DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ0307TVP04 Issue Date: Public Comment - February 15, 2024
Expiration Date: [Five Years]

The Alaska Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the Permittee, **United States Air Force**, for the operation of the **Eareckson Air Station**.

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

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

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

All currently applicable stationary source-specific terms and conditions of Air Quality Control Minor Permit No. AQ0307MSS05 have been incorporated into this operating permit.

Upon effective date of this permit, Operating Permit No. AQ0307TVP03, Revision 2 is revoked.

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
EB……... Emergency Backup
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 Air Force** PACAF Regional Support Center (PRSC)/CC 10471 20th Street, Suite 265 Joint Base Elmendorf-Richardson (JBER), AK 99506-2101
Stationary Source Name:		**Eareckson Air Station**
Location:		52º 42′ 45" North; 174º 6′ 49" West
Physical Address:		Shemya Island, Alaska
Owner:		**United States Air Force** PACAF Regional Support Center (PRSC)/CC 10471 20th Street, Suite 265 Joint Base Elmendorf-Richardson (JBER), AK 99506-2101
Operator:		**United States Air Force** PACAF Regional Support Center (PRSC)/CC 10471 20th Street, Suite 265 Joint Base Elmendorf-Richardson (JBER), AK 99506-2101
Permittee's Responsible Official:		Breanna D. Fulton, PRSC Commander PACAF Regional Support Center (PRSC)/CC 10471 20th Street, Suite 265 Joint Base Elmendorf-Richardson (JBER), AK 99506-2101
Designated Agent:		Randy Reed, Air Quality Program Manager 611 CES/CEIE 10471 20th Street, Suite 322 Joint Base Elmendorf-Richardson (JBER), AK 99506-2101
Stationary Source and Building Contact:		Randy Reed, Air Quality Program Manager 611 CES/CEIE 10471 20th Street, Suite 322 Joint Base Elmendorf-Richardson, AK 99506-2101 (907) 552-4498 William.reed.36@us.af.mil
Fee Contact:		Kathleen Briggs 611 CES/CEIE 10471 20th Street, Suite 319 Joint Base Elmendorf-Richardson, AK 99506-2101 (907) 552-5657 Kathleen.briggs.1@us.af.mil
Permit Contact:		Randy Reed, Air Quality Program Manager 611 CES/CEIE 10471 20th Street, Suite 322 Joint Base Elmendorf-Richardson, AK 99506-2101 (907) 552-4498 William.reed.36@us.af.mil
Process Description:	SIC Code	9711 - National Security
	NAICS Code:	928110 - National Security

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

Section 2. Emissions Unit Inventory and Description

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

Table A - Emissions Unit Inventory

EU ID	Building	EU Name	EU Description	Rating/Size	Installation or Construction Date	Manufacturer Date
Main Generators						
7	3049	Engine 1	Caterpillar C280-3616 SN: NKB00320	4,600 kW/ 7,268 Hp	Jan 13, 2015	2013
8	3049	Engine 2	Caterpillar C280-3616 SN: NKB00317	4,600 kW/ 7,268 Hp	Jan. 13, 2015	2013
9	3049	Engine 3	Caterpillar C280-3616 SN: NKB00315	4,600 kW/ 7,268 Hp	July 1, 2014	2013
10	3049	Engine 4	Caterpillar C280-3616 SN: NKB00316	4,600 kW/ 7,268 Hp	July 1, 2014	2013
Firewater Pump Engines						
13	3057	Firewater Pump #2	Detroit DDFP-04AT SN: 4A-250901	188 Hp	Oct. 1998	April 1981
14	3057	Firewater Pump #1	Detroit DDFP-04AT SN: 4A-256080	235 Hp	Oct. 1998	Oct. 1981
15	3051	Firewater Pump	Clarke JU6H-UF30 SN: PE6068T407586	160 Hp	Feb. 2005	Feb. 2005
16	3051	Firewater Pump #1	Clarke JU6H-UF30 SN: PE6068T228685	160 Hp	2004	July 2003
17	3051	Firewater Pump #2	Clarke JU6H-UF30 SN: PE6068T228691	160 Hp	2004	July 2003
Emergency Generators						
24	629	EB Generator	Cummins 4B-3.9 SN: 44220019	66 Hp	1987	Sept. 1987
27	76-558	EB Generator	Mitsubishi 4D31-PT SN: 81473-A	40 kW/ 74 Hp	Jan. 1987	--
30	3049	EB Generator	Caterpillar 3406B SN: 2WB04370	248 kW/ 333 Hp	Jan. 1990	--
30a	3049	EB Generator	Caterpillar C9 SN: S9L01601	319 kW/ 480 Hp	2020	2007
32	4014	EB Generator	Mitsubishi S6N-PTA SN: 12939	350 kW/ 540 Hp	Jan. 1990	--
33	4014	EB Generator	Mitsubishi S6N-PTA SN: 12940	350 kW/ 540 Hp	Jan. 1991	Feb. 1989
34	600	EB Generator	Caterpillar 3406B D1 SN: 2WB10512	283 kW/ 417 Hp	Jan. 1991	--
35	609	EB Generator	Cummins 6CT-8.3 SN: 44219953	154 kW/ 207 Hp	Jan. 1995	--
36	754	EB Generator	Caterpillar 3412 SN: 81Z04233	496 kW/ 665 Hp	1995	--
39	110	EB Generator	Cummins, Model # NTA855G3, SN: 30338752	409 kW/ 535 Hp	1/1996	11/1992
40	628	EB	Caterpillar 3406BD1	302 kW/	Jan. 1998	--

