

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ0886TVP02

Issue Date: Draft January 11, 2010

Expiration Date: Five Years

The Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the Permittee, **United States Department of Air Force - Elmendorf Air Force Base**, for the operation of the **Elmendorf Air Force Base - Flight Line**.

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.

All stationary source-specific terms and conditions of Air Quality Minor Permit Nos. AQ0886MSS01 Revision 1 and AQ0886MSS04 have been incorporated into this operating permit.

Upon effective date of this operating permit, Operating Permit No. AQ0886TVP01 expires.

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

John F. Kuterbach, Manager
Air Permits Program

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List of Abbreviations Used in this Permit

| | | | |
|-----------------|--|-----------------|---|
| AAC | Alaska Administrative Code | SO ₂ | Sulfur dioxide |
| ADEC | Alaska Department of Environmental Conservation | SSM | Startup, Shutdown & Malfunction |
| AS | Alaska Statutes | TPH | Tons per hour |
| ASTM | American Society for Testing and Materials | TPY | Tons per year |
| BACT | Best Available Control Technology | VOC | Volatile organic compound [VOC as defined in 40 C.F.R. 51.100(s)] |
| BHp | Boiler Horsepower | VOL | Volatile organic liquid [VOL as defined in 40 C.F.R. 60.111b, Subpart Kb] |
| C.F.R. | Code of Federal Regulations | vol% | Volume percent |
| The Act | Clean Air Act | wt% | weight percent |
| CO | Carbon Monoxide | | |
| dscf | Dry standard cubic foot | | |
| EAFB | Elmendorf AFB | | |
| EPA | US Environmental Protection Agency | | |
| EU | Emission Unit | | |
| FPA | Final Project Agreement | | |
| gr/dscf | Grain per dry standard cubic foot (1 pound = 7000 grains) | | |
| GPH | Gallons per hour | | |
| HAPs | Hazardous Air Pollutants [HAPs as defined in AS 46.14.990(14)] | | |
| ID | Emission Unit Identification Number | | |
| kPa | KiloPascals | | |
| LAER | Lowest Achievable Emission Rate | | |
| Mg | Mega-gram (1,000,000 grams) | | |
| MACT | Maximum Achievable Control Technology as defined in 40 C.F.R. 63. | | |
| MR&R | Monitoring, Recordkeeping, and Reporting | | |
| NESHAPs | Federal National Emission Standards for Hazardous Air Pollutants [NESHAPs as contained in 40 C.F.R. 61 and 63] | | |
| NO _x | Nitrogen Oxides | | |
| NSPS | Federal New Source Performance Standards [NSPS as contained in 40 C.F.R. 60 ¹] | | |
| O&M | Operation and Maintenance | | |
| O ₂ | Oxygen | | |
| PAL | Plantwide Applicability Limitation | | |
| PM-10 | Particulate Matter less than or equal to a nominal ten 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 | | |
| S | Sulfur | | |
| SIC. | Standard Industrial Classification | | |

Section 1. Stationary Source Information

Identification -- Names and Addresses

Permittee: **United States Department of Air Force - Elmendorf Air Force Base**
3 CES/CEVQ
6326 Arctic Warrior Drive
Elmendorf Air Force Base, AK 99506

Stationary Source Name: **Elmendorf Air Force Base - Flight Line**

Location: 61.2415^o North, -149.8253^o West

Physical Address: 6326 Arctic Warrior Drive
Elmendorf Air Force Base, AK 99506

Owner: United States Department of Air Force - Elmendorf Air Force Base, 3rd Wing
3 CES/CEVQ
6326 Arctic Warrior Drive
Elmendorf Air Force Base, AK 99506

Operator: United States Department of Air Force - Elmendorf Air Force Base, Civil Engineering Squadron
3 CES/CEVQ
6326 Arctic Warrior Drive
Elmendorf Air Force Base, AK 99506

