific dates applicable to the stationary source as listed in this condition. As stated in 40 C.F.R. 71.5(a)(1)(iii), submission for a permit renewal application is considered timely if it is submitted at least six months but no more than eighteen months prior to expiration of the operating permit. According to 40 C.F.R. 71.5(a)(2), a complete renewal application is one that provides all information required pursuant to 40 C.F.R. 71.5(c) and remits payment of fees owed under the fee schedule established pursuant to 18 AAC 50.400. 40 C.F.R. 71.7(b) states that if a source submits a timely and complete application for permit issuance (including renewal), the source's failure to have a permit is not a violation until the permitting authority takes final action on the permit application.

Therefore, as long as an application has been submitted within the timeframe specified under 40 C.F.R. 71.5(a)(1)(iii) and is complete before the expiration date of the existing permit, then the expiration of the existing permit is extended and the Permittee has the right to operate under that permit until the effective date of the new permit. However, this protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit by the deadline specified in writing by the Department any additional information needed to process the application.

Conditions 116 through 119, National Security

Legal Basis: For the purposes of this rule, a "National Security Emergency" means a situation where extremely quick action on the part of a Military Department or a Department of Defense component is needed, and when timing of such action may make it impracticable to meet one or more requirements of an applicable permit or those related to non-permitted emission units.

Factual Basis: Authority for the National Security Emergency comes under Presidential Executive Order 12656 Part 5 Department of Defense, 40 C.F.R. 71.6(g)(1)-(g)(5) and 18 AAC 50.235 and AS 46.14.540.

Conditions 120 through 126, General Compliance Requirements and Schedule

Legal Basis: These conditions require compliance with the applicable requirements in 18 AAC 50.345(b) through (d) and (h) and 40 C.F.R. 71.6(c)(3). As stated in 18 AAC 50.345(a), the requirements in 18 AAC 50.345(b) through (d) and (h) are standard conditions that must be included in all operating permits issued by the Department.

Factual Basis: These are standard conditions for compliance required for all operating permits.

Conditions 127 and 128, Permit Shield

Legal Basis: These conditions require compliance with the requirements in 40 C.F.R. 71.6(f), which the Department has adopted by reference under 18 AAC 50.040(j)(4). These requirements apply because the Permittee has requested that the Department shield the stationary source from specific non-applicable requirements listed under this condition.

Factual Basis: Table C of Operating Permit No. AQ0318TVP05 shows the permit shield that the Department granted to the Permittee. The permit conditions set forth the requirements

that the Department determined were not applicable to the stationary source at the time of permit issuance. The Department based the determinations on the permit application, past operating permit, Title I permits, and inspection reports. Should any of the shielded requirements become applicable during the permit term, the Permittee is required to take necessary steps to comply with all applicable requirements in a timely manner.