EU ID	Building	EU Name	EU Description	Rating/Size	Installation or Construction Date	Manufacturer Date
		Generator	SN: 2WB11445	405 Hp		
41	718	EB Generator	Cummins 4BT-3.9 Series B SN: 44232592	76.1 kW/ 102 Hp	Jan. 2000	Dec. 1987
42	775	EB Generator	Cummins VT A28 62 SN: 49951	500 kW/ 900 Hp	Jan. 2001	Nov. 1987
50a	74-041-1a	EB Generator	Deutz D2011L04i SN: 1181337	47.5 kW/ 64 Hp	March 2017	2012
51a	74-041-2b	EB Generator	Deutz D2011L04i SN: 21508033	47.5 kW/ 64 Hp	March 2017	2012
87[1]	620	EB Generator	Volvo Penta TAD1630G SN: 2160 033833	494 kW/ 672 Hp	2004	--
91[1]	585	EB Generator	Fermont MEP-701A SN: 100284	100 kW/ 134 Hp	2018	March 2007
92[1]	585	EB Generator	Fermont MEP-701A SN: 100165	100 kW/ 134 Hp	2018	Oct. 2006
Boilers and Heaters						
54a	515	Boiler	Burnham 4FHW-107A-50.0PF, SN: 1108999LB	0.716 MMBtu/hr	Sep. 2012	--
55a	110	Boiler	Columbia SN: WO-BC800	0.8 MMBtu/hr	2015	--
61	3045	Boiler	Burnham 4FW-63-50-O-PF SN: 20870	0.528 MMBtu/hr	Jan. 1994	--
62a	600	Process heater	Riello, RTC-80 550 SN:20158764CA01QC00058	5.5 MMBtu/hr	2021	2021
63	752	Hot Water Boiler #2	Kewanee Model No: M 205 KX, SN: 801071	2.05 MMBtu/hr	Jan. 1994	--
64	752	Boiler	Kewanee M205KX SN: 801071	2.05 MMBtu/hr	Jan. 1994	--
67	599	Boiler	Burnham 4FW-675A-45-0-PF, SN: 18730	6.319 MMBtu/hr	2004	--
68	755	Boiler #2	Kewanee Model M 205-KX, Order No: 813212	2.05 MMBtu/hr	Jan. 1995	--
70a	611	Boiler	Burnham 4FHW-180A-50-0/JP-PF, Order # 1209603LB	1.24 MMBtu/hr	2015	--
71	743	Boiler	Burnham 3W-100-50-0-PF SN: 22318	4.185 MMBtu/hr	1996	--
72	743	Boiler	Burnham 3W-100-50-0-PF SN: 22319	4.185 MMBtu/hr	1996	--
73	618	Boiler	Burnham 4FW-63-50-0-PF SN: 20874	0.528 MMBtu/hr	Jan. 1998	--
74a	600	Process heater	Riello RTC-80 550 SN:20158764CA01QC00059	5.5 MMBtu/hr	2021	2021
75	598	Boiler	Burnham 4FW-675A-45-0-PF, SN: 18730	8.675 MMBtu/hr	2002	--
77	729	Boiler	Weil-McLain 488 SN: CP2039826	0.810 MMBtu/hr	Unknown	--
78	755	Boiler #1	Kewanee, Model No: 7L-280-KX, SN: 813211	2.66 MMBtu/hr	2004	--
79	597	Boiler #1	Burnham 4FW-240-40-0-PF SN: 19537	2.51 MMBtu/hr	2005	--

EU ID	Building	EU Name	EU Description	Rating/Size	Installation or Construction Date	Manufacturer Date
80	597	Boiler #2	Burnham 4FW-240-40-0-PF SN: 19428	2.51 MMBtu/hr	2005	--
81	754	Boiler	Burnham 4FW-450A-50-0-PF, SN: 28496	3.015 MMBtu/hr	2004	--
82	754	Hot Water Boiler #2	Burnham 4FW-450A-50-0-PF, SN: 28498	3.015 MMBtu/hr	2004	--
86	490	Boiler	Columbia WL90 SN: 149359	1.014 MMBtuhr	Nov. 2012	--
88	618	Space Heater	Reznor Model RV225 SN BGDRV22560085X	0.2 MMBtu/hr	Unknown	Apr. 2007
90	743	Hot Water Boiler	PVI Industries 500N300A-TPO SN: 39481649	0.399 MMBtu/hr	1994	1994
Miscellaneous Emission Units						
85	--		Solid Waste Landfill, Permit SW2A013-25	77,333 cubic yards	2005	--
93	729	Burn Barrel	Elastec “Smart Ash”	64 lb/hr	Pre-2004	
94	729	Burn Barrel	Elastec “Smart Ash”	64 lb/hr	2004	
95 – 112	585	Micro-turbines	Capstone C30, Microturbines # 1 – 18	0.394 MMBtu/hr each	2004	--

Table Notes:

1. EU IDs 13 – 17, 24, 27, 30, 30a, 34, 35, 39 – 41, 50a, 51a, 91, and 92 are considered insignificant on an emission rate basis under 18 AAC 50.326(e). However, the units are listed in the table because they are subject to Title I and Title V permit requirements.
2. The Permittee decommissioned EU IDs 62 and 74 (process heaters).
3. EU IDs 54a, 55a, 61, 70a, 73, 77, 86, 88, and 90 are considered insignificant on an emission rate basis under 18 AAC 50.326(e). However, the units are listed in the table because they are subject to Title I permit requirements.
4. EU ID 85 is considered significant on an emission rate basis under 18 AAC 50.326(e), and therefore listed in the table. The Permittee shall operate EU ID 85 in accordance with the provisions of Eareckson Air Station landfill permit SW2A 0.13-25, approved by DEC Environmental Health Solid Waste Program.
5. EU IDs 93 – 112 are considered insignificant on an emission rate bases under 18 AAC 50.326(e). These units are being included in the table at the request of the permittee for transparency purposes only.

[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 7 - 10, 13 - 17, 24, 27, 30, 30a, 32 - 36, 39 - 42, 50a, 51a, 54a, 55a, 61, 62a, 63, 64, 67, 68, 70a, 71, 72, 73, 74a, 75, 77 - 82, 86 - 88, 90 - 92, and 95 - 112 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 7 - 10, monitor, record, and report in accordance with Conditions 2 - 4.

1.2. For each of EU IDs 32, 33, 36, 42, 62a, 63, 64, 67, 68, 71, 72, 74a, 75, 78 - 82, and 87, 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 80 for the visible emissions standard based on reasonable inquiry. The Permittee shall report in the operating report under Condition 79 if any of EU IDs 32, 33, 36, 42, 62a, 63, 64, 67, 68, 71, 72, 74a, 75, 78 - 82, and 87 reaches any of the significant emissions thresholds listed in 18 AAC 50.326(e) and monitor, record, and report in accordance with Conditions 2 through 4 for the remainder of the permit term for that emissions unit.

1.3. For EU IDs 13 - 17, 24, 27, 30, 30a, 34, 35, 39 - 41, 50a, 51a, 54a, 55a, 61, 70a, 73, 77, 86, 88, 90 - 92, and 95 - 112, monitoring shall consist of an annual compliance certification under Condition 80 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 1.2, or in the event of replacement[1] during the permit term, the Permittee shall observe the exhaust of EU IDs 7 - 10, 32, 33, 36, 42, 62a, 63, 64, 67, 68, 71, 72, 74a, 75, 78 - 82, and 87 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.

[1] *"Replacement,"* as defined in 40 C.F.R. 51.166(b)(32).

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 7 - 10, 32, 33, 36, 42, 62a, 63, 64, 67, 68, 71, 72, 74a, 75, 78 - 82, and 87 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 7 - 10, observe exhaust within six months after the effective date of this permit.

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

(A) For EU IDs 7 - 10, continue with the monitoring schedule of the replaced emissions unit; and

(B) For EU IDs 32, 33, 36, 42, 62a, 63, 64, 67, 68, 71, 72, 74a, 75, 78 - 82, and 87 comply with Condition 1.2.

(iv) For each of EU IDs 32, 33, 36, 42, 62a, 63, 64, 67, 68, 71, 72, 74a, 75, 78 - 82, and 87, observe the exhaust of the emissions unit within 30 days after the end of the calendar month during which monitoring was triggered under Condition 1.2; or for an emissions unit with intermittent operations, within the first 30 days during the unit's next scheduled operation.

b. Monthly Method 9 Observations. After the first Method 9 observation conducted under Condition 2.3.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

[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.