Permittee's Responsible Official: Mr. Daniel Barnett
Deputy Base Civil Engineer

Stationary Source, Permit, Building, Fee Contact, and Designated Agent: Ms. Rosanna Dickens
3 CES/CEVQ
6326 Arctic Warrior Drive
Elmendorf Air Force Base, AK 99506-3240
(907) 552-2867
rosanna.dickens@elmendorf.af.mil

SIC Code and Description: 4522 -- Air Transportation, Nonscheduled

[18 AAC 50.040(j)(3), 7/25/08; 18 AAC 50.326(a), 12/1/04]
[40 C.F.R. 71.5(c)(1 & 2), 7/2/07]

Section 2. Emission Unit Inventory and Description

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

Table A – Emission Unit Inventory

| ID | Emission Unit Name | Emission Unit Description | Rating/ Size | Fuel Type | Bldg. No. | Install Date |
|----|--|--|-------------------|----------------|--------------|-----------------|
| 1 | Alert Hangar (H-16) Generator | Emergency Generator; Volvo T1D121LG-868088 Engine | 300 kW | JP-8 | 15658 | 1994 |
| 2 | 3rd Tactical Fighter Wing HQ Generator | Emergency Generator; Cummins 6BT 5.9-G2 Engine | 100 kW | JP-8 | 11550 | 1993 |
| 3 | Air Field Lighting (AFL) Generator | Emergency Generator; Caterpillar 3412 Engine | 500 kW | JP-8 | 14524 | 1989 |
| 4 | Hangar 17 (Aircraft Weather Shelter) Generator | Emergency Generator; Cummins KTA 19-G2 Engine | 400 kW | JP-8 | 16670 | 1995 |
| 5 | West Ramp Generator | Emergency Generator; Cummins QST 30-62 Engine | 750 kW | JP-8 | 13194 | 1999 |
| 6 | Aircraft Arrestor Engine 1 | Aircraft Arrestor; Wisconsin v-465D | 65 hp | Gasoline | 74-050 | 1994 |
| 7 | Aircraft Arrestor Engine 2 | Aircraft Arrestor; Wisconsin v-465D (Gasoline) | 65 hp | Gasoline | 74-053 | 1994 |
| 8 | Aircraft Arrestor Engine 3 | Aircraft Arrestor; Wisconsin v-465D (Gasoline) | 65 hp | Gasoline | 74-054 | 1999 |
| 9 | Aircraft Arrestor Engine 4 | Aircraft Arrestor; Wisconsin v-465D (Gasoline) | 65 hp | Gasoline | 74-052 | 1999 |
| 10 | Aircraft Arrestor Engine 5 | Aircraft Arrestor; Wisconsin v-465D (Gasoline) | 65 hp | Gasoline | 74-046 | 1999 |
| 11 | Aircraft Arrestor Engine 6 | Aircraft Arrestor; Wisconsin v-465D (Gasoline) | 65 hp | Gasoline | 74-044 | 1999 |
| 12 | Aircraft Arrestor Engine 7 | Aircraft Arrestor; Wisconsin v-465D (Gasoline) | 65 hp | Gasoline | 74-055 | 2002 |
| 13 | Aircraft Arrestor Engine 8 | Aircraft Arrestor; Wisconsin v-465D (Gasoline) | 65 hp | Gasoline | 74-050 | 2002 |
| 14 | Aircraft Arrestor Engine 9 | Aircraft Arrestor; Wisconsin v-465D (Gasoline) | 65 hp | Gasoline | 74-053 | 1983 |
| 15 | Aircraft Arrestor Engine 10 | Aircraft Arrestor; Wisconsin v-465D (Gasoline) | 65 hp | Gasoline | 74-054 | 1983 |
| 16 | Aircraft Arrestor Engine 11 | Aircraft Arrestor; Wisconsin v-465D (Gasoline) | 65 hp | Gasoline | 74-052 | 1975 |
| 17 | Aircraft Arrestor Engine 12 | Aircraft Arrestor; Wisconsin v-465D (Gasoline) | 65 hp | Gasoline | 74-046 | 1975 |
| 20 | Fighter Fuel Cell Maintenance Hangar Generator | Emergency Generator; Cummins | 50 kW | JP-8 | 8681 | 2005 |
| 38 | Hanger 21 - C-17 Maintenance Complex Generator | Emergency Generator; Cummins QSL9-G2NR3 | 120 kW | JP-8 | 17508 | 2008 |
| 59 | F-22 LO Facility A Emergency Generator | Emergency Generator; Cummins 100DSHAF | 100 kW | JP-8 | 9696 | 2008 |
| 60 | F-22 7-Bay North Side Boiler 1 | Natural Gas Fired Boiler TBD | 5.900 MMBtu/hr | Natural Gas | 17660 | TBD |
| 61 | F-22 7-Bay North Side Boiler 2 | Natural Gas Fired Boiler TBD | 5.900 MMBtu/hr | Natural Gas | 17660 | TBD |