(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 10;

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

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

(iv) opacity observations to the nearest five percent at 15-second intervals on the Visible Emission Observation Form in Section 10; and

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

b. To determine the six-minute average opacity,

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

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

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

(iv) record the average opacity on the sheet.

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

3.2. If using the Smoke/No Smoke Plan of Condition 2.4, record the following information in a written log for each observation and submit copies of the recorded information upon request of the Department:

a. the date and time of the observation;

b. the EU ID of the emissions unit observed;

c. whether visible emissions are present or absent in the emissions unit exhaust;

d. a description of the background to the exhaust during the observation;

e. if the emissions unit starts operation on the day of the observation, the startup time of the emissions unit;

f. name and title of the person making the observation; and

g. operating rate (load or fuel consumption rate or best estimate**,** if unknown).

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

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

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

4.1. In the first operating report required in Condition 79 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 79 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 78:

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 7 - 10, 13 - 17, 24, 27, 30, 30a, 32 - 36, 39 - 42, 50a, 51a, 54a, 55a, 61, 62a, 63, 64, 67, 68, 70a, 71, 72, 73, 74a, 75, 77 - 82, 86 - 88, 90 - 92, and 95 - 112 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 7-10, monitor, record and report in accordance with Conditions 6 through 8.

5.2. For each of EU IDs 32, 33, 36, 42, 62a, 63, 64, 67, 68, 71, 72, 74a, 75, 78 - 82, and 87, 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 80 for the PM emissions standard based on reasonable inquiry. The Permittee shall report in the operating report under Condition 79 if any of EU IDs 32, 33, 36, 42, 62a, 63, 64, 67, 68, 71, 72, 74a, 75, 78 - 82, and 87 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.

5.3. For EU IDs 13 - 17, 24, 27, 30, 30a, 34, 35, 39 - 41, 50a, 51a, 54a, 55a, 61, 70a, 73, 77, 86, 88, 90 - 92, and 95 - 112, the Permittee must annually certify compliance under Condition 80 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)]

5.4. Fuel Blending Requirement for EUs 7 – 10:

a. Use the WOTEC[4] system to blend at the highest blending ratio at which the emission unit was tested and no more than 1 part used oil with 57 parts JP-8 (1.75% blend ratio).

b. Record the blend ratio setting in the WOTEC system each time the setting is changed and submit the records on request.

[Condition 5.2, Minor Permit AQ0307MSS05, MM/DD/YY]

5.5. Fuel Blending Requirement for EUs 54a, 55a, 61, 62a, 63, 64, 67, 68, 70a – 75, 77 – 82, 86, 88, and 90:

a. Blend the used oil in the ratio of no more than 1 part used oil with 2 parts JP-8 oil; and

b. Record the blend ratio each time used oil is added to the fuel tank and submit the records on request.

[Condition 5.3, Minor Permit AQ0307MSS05, MM/DD/YY]

PM MR&R

Liquid Fuel-Burning Engines and Turbines

6. PM Monitoring. The Permittee shall conduct source tests on EU IDs 7-10 and EU IDs 32, 33, 36, 42, and 87 (when required by Condition 5.2), 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)]

[4] WOTEC: Waste Oil to Energy Converter Filtration System

6.1. If the result of any Method 9 observation conducted under Condition 2.3 for any of EU IDs 7-10 and EU IDs 32, 33, 36, 42, and 87 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 5.

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 diameter(s) of EU IDs 30a, 62a, 74a, 87, 91, 92, and 95 – 112.

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 79, 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 30a, 62a, 74a, 87, 91, 92, and 95 – 112 in the next operating report under Condition 79 following the deadline in Condition 7.1 for collecting the stack diameter records.

8.4. Report in accordance with Condition 78:

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 62a, 63, 67, 68, 71, 72, 74a, 75, and 78 – 82 (when required by Condition 5.2) 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 62a, 63, 67, 68, 71, 72, 74a, 75, and 78 – 82 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 5.

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 79, 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 78 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)]

Used Oil Burning

12. PM Monitoring, Recordkeeping, and Recording. The Permittee may burn used oil in EUs 7 – 10, 54a, 55a, 61, 62a, 63, 64, 67, 68, 70a – 75, 77 – 82, 86, 88, and 90 as follows:

12.1. The used oil on site must be generated on site and the Federal notification requirements must have been met. The Permittee shall not accept used oil from another person unless the applicable requirements of 18 AAC 62.410 are met, and a permit amendment has been requested.

12.2. The used oil or blend of used oil and JP-8 shall not contain constituents exceeding the quantities in Table B. To ensure compliance, the Permittee shall:

a. analyze an initial composite sample of each batch of used oil using SW-846 test method for arsenic, lead, calcium, chromium, total halogens, flash point, polychlorinated biphenyls and sulfur;

b. retest the blended used oil until no specification in Table B is exceeded; and

c. maintain records showing the blending ratio and the results of each analysis. Submit the records with the stationary source's EPA ID number when requested.

Table B – Specifications for used oil or used oil and distillate oil blend

Constituent/Property	Allowable Level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Flash point	100 °F minimum
Total halogens	4,000 ppm maximum[1]
Sulfur	0.3% by weight[2]

Table Notes:

[1]Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 C.F.R. 279.10(b)(1). Such used oil is subject to 40 C.F.R. 266 Subpart H rather than 40 C.F.R. 279 Subpart B when burned for energy recovery unless the presumption of mixing can be successfully rebutted.

[2]Sulfur limit is not included in 40 C.F.R. 279.11, Table 1. The sulfur limit is consistent with Condition 15.

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]
[40 C.F.R. 279.11, Table 1]
[40 C.F.R. 71.6(a)(3)]

Sulfur Compound Emissions Standard

13. Sulfur Compound Emissions. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EU IDs 7 - 10, 13 - 17, 24, 27, 30, 30a, 32 - 36, 39 - 42, 50a, 51a, 54a, 55a, 61, 62a, 63, 64, 67, 68, 70a, 71, 72, 73, 74a, 75, 77 - 82, 86 - 88, 90 - 92, and 95 - 112 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)]

Fuel Oil[5] *(EU IDs 7 - 10, 13 - 17, 24, 27, 30, 30a, 32 - 36, 39 - 42, 50a, 51a, 54a, 55a, 61, 62a, 63, 64, 67, 68, 70a, 71, 72, 73, 74a, 75, 77 - 82, 86 - 88, 90 - 92, and 95 - 112)*

13.1. The Permittee shall demonstrate compliance with Condition 13 by complying with Condition 15.

Preconstruction Permit [6] Requirements

Ambient Air Quality Protection Requirements[7]

14. Fuel Specifications. The Permittee:

14.1. shall burn only JP-8 that has the specifications of diesel fuel in all emission units except EUs 7 – 10, 54a, 55a, 61, 62a, 63, 64, 67, 68, 70a – 75, 77 – 82, 86, 88, and 90;

14.2. may burn used oil in EUs 7 – 10, 54a, 55a, 61, 62a, 63, 64, 67, 68, 70a – 75, 77 – 82, 86, 88, and 90 as long as the used oil complies with the fuel blending requirements specified in

a. Condition 5.4.a for EUs 7 – 10; and

b. Condition 5.5.a for EUs 54a, 55a, 61, 62a, 63, 64, 67, 68, 70a – 75, 77 – 82, 86, 88, and 90.

14.3. shall maintain records showing the fuels used in each EU listed in Conditions 14.1 and 14.2 and submit the records when requested.

[Condition 7, Minor Permit No. AQ0307MSS05 MM/DD/YY]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

15. Sulfur Content of Fuels. The Permittee shall limit the sulfur content of liquid fuels fired in all EUs to no more than 0.3-percent by weight (wt%)[8].

[Condition 8, Minor Permit No. AQ0307MSS05 MM/DD/YY]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

[5] *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.

[6] *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.

[7] The ambient air quality protection requirements conditions are predicated upon a legacy modeling analysis from Construction permit 307CP01 or the stationary source's prior permit-to-operate. The associated terms and conditions remain applicable and have been carried forward through multiple minor permit revisions and rescissions.

[8] For oil combusted in EUs 7 – 10, the sulfur content of the used lubricating oil must be less than 200 parts per million and the used lubricating oil must meet the on-specification levels and properties for used oil in 40 C.F.R. 279.11 (40 C.F.R. 60.4207).

15.1. **Monitoring.** Obtain a statement of certification from the fuel supplier showing that all liquid fuel delivered to the stationary source complies with Condition 15. If a statement or certification is not available from the fuel supplier, analyze a representative sample of the fuel for each shipment delivered to the stationary source to determine the sulfur content using an approve ASTM method such as D975-94, D3120-92, D4152-90, D2622-91, and D396-92, or an appropriate method listed in 18 AAC 50.035(b)-(c) and 40 C.F.R. 60.17 incorporated by references in 18 AAC 50.040(a)(1).

15.2. Keep a record of the statements of certifications and all test result and calculations required under Condition 15.1. Attach copies of the records with the operating report required by Condition 79.

15.3. Report in accordance with Condition 78 if the monitoring in Condition 15.1 determines the fuel received does not meet the requirements of Condition 15.

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

16. Nonroad Engine Use. Track and report in the operating report required by Condition 79, the use of permanent and temporary nonroad engines installed at the stationary source that have a rating greater than 400 brake horsepower. Include in the report the engine's size, serial number, tag number if assigned, installation date, initial startup date, shutdown date, and date the engine was removed from the facility.

[Condition 10, Minor Permit No. AQ0307MSS05 MM/DD/YY]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

16.1. No less than once each calendar year, examine each nonroad engine[9] to determine whether the emission units continue to qualify as nonroad engines in accordance with the definition in 40 C.F.R. 1068.30.

16.2. If the Permittee identifies a nonroad emission unit that has lost its nonroad engine status, then the Permittee shall report within 60 days after discovery under Condition 78 and request permit revisions to incorporate applicable MR&R requirements for that emission unit as a stationary emission unit.

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

Best Available Control Technology (BACT) Requirements

17. BACT Limits and MR&R Requirements. The Permittee shall comply with BACT limits as set out in Conditions 17.1 through 17.3.

17.1. Nitrogen Oxides (NO_x): Operate the following EUs with good combustion practices:

[9] A nonroad engine is a transportable internal combustion unit that is on site for no more than 12 consecutive months or seasonally for no more than 24 months. Transportability includes, but is not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. A complete definition of a nonroad engine can be found in 40 C.F.R. 1068.30.

a. Firewater pump engine EUs 13, 14, 16, and 17; and

b. Boilers EUs 78 – 82.

17.2. Carbon monoxide (CO): Operate the firewater pump engines, EUs 13 and 14 with good combustion practices.

17.3. SO_2: Limit the sulfur content in fuel oil burned in EUs 16, 17, and 78 – 82 to no greater than 0.3 percent by weight. Monitor, record, and report in accordance with Conditions 15.1 through 15.3.

[Condition 11, Minor Permit No. AQ0307MSS05 MM/DD/YY]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

ORLs to Avoid PSD Review for Modification

Avoidance Limits for SO_2:

18. SO_2 Emissions Limit. The Permittee shall limit the emissions of SO_2 from EUs 7 – 10 to no greater than 71.7 tons in any 12 consecutive month period to avoid permit classification as a prevention of significant deterioration (PSD) major modification.

18.1. **SO_2 Operating Limit.** To ensure compliance with the SO_2 emissions limit in Condition 18, the Permittee shall:

a. limit the sulfur content of liquid fuels fired in EUs 7 – 10 to no greater than 0.3 percent by weight;

b. limit the combined total amount of fuel fired in EUs 7 – 10 to no greater than 3,390,000 gallons in any 12 consecutive month period; and

[Condition 12, Minor Permit No. AQ0307MSS05 MM/DD/YY]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

c. **MR&R for Sulfur Content of Fuel Burned in EUs 7 – 10.** The Permittee shall monitor, record, and report the sulfur content of fuel burned in EUs 7 – 10 as described in Conditions 15.1 through 15.3.

d. **MR&R For Gallons of Fuel Burned in EUs 7 – 10.** The Permittee shall monitor, record, and report the gallons of fuel burned in EUs 7 – 10 as follows:

(i) Monitor and record the daily fuel burned by each of EUs 7 – 10 using fuel meters on tanks that feed EUs 7 – 10. The fuel meters should be accurate to within five percent.

(ii) Calculate and record, no later than 30 days after the end of the previous calendar month, the gallons of fuel burned in each of EUs 7 – 10 during the previous calendar month from the records compiled in Condition 18.1.d(i);

(iii) Calculate and record, no more than 30 days after the end of the previous calendar month, the combined gallons of fuel burned in all of EUs 7 – 10 during the preceding consecutive 12 calendar months;

(iv) Report in the operating report required by Condition 79, copies of the records calculated under Condition 18.1.d(iii); and

(v) Report as excess emissions and permit deviation as described in Condition 78, if the combined fuel consumption in EUs 7 – 10 during the preceding 12 consecutive calendar months exceeds the limits in Condition 18.1.

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]
[40 C.F.R. 71.6(a)(9)]

Avoidance Limits for NO_x:

19. NO_x Emissions Limit. The Permittee shall limit the emissions of NO_x from EUs 7 – 10 to no greater than 874.2 tons in any 12 consecutive month period to avoid permit classification as a PSD major modification.

19.1. **NO_x Operating Limit.** To ensure compliance with the NO_x emissions limit in Condition 19, the Permittee shall:

a. continuously monitor the operation of EUs 7 – 10 using totalizing kilowatt-hour (kWh) meters installed on each engine;

b. no later than the last day of each calendar month, calculate and record the sum total of kilowatt-hours produced by EUs 7 – 10 in the prior month, and the rolling 12 consecutive month total kilowatt-hours produced from the combined operation of EUs 7 – 10.