| ID | Emission Unit Name | Emission Unit Description | Rating/ Size | Fuel Type | Bldg. No. | Install Date |
|-----|--|--|-------------------|----------------|---------------|-----------------|
| 80 | F-22 Squad Ops/AMU/6 Bay Hanger Boiler 1 | Natural Gas Fired Boiler TBD | 7.0 MMBtu/hr | Natural Gas | 9694 | TBD |
| 81 | F-22 Squad Ops/AMU/6 Bay Hanger Boiler 2 | Natural Gas Fired Boiler TBD | 7.0 MMBtu/hr | Natural Gas | 9694 | TBD |
| 84 | F-22 8 Bay Boiler 1 | Natural Gas Fired Boiler TBD | 7.0 MMBtu/hr | Natural Gas | 9684 | TBD |
| 85 | F-22 8 Bay Boiler 2 | Natural Gas Fired Boiler TBD | 7.0 MMBtu/hr | Natural Gas | 9684 | TBD |
| 95 | F-22 7-Bay Boiler 1 | Natural Gas Fired Boiler TBD | 5.9 MMBtu/hr | Natural Gas | 10682 | TBD |
| 96 | F-22 7-Bay Boiler 2 | Natural Gas Fired Boiler TBD | 5.9 MMBtu/hr | Natural Gas | 10682 | TBD |
| 138 | F-22 Fire Crash Rescue Station Emergency Generator | Emergency Generator TBD | 30 kW | Distillate | TBD | TBD |
| 139 | F-22 Airfield Light Vault (East) | Emergency Generator TBD | 100 kW | Distillate | TBD | TBD |
| 140 | Hydrant Tank Farm Phase II Generator | Emergency Generator; Caterpillar 3412 | 750 kW | JP-8 | 16383 | 2004 |
| 141 | Hush House | Aircraft Engine Testing | N/A | N/A | 9561- 9563 | 1995 |
| 142 | Jet Engine Shop Used Oil Burner | Used Oil Burner Shenandoah 350 | 0.350 MMBtu/hr | Used Oil | 8549 | 2005 |
| 143 | Hangar 20 - C-17 Hangar Generator | Emergency Generator; Caterpillar 3412 | 150 kW | JP-8 | 17534 | 2009 |
| 144 | F-22 LO Facility Paint Booth | Paint Booth | N/A | N/A | 9696 | 2008 |
| 145 | 3rd EMS Paint Booth | Paint Booth | N/A | N/A | 6263 | 1994 |

Table Notes:

- (1) EU IDs 18 and 19, Aircraft Arrestor Engines 13 and 14, as listed in Title V Permit No. AQ0886TVP01 no longer exist.
- (2) EU IDs 21 – 37 and 75 – 79 as listed in Minor Permit No. AQ0886MSS01 Revision 1 are insignificant emission units per 18 AAC 50.326(e) and (g)(5) and are not required to be listed in this renewal permit.
- (3) EU IDs 39 – 50 as listed in Minor Permit No. AQ0886MSS02 no longer exist.
- (4) EU IDs 51 – 58, 62 – 74, 82 – 83, 86 – 94, 97 – 137 as listed in Minor Permit No. AQ0886MSS04 are insignificant emission units per 18 AAC 50.326(e), (g)(4) and (g)(5) and are not required to be listed in this renewal permit.