(i) If the kilowatt-hour meter is found to be inoperable, calculate emissions using one of the two following methods until a new meter is installed and operating properly:

(A) Record operating hours and operating load rate on an hourly basis for each of EUs 7 – 10, and retain records in accordance with this condition. Calculate the total kilowatt-hours of production using the following equation:

$$\sum_{n=EU7}^{EU\ 10} [n\ operating\ hours] * [n\ average\ operating\ load\ rate\ (kW)]$$

(1) For any hours of operation that have occurred after the kilowatt hour meter became inoperable but for which the operating hours and/or load rate were not recorded, assume maximum kilowatt hour production.

(B) Alternatively, assume maximum kilowatt-hour production and apply this rate to the known operating hours for each engine during the period that the totalizing kilowatt-hour meter is out of operation.

c. no later than the last day of each calendar month, calculate and record the rolling 12 consecutive month total NO_x emissions for the preceding 12 months by applying one of the following emission factors to the 12 consecutive month rolling sum of kilowatt-hour recorded for each month in Condition 19.1.b :

(i) 0.021 lb/kW-hr, or

(ii) the maximum emission rate found in the most recent Department-approved source test;

d. report the 12 consecutive month rolling total kilowatt-hours produced and the 12 consecutive month rolling total NO_x emissions as recorded in Conditions 19.1.b and 19.1.c, respectively, in the operating report required by Condition 79; and

e. report as excess emissions and permit deviation as described in Condition 78 if the 12 consecutive month rolling total NO_x emissions calculated in Condition 19.1.c exceed the limit listed in Condition 19.

19.2. If the 12-month rolling total NO_x emissions calculated in Condition 19.1.c exceed 655.6 tons[10], then conduct a source test, in accordance with Section 5, to verify the NO_x emission rate for EUs 7 – 10 within 180 days of discovery.

a. Conduct the source test on one of EUs 7 – 10 on a rotating basis.

b. Conduct the source tests at 100% load. Monitor and record the fuel consumption and average load during each test. List the average operating parameters for each run in the source test report.

c. Determine the NO_x emission factor for each load using exhaust properties determined by either Method 19 or Methods 1 – 4. If using Method 19, use the higher heating value throughout the analysis.

d. Within 45 days of Department approval of the source test report, provided in accordance with Condition 19.2, calculate the 12 consecutive month rolling NO_x emissions for EU IDs 7 – 10.

e. Report in the first operating report required by Condition 79 the newly calculated 12-month rolling NO_x emissions from Condition 19.2.d.

[Condition 13, Minor Permit No. AQ0307MSS05 MM/DD/YY]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)]

[10] 75% of the emissions limit listed in Condition 19.

Insignificant Emissions Units

20. 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:

20.1. **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)]

20.2. **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)]

20.3. **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)]

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

a. Submit the compliance certifications of Condition 80 based on reasonable inquiry,

b. Comply with the requirements of Condition 61;

c. Report in the operating report required by Condition 79 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 20.1, 20.2, and 20.3.

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

Federal Requirements

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

NSPS Subpart A – General Provisions

21. NSPS Subpart A Notification. Unless exempted by a specific subpart, for any affected facility[11] or existing facility[12] regulated under NSPS requirements in 40 C.F.R. 60, the Permittee shall furnish the Administrator[13] 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]

21.1. 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]

21.2. 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]

21.3. 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: [14]

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]

[11] *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.

[12] *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.

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

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

21.4. 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:

[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.

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

[18 AAC 50.040(a)(1)]
[40 C.F.R. 60.12, Subpart A]

NSPS Subpart IIII[15] – Compression Ignition Internal Combustion Engines (CI ICE), EU IDs 7 – 10, 30a, 50a, and 51a

23. National Security Exemption (NSE). For each of EU IDs 30a, 50a, and 51a, the Permittee shall ensure that a permanent label is affixed to the engine with the following information:

23.1. The label heading “EMISSION CONTROL INFORMATION”.

23.2. Engine displacement, family identification, and model year of the engine/equipment (as applicable), or whom to contact for further information.

23.3. The statement: “THIS (engine, equipment, vehicle, etc.) HAS AN EXEMPTION FOR NATIONAL SECURITY UNDER 40 C.F.R. 1068.225.”

[15] The provisions of NSPS Subpart IIII listed in Conditions 23 through 31 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. 60.4200(d), 40 C.F.R. 1068.225(a) & (d)]

24. NSPS Subpart IIII Applicability and General Compliance Requirements.

25. For EU IDs 7 – 10 listed in Table A, the Permittee shall comply with the applicable requirements for stationary CI ICE located in remote areas of Alaska[16] whose construction[17] commence after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006.

25.1. 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 26 through 30.

[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]

26. NSPS Subpart IIII GAPCP. Except as permitted under Condition 29.1, the Permittee shall operate and maintain EU IDs 7 – 10 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 28 and the applicable requirements of 40 C.F.R. 1068. In addition, the Permittee shall operate and maintain the stationary CI ICE that achieves the emissions standards as required in Condition 28 over the entire life of the engine.

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

27. NSPS Subpart IIII Fuel Requirements. For EU IDs 7 – 10, the Permittee is exempt from the fuel requirements of 40 C.F.R. 60.4207, and may use fuels mixed with used lubricating oil, in volumes of up to 1.75 percent of the total fuel.

[18 AAC 50.040(a)(2)(OO) & (j); & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.4216(d) & (f), Subpart IIII]

27.1. The sulfur content of the used lubricating oil must be less than 200 ppm.

27.2. The used lubricating oil must meet the on-specification levels and properties for used oil in 40 C.F.R. 279.11.

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

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

28.1. For CI ICE with model years earlier than 2014 located in areas of Alaska not accessible by the Federal Aid Highway System, the Permittee is allowed to meet the applicable emission standards for emergency engines in 40 C.F.R. 60.4205.

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

[17] 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).

28.2. Exhaust emissions from EU IDs 7 – 10 (stationary CI ICE with a displacement of less than 30 liters per cylinder, located in remote areas of Alaska, not fire pump engines) must comply with the emission standards for new nonroad CI ICE in 40 C.F.R. 60.4202 for all pollutants, for the same displacement and maximum power, as follows:

a. 9.8 g/kW-hr for NO_x + THC (combined);

b. 5.0 g/kW-hr for CO; and

c. 0.50 g/kW-hr for PM.

[40 C.F.R. 60.4216(c), 60.4205(b) & 60.4202(e)(3), Subpart IIII]
[40 C.F.R. Appendix I to Part 1042(b)(2) & Table 2, Category 2]

29. 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)]

29.1. If the Permittee does not install, configure, operate, and maintain the engines and control devices according to the manufacturer's emission-related written instructions as required in Condition 26, or changes emission-related settings in a way that is not permitted by the manufacturer, the Permittee shall demonstrate compliance as follows:

a. Keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, 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]

b. 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]

c. 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]

29.2. The Permittee shall demonstrate compliance with the emission standards by purchasing an engine certified to the applicable emission standards in Conditions 28.1 and 28.2. The engines must be installed and configured according to the manufacturer's specifications, except as permitted in Condition 29.1.

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

29.3. If using fuels mixed with used lubricating oil as specified in Condition 27, comply with the following:

a. Determine that the used oil to be burned for energy recovery meets the fuel specifications of 40 C.F.R. 279.11 and the sulfur content limit in Condition 27.1 by performing approved analyses or obtaining copies of analyses or other information documenting that the used oil fuel meets the specifications.

b. Keep records of the following:

(i) copies of analyses of the used oil (or other information used to make the compliance determination in Condition 29.3.a) for three years;

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

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

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

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

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

30.1. If using fuels mixed with used lubricating oil, include with the operating report required under Condition 79 a copy of the records required in Condition 29.3.b for the period covered by the report.

30.2. Report in accordance with Condition 78 if any of the requirements in Conditions 23 through 31 were not met.

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

31. 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]

31.1. 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]

31.2. 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]

31.3. The requirements of Condition 31 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

32. 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

32.1. Table 8 to NESHAP Subpart ZZZZ for EU IDs 7 – 10, 13 – 17, 24, 27, 30, 30a, 32 – 36, 39, – 42, 50a, 51a, 87, 91, and 92 listed in Table A; and

32.2. Table 8 to Subpart JJJJJJ for EU IDs 55a, 61, 63, 67, 68, 71, 72, 75, and 78 – 82 listed in Table A.

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

NESHAP Subpart ZZZZ[18] – Stationary RICE

33. NESHAP Subpart ZZZZ Applicability. The Permittee shall comply with applicable requirements for existing[19] (EU IDs 7 – 10, 13 – 17, 24, 27, 30, 30a, 32 – 36, 39 – 42, 50a, 51a, 87, 91, and 92) stationary reciprocating internal combustion engines (RICE) located at an area source of hazardous air pollutant (HAP) emissions.

33.1. For EU IDs 13 – 17, 24, 27, 30, 32 – 36, 39 – 42 87, 91, and 92, emergency engines, the Permittee shall at all times comply with Conditions 34 through 39.

33.2. For EU IDs 7-10, 30a, 50a, and 51a, 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 23 through 31. 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)]

[18] The provisions of NESHAP Subpart ZZZZ listed in Conditions 32 through 35.4 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.

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

40 C.F.R. 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]

34. NESHAP Subpart ZZZZ GAPCP, Operation and Maintenance Requirements. The Permittee shall comply with the following:

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

34.1. At all times, operate and maintain EU IDs 13 – 17, 24, 27, 30, 32 – 36, 39 – 42, 87, 91, and 92, 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.

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

34.2. 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]

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

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

35. NESHAP Subpart ZZZZ Work and Management Practices Standards and Monitoring. For EU IDs 13 – 17, 24, 27, 30, 32 – 36, 39 – 42, 87, 91, and 92, 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]

35.1. For EU IDs 13 – 17, 24, 27, 30, 32 – 36, 39 – 42, 87, 91, and 92:

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 35.3;

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

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

[Table 2d (Item 4 & Footnote 1), Subpart ZZZZ]

35.2. Demonstrate continuous compliance with the requirements in Condition 35.1 by complying with Condition 34.2.

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

35.3. The Permittee has the option to utilize an oil analysis program in order to extend the specified oil change requirements in Condition 35.1.a(i), as described below:

a. The oil analysis must be performed at the same frequency specified for changing the oil in Conditions 35.1.a(i).

b. The analysis program must, at a minimum, analyze the following three parameters: Total Base Number, 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 35.3.b(i) through 35.3.b(iii) are not exceeded, the Permittee is not required to change the oil.

d. If any of the limits in Conditions 35.3.b(i) through 35.3.b(iii) is exceeded, the Permittee must change the oil within 2 business days of receiving the results of the analysis.

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

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

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

35.4. If 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 under Condition 44.1.a and 35.3, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the Permittee may delay the management practice 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.

[40 C.F.R. 63, Footnote 2 to Table 2d, Subpart ZZZZ]

36. Hour-Meters for Monitoring Operating Hours. For EUs 13 – 17, 24, 27, 30, 32 – 36, 39 – 42, 87, 91, and 92 listed in Table A, the Permittee shall install a non-resettable hour meter if one is not already installed.

[18 AAC 50.040(c)(23)]

37. Operating Hour Limits for Emergency Engines. For EUs 13 – 17, 24, 27, 30, 32 – 36, 39 – 42, 87, 91, and 92, the Permittee shall operate the emergency stationary RICE according to the requirements in Conditions 37.1 through 37.3. In order for the engine to be considered an emergency stationary RICE, 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 40 C.F.R. 63.6640(f)(1), (2), and (4) is prohibited. If the Permittee does not operate the engine according to the requirements in 40 C.F.R. 63(f)(1), (2), and (4), the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines.

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

37.2. The Permittee may operate the EUs for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of these units is limited to 100 hours per calendar year. 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 RICE beyond 100 hours per calendar year.

37.3. The Permittee may operate the emission unit up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing under Condition 37.2. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or 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.

[18 AAC 50.040(c)(23)]
[40 C.F.R. 63.6640(f)(1), (2), and (4)]

38. 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)]

38.1. 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.

[40 C.F.R. 63.6655(f)]

38.2. If electing to operate and maintain EU IDs 13 – 17, 24, 27, 30, 32 – 36, 39 – 42, 87, 91, and 92 according to a maintenance plan developed by the Permittee as allowed under Condition 34.2.b, keep records of the maintenance conducted on EU IDs 13 – 17, 24, 27, 30, 32 – 36, 39 – 42, 87, 91, and 92 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]

38.3. If electing to utilize the oil analysis program described in Condition 35.3, 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]

38.4. 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]

39. 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)]

39.1. Include in the operating report required by Condition 79 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]

39.2. Notify the Department in accordance with Condition 78 if any of the requirements in Conditions 32 through 39 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[20] - Industrial, Commercial, and Institutional (ICI) Boilers, EU IDs 55a, 61, 63, 67, 68, 71, 72, 75, and 78 – 82

40. NESHAP Subpart JJJJJJ Applicability. For EU IDs 55a, 61, 63, 67, 68, 71, 72, 75, and 78 – 82, listed in Table A, the Permittee shall comply with applicable requirements of NESHAP Subpart JJJJJJ for existing[21] 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]

41. NESHAP Subpart JJJJJJ Good Air Pollution Control Practices. At all times, the Permittee shall operate and maintain EU IDs 55a, 61, 63, 67, 68, 71, 72, 75, and 78 – 82, 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]

42. NESHAP Subpart JJJJJJ Work and Management Practices. For each of EU IDs 55a, 61, 63, 67, 68, 71, 72, 75, and 78 – 82, the Permittee shall comply with the following work and management practices at all times and demonstrate continuous compliance, as follows:

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

42.1. For EU IDs 67 and 75, conduct a tune-up of each boiler biennially in accordance with Condition 42.4. 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]

42.2. For EU IDs 55a, 61, 63, 68, 71, 72, and 78 – 82, conduct a tune-up of each boiler every five years in accordance with Condition 42.4.