[18 AAC 50.326(a), 12/1/04]
 [40 C.F.R. 71.5(c)(3), 7/2/07]

Section 3. State Requirements

Visible Emissions Standards

- 1. Industrial Process and Fuel-Burning Equipment Visible Emissions.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EU IDs 1 – 17, 20, 38, 59 – 61, 80, 81, 84, 85, 95, 96, 138, 139, 140, 142, and 143 listed in Table A to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

[18 AAC 50.040(j) & 50.055(a)(1), 7/25/08; 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(1), 7/2/07]

- 1.1 For each of EU IDs 1, 3 – 5, 140, and 142, as long as actual emissions are considered insignificant and no greater than 5 TPY CO, 2 TPY each for VOC, NO_x, and SO₂, and 0.75 TPY PM-10, monitor, record, and report in accordance with Conditions 16 and 59. Otherwise, monitor, record and report in accordance with Conditions 2 through 4.
- 1.2 For EU IDs 60, 61, 80, 81, 84, 85, 95, and 96, burn only gas as fuel. Monitoring for these emission unit(s) shall consist of a certification in each operating report under Condition 58 that each of these emission units fired only gas. Report under Condition 57 if any fuel is burned other than gas.
- 1.3 For EU IDs 2, 6 – 17, and 20 as long as they do not exceed the limits in Condition 15, monitoring shall consist of an annual compliance certification in accordance with Conditions 16 and 59 with the opacity standard.
- 1.4 For EU IDs 38, 59, 138, 139, and 143, monitor, record and report in accordance with Conditions 16 and 59.

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04; 18 AAC 50.346(c), 11/9/08]
[40 C.F.R. 71.6(a)(3), 7/2/07]

Visible Emissions Monitoring, Recordkeeping and Reporting

For Liquid Fuel-Fired Emission Units (EU IDs 1, 3 – 5, 140, and 142)

- 2. Visible Emissions Monitoring.** The Permittee shall observe the exhaust of EU IDs 1, 3 – 5, 140, and 142 (if no longer insignificant pursuant to Condition 1.1) for visible emissions using either the Method 9 Plan under Condition 2.1 or the Smoke/No-Smoke Plan under Condition 2.2. The Permittee may change visible-emissions plans for an emission unit at any time unless prohibited from doing so by Condition 2.3. The Permittee may for each unit elect to continue the visible emission monitoring schedule in effect from the previous permit at the time a renewed permit is issued, if applicable.

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04; 18 AAC 50.346(c), 11/9/08]
[40 C.F.R. 71.6(a)(3)(i), 7/2/07]

- 2.1 **Method 9 Plan.** For all 18-minute observations in this plan, observe exhaust, following 40 C.F.R. 60, Appendix A-4, Method 9, adopted by reference in 18 AAC 50.040(a), for 18 minutes to obtain 72 consecutive 15-second opacity observations.
- a. First Method 9 Observation. For any unit, observe exhaust for 18 minutes within 14 calendar days after changing from the Smoke/No-Smoke Plan of Condition 2.2. For any units replaced during the term of this permit, observe exhaust for 18 minutes within 30 days of startup. For any unit no longer considered insignificant as set out by Condition 1.1, observe for 18 minutes within 30 days of triggering a change in status.
 - b. Monthly Method 9 Observations. After the first Method 9 observation, perform 18-minute observations at least once in each calendar month that an emission unit operates.
 - c. Semiannual Method 9 Observations. After observing emissions for three consecutive operating months under Condition 2.1b, unless a six-minute average is greater than 15 percent and one or more observations are greater than 20 percent, observe emissions at least semiannually for 18 minutes. Semiannual observations must be taken between four and seven months after the previous set of observations.
 - d. Annual Method 9 Observations. After at least two semiannual 18-minute observations, unless a six-minute average is greater than 15 percent and one or more individual observations are greater than 20 percent, observe emissions at least annually. Annual observations must be taken between 10 and 13 months after the previous observations.
 - e. Increased Method 9 Frequency. If a six-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more observations are greater than 20 percent, then increase or maintain the 18-minute observation frequency for that emission unit to at least monthly intervals, until the criteria in Condition 2.1c for semiannual monitoring are met.
- 2.2 **Smoke/No Smoke Plan.** Observe the exhaust for the presence or absence of visible emissions, excluding condensed water vapor.
- a. Initial Monitoring Frequency. Observe the exhaust during each calendar day that an emission unit operates.
 - b. Reduced Monitoring Frequency. After the emission unit has been observed on 30 consecutive operating days, if the emission unit operated without visible smoke in the exhaust for those 30 days, then observe emissions at least once in every calendar month that an emission unit operates.

- c. Smoke Observed. If smoke is observed, either begin the Method 9 Plan of Condition 2.1 or perform the corrective action required under Condition 2.3.

2.3 **Corrective Actions Based on Smoke/No Smoke Observations.** If visible emissions are present in the exhaust during an observation performed under the Smoke/No Smoke Plan of Condition 2.2, then the Permittee shall either follow the Method 9 plan of Condition 2.1 or

- a. initiate actions to eliminate smoke from the emission unit within 24 hours of the observation;
- b. keep a written record of the starting date, the completion date, and a description of the actions taken to reduce smoke; and
- c. after completing the actions required under Condition 2.3a,
 - (i) take Smoke/No Smoke observations in accordance with Condition 2.2
 - (A) at least once per day for the next seven operating days and until the initial 30 day observation period is completed; and
 - (B) continue as described in Condition 2.2b; or
 - (ii) if the actions taken under Condition 2.3a do not eliminate the smoke, or if subsequent smoke is observed under the schedule of Condition 2.3c(i)(A), then observe the exhaust using the Method 9 Plan unless the Department gives written approval to resume observations under the Smoke/No Smoke Plan; after observing smoke and making observations under the Method 9 Plan, the Permittee may at any time take corrective action that eliminates smoke and restart the Smoke/No Smoke Plan under Condition 2.2a.

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

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04; 18 AAC 50.346(c), 11/9/08]
[40 C.F.R. 71.6(a)(3)(ii), 7/2/07]

3.1 If using the Method 9 Plan of Condition 2.2

- a. the observer shall record
 - (i) the name of the stationary source, emission unit, and location; stationary source type, observer's name, and affiliation; and the date on the Visible Emissions Field Data Sheet in Section 11;
 - (ii) the time, estimated distance to the emissions 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) 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 Emissions Observation Record in Section 11, and
 - (v) the minimum number of observations required by the permit; each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period;
- b. to determine the six-minute average opacity, divide the observations recorded on the record sheet into sets of 24 consecutive observations; sets need not be consecutive in time and in no case shall two sets overlap; for each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24; record the average opacity on the sheet;
 - c. calculate and record the highest 18-consecutive-minute averages observed.
- 3.2 If using the Smoke/No Smoke Plan of Condition 2.2, record the following information in a written log for each observation and submit copies of the recorded information upon request of the Department:
- a. the date and time of the observation;
 - b. from Table A, the ID of the unit observed;
 - c. whether visible emissions are present or absent in the exhaust;
 - d. a description of the background to the exhaust during the observation;
 - e. if the unit starts operation on the day of the observation, the startup time of the unit;
 - f. name and title of the person making the observation; and
 - g. operating rate (load or fuel consumption rate).