[Table 2 (item 12), Subpart JJJJJJ]
[40 C.F.R. 63.11223(a) & (b), Subpart JJJJJJ]

[20] The provisions of NESHAP Subpart JJJJJJ listed in Conditions 32.2 and 40 through 45 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.

[21] 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.

42.3. 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 43.3.

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

42.4. Conduct a performance tune-up according to 40 C.F.R. 63.11223(b) for each of EU IDs 55a, 61, 63, 68, 71, 72, and 78 – 82 every five years and conduct a performance tune-up for each of EU IDs 67 and 75 biennially, and submit a signed statement in the Notification of Compliance Status report that indicates that you conducted a tune-up of the boiler.

[40 C.F.R. 63.11214(b)]

42.5. For EU IDs 55a, 61, 63, 67, 68, 71, 72, 75, and 78 – 82 subject to the work practice standard or management practices of tune-up in Condition 42:

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

a. Conduct a performance tune-up according to Conditions 42.5.b and 42.5.c. Keep records as required in Condition 44.1 to demonstrate continuous compliance. Conduct the tune-up while burning the type of fuel the boiler burned over the 12 months prior to the tune-up.

[40 C.F.R. 63.11223(a)]

b. For EU IDs 67 and 75, conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified in Conditions 42.5.b(i) through 42.5.b(vii). Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. For a new or reconstructed boiler, the first biennial tune-up must be no later than 25 months after the initial startup of the new or reconstructed boiler.

[40 C.F.R. 63.11223(b)]

(i) 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 from the previous inspection).

(ii) 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.

(iii) 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 from the previous inspection).

(iv) 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.

(v) 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.

(vi) Maintain on-site a record containing the information in Conditions 42.5.b(vi)(A) and 42.5.b(vi)(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]

(vii) 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.

c. For EU IDs 55a, 61, 63, 68, 71, 72, and 78 – 82, conduct a tune-up every five years as specified in Conditions 42.5.b(i) through 42.5.b(vii). Each five-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed oil-fired boiler with a heat input capacity of equal to or less than five million British thermal units per-hour (MMBtu/hr), the first five-year tune-up must be no later than 61 months after the initial startup. The permittee may delay the burner inspection until the next scheduled unit shutdown, but must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months.

[40 C.F.R. 63.11223(e)]

43. 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)]

43.1. the notifications specified in Conditions 43.1.a and 43.1.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 43.1.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 43.1.b(i) and 43.1.b(iv). The Notification of Compliance Status must include the information and certification(s) of compliance in Conditions 43.1.b(i) through 43.1.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)]

43.2. 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)]

43.3. 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)]

44. NESHAP Subpart JJJJJJ Recordkeeping Requirements. For each of EU IDs 55a, 61, 63, 67, 68, 71, 72, 75, and 78 – 82, 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]

44.1. 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.

44.2. Keep records to document conformance with the work practice standards and management practices as specified in Condition 44.2.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)[22], 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).

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

44.4. Keep records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in Condition 41, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

[22] 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]

44.5. 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]

45. NESHAP Subpart JJJJJJ Reporting Requirements. For each of EU IDs 55a, 61, 63, 67, 68, 71, 72, 75, and 78 – 82, 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)]

45.1. Prepare, by March 1, and submit to the EPA and the Department upon request, a biennial Compliance Certification report for the previous calendar year containing the information specified in Conditions 45.1.a and 45.1.b.

a. Company name and address.

b. Statement by the responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of NESHAP Subpart JJJJJJ. The notification must include the following certifications of compliance, and signed by a responsible official: *"This facility complies with the requirements in 40 C.F.R. 63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler."*

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

(i) 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(b)(2)(ii)]

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

[40 C.F.R. 63.11225(b)(3)]

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

Subpart A – General Provisions & Subpart M – Asbestos

46. 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

47. 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]

48. 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]

49. 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

50. 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).

50.1. 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).

50.2. 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).

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

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

Section 4. General Conditions

Standard Terms and Conditions

51. 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)]

52. 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)]

53. 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)]

54. 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]

55. 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:

55.1. potential to emit of 1273.12 TPY; or

55.2. 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]

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

56.1. 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 55.2. 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/.

56.2. 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.

56.3. 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.

56.4. 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 55.1.

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

57. Good Air Pollution Control Practice (GAPCP). The Permittee shall do the following for EU IDs 54a, 62a, 70a, 74a, 77, 86, and 90.

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

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

57.3. 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)]

58. 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)]

59. 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.

59.1. 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 59.1.a or to address the results of Department inspections that found potential problems; and

(ii) to prevent future dust problems.

59.2. The Permittee shall report according to Condition 61.3.

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

60. 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)]

61. 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)]

61.1. **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 61.

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 61; or

(ii) the Department notifies the Permittee that it has found a violation of Condition 61.

61.2. **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 61; and

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

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

a. With each stationary source operating report under Condition 79, 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 78.

62. 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[23] listed in Condition(s) 28 and 47 (refrigerants), the Permittee shall

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

62.2. report in accordance with Condition 78.1.b; the report must include information on the steps taken to mitigate emissions and corrective measures taken or to be taken. Monitoring of compliance for this condition consists of the report required under Condition 79.

[18 AAC 50.235(a), 50.326(j)(4), & 50.040(j)(4)]
[40 C.F.R. 71.6(c)(6)]

Open Burning Requirements

63. 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:

[23] 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.

63.1. 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

63.2. Include this condition in the annual certification required under Condition 80.

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

Section 5. General Source Testing and Monitoring Requirements

64. 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)]

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

[18 AAC 50.220(b)]

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

65.2. 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.

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

66.1. 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]

66.2. 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]

66.3. 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]

66.4. Source testing for the reduction in visibility through the exhaust effluent must be conducted in accordance with the procedures set out in Reference Method 9. The Permittee may use the form in Section 10 to record data.

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

66.5. 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]

66.6. 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]

66.7. 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]

67. 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)]

68. Test Exemption. The Permittee is not required to comply with Conditions 70, 71 and 72 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)]

69. 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)]

70. Test Plans. Except as provided in Condition 68, 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 64 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)]

71. Test Notification. Except as provided in Condition 68, 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)]

72. Test Reports. Except as provided in Condition 68, 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 75. 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)]

73. Particulate Matter Calculations. In source testing for compliance with the particulate matter standards in Conditions 5 and 20.2, the three-hour average is determined using the average of three one-hour test runs.

[18 AAC 50.220(f)]

Section 6. General Recordkeeping and Reporting Requirements

Recordkeeping Requirements

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

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

74.2. 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

75. 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.

75.1. 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)]

76. 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.

76.1. 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)]

77. 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)]

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

78.1. **Excess Emissions Reporting.** Except as provided in Condition 61, 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 78.1.d.

d. Report all other excess emissions not described in Conditions 78.1.a, 78.1.b, and 78.1.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 79 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)]

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

a. 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 79 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)]

78.3. **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 Permittee Portal option, http://dec.alaska.gov/applications/air/airtoolsweb. Alternatively, upon written Department approval, the Permittee may submit the form contained in Section 12 of this permit. The Permittee must provide all information called for by the form that is used. Submit the report in accordance with the submission instructions on the Department's Standard Permit Conditions webpage found at http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-iii-and-iv-submission-instructions/.

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

79. Operating Reports. During the life of this permit[24], the Permittee shall submit to the Department an operating report in accordance with Conditions 75 and 76 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.

79.1. 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.

79.2. When excess emissions or permit deviations that occurred during the reporting period are not included with the operating report under Condition 79.1, the Permittee shall identify

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

b. the equipment involved;

c. the permit condition affected;

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

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

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

79.3. when excess emissions or permit deviation reports have already been reported under Condition 78 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.

79.4. **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)]

80. 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 76.

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

a. identify each term or condition set forth in Section 3 through Section 8, that is the basis of the certification;

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

c. state whether compliance is intermittent or continuous; and

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

80.2. **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.

80.3. 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)]

81. 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:

81.1. **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.

81.2. **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 81.2.b(iv) through 81.2.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.

81.3. For reporting under Condition 81.2, the Permittee shall report the annual emissions and the required data elements under Condition 81.4 every third year for the previous calendar year as scheduled by the EPA.[25].

[25] 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.).

81.4. For each emissions unit and the stationary source, include in the report the required data elements[26] 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.

81.5. 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]

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

82.1. For the purposes of reporting actual or assessable emissions required under Condition 81 and Condition 55.2, the Permittee shall use consistent pollutant-specific emission factors and calculation methods for all reporting requirements for the stationary source.

[18 AAC 50.040(j)(4), 50.200, 50.275, 50.326(j)(3), & 50.346(b)(8)]
[40 C.F.R. 51.15, 51.30(a)(1) & (b)(1), and Appendix A to 40 C.F.R. 51 Subpart A]

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

83.1. **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 79 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.

83.2. **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)]

[26] 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 7. Permit Changes and Renewal

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

84.1. 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;

84.2. 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;

84.3. 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

84.4. 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)]

85. 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)]

86. 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:

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

86.2. 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;

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

86.4. 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)]

87. Operational Flexibility. The Permittee may make CAA Section 502(b)(10)[27] 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).

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

87.2. For each such change, the notification required by Condition 87.1 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.

87.3. The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made pursuant to Condition 87.

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

88. Permit Renewal. To renew this permit, the Permittee shall submit to the Department[28] 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)]

[27] 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.

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

Section 8. Compliance Requirements

General Compliance Requirements

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

89.1. included and specifically identified in the permit; or

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

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

90. 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

90.1. an enforcement action;

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

90.3. denial of an operating permit renewal application.

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

91. 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)]

92. 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)]

93. 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

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

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

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

93.4. 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

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

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

Section 9. Permit As Shield from Inapplicable Requirements

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

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

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

95.2. 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)]

96. 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
87	40 C.F.R. 60 Subpart IIII	Commenced construction before the July 11, 2005 applicability date
30a, 50a, 51a	40 C.F.R. 60 Subpart IIII	Units have been issued a Manufacturer's National Security Exemption in accordance with 40 C.F.R. 1068.225 labeling requirements
39, 91, 92	40 C.F.R. 60 Subpart IIII	Units were manufactured prior to April 1, 2006.
7 – 10, 13 – 17, 24, 27, 30, 30a, 32 – 36, 39 – 42, 50a, 51a, 87, 91, 92	40 C.F.R. 63 Subpart JJJJ	Units are not SI ICE
30a, 50a, 51a	40 C.F.R. 63 Subpart ZZZZ	Units have been issued a Manufacturer's National Security Exemption in accordance with 40 C.F.R. 1068.225 labeling requirements
54a, 55a, 62a, 63, 67, 68, 70a, 71-75, 77-82, 86, 90	40 C.F.R. 60 Subpart Dc	Size threshold below 10 MMBtu/hr
61, 64	40 C.F.R. 60 Subpart Dc	Units are not steam generating units
67, 75	40 C.F.R. 63.11201(b), Table 2, Item 1	Size threshold below 10 MMBtu/hr
55a, 61, 63, 68, 71, 72, 78-82	40 C.F.R. 63.11201(b), Table 2, Item 4, 40 C.F.R. 63.11223(b)	Size threshold below 5 MMBtu/hr

54a, 70a, 73, 77, 86, 90	40 C.F.R. 63 Subpart JJJJJJ	Size threshold below 1.6 MMBtu/hr per exclusions of 63.111195(f) and in accordance with the definition of 'hot water heater' in 63.11237
62a, 64, 74a	40 C.F.R. 63 Subpart JJJJJJ	These units are process heaters, not boilers.
88	40 C.F.R. 63 Subpart JJJJJJ	This unit is a space heater, not a boiler.
54a, 55a, 61, 62a, 63, 64, 67, 68, 70a, 71-75, 77-82, 86, 90	40 C.F.R. 63 Subpart UUUUU	Size threshold below 25 MWe, and not serving a generator to produce electricity for sale, per the definition of 'electric generating unit' in 40 C.F.R. 63.10042
95-112	40 C.F.R. Subpart GG	Pre-2005 model year, rating less than 10 MMBtu/hr
95-112	40 C.F.R. 60 Subpart KKKK	Pre-2005 model year, rating less than 10 MMBtu/hr
93, 94	40 C.F.R. 60 Subpart DDDD	Units are not incinerators, per definition of 'cyclonic burn barrel' in 60.2875

Section 10. Visible Emissions Forms

VISIBLE EMISSIONS OBSERVATION FORM

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

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

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

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

Range of Opacity:
Minimum / Maximum

Print Observer's Name

Observer's Signature / Date

Observer's Affiliation:

Certifying Organization:
Certified By: / Date

Data Reduction:

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

Average Opacity Summary:

Set Number	Time			Opacity		
	Start	End		Sum	Average	Comments

Section 11. SO_2 Material Balance Calculation

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

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

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

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

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

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

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

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

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

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

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

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

The fuel weight percent of sulfur ($wt\%S_{fuel}$) is obtained pursuant to Condition 15. The fuel weight percents of carbon and hydrogen are obtained from the fuel refiner.

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

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

[18 AAC 50.346(c)]

Section 12. Notification Form[29]

Eareckson Air Station	**AQ0307TVP04**
Stationary Source Name	**Air Quality Permit Number.**

United States Air Force
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[30], CO[31], or Settlement Agreement - Complete Section 2 and Certify

[29] Revised as of July 22, 2020.

[30] Compliance Order By Consent

[31] 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 75.)*

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

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