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

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04; 18 AAC 50.346(c), 11/9/08]
[40 C.F.R. 71.6(a)(3)(iii), 7/2/07]

- 4.1 Include in each stationary source operating report under Condition 58
- a. which visible-emissions plan of Condition 2 was used for each emission unit; if more than one plan was used, give the time periods covered by each plan;

- b. for each emission unit under the Method 9 Plan,
 - (i) copies of the observation results (i.e. opacity observations) for each unit that used the Method 9 Plan, except for the observations the Permittee has already supplied to the Department; and
 - (ii) a summary to include:
 - (A) number of days observations were made;
 - (B) highest six-minute average observed; and
 - (C) dates when one or more observed six-minute averages were greater than 20 percent;
- c. for each unit under the Smoke/No Smoke Plan, the number of days that Smoke/No Smoke observations were made and which days, if any, that smoke was observed; and
- d. a summary of any monitoring or recordkeeping required under Conditions 2 and 3 that was not done;

4.2 Report under Condition 57:

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

Particulate Matter Emissions Standards

- 5. Industrial Process and Fuel-Burning Equipment Particulate Matter.** The Permittee shall not cause or allow particulate matter emitted from EU IDs 1 – 17, 20, 38, 59 – 61, 80, 81, 84, 85, 95, 96, 138, 139, 140, 142, and 143 listed in Table A to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.040(j) & 50.055(a)(1), 7/25/08; 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(1), 7/2/07]

- 5.1 For each of EU IDs 1, 3 – 5, 140, and 142, as long as actual emissions are considered insignificant and no greater than 5 TPY CO, 2 TPY each for VOC, NO_x, and SO₂, and 0.75 TPY PM-10, monitor, record, and report in accordance with Conditions 16 and 59. Otherwise, monitor, record and report in accordance with Conditions 7 through 12.

- 5.2 For EU IDs 60, 61, 80, 81, 84, 85, 95, and 96, burn only gas as fuel. Monitoring for these emission unit(s) shall consist of a certification in each operating report under Condition 58 that each of these emission unit(s) fired only gas. Report under Condition 57 if any fuel is burned other than gas.
- 5.3 For EU IDs 2, 6 – 17, and 20 as long as they do not exceed the limits in Condition 15, monitoring shall consist of an annual compliance certification under Conditions 16 and 59 with the particulate matter standard.
- 5.4 For EU IDs 38, 59, 138, 139, and 143, monitor, record and report in accordance with Conditions 16 and 59, except as indicated in Condition 6.

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04; 18 AAC 50.346(c), 11/9/08]
[40 C.F.R. 71.6(a)(3), 7/2/07]

Particulate Matter Monitoring, Recordkeeping and Reporting

Compliance with Particulate Matter Emissions Standard (EU ID 138)

- 6. Particulate Matter Demonstration.** The Permittee shall provide an initial compliance demonstration of the particulate matter limit in Condition 5 for EU ID 138 prior to commencing operation of the unit.

[Condition 3.1, Minor Permit No. AQ0866MSS04, 5/15/09]
[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04]

For Liquid Fuel-Fired Engines (EU IDs 1, 3 – 5, and 140)

- 7. Particulate Matter Monitoring for Diesel Engines.** The Permittee shall conduct source tests on diesel engines, EU IDs 1, 3 – 5, and 140 (pursuant to Condition 5.1) to determine the concentration of particulate matter (PM) in the exhaust of the emission unit in accordance with this Condition 7.

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04; 18 AAC 50.346(c), 11/9/08]
[40 C.F.R. 71.6(a)(3)(i), 7/2/07]

- 7.1 Within six months of exceeding the criteria of Conditions 7.2a or 7.2b, either
- a. conduct a PM source test according to requirements set out in Section 6; or
 - b. make repairs so that emissions no longer exceed the criteria of Condition 7.2; to show that emissions are below those criteria, observe emissions as described in Condition 2.1 under load conditions comparable to those when the criteria were exceeded.
- 7.2 Conduct the PM test or make repairs according to Condition 7.1 if
- a. 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity greater than 20 percent; or

-
- b. for an emission unit with an exhaust stack diameter that is less than 18 inches, 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity that is greater than 15 percent and not more than 20 percent, unless the Department has waived this requirement in writing.
- 7.3 During each one-hour PM source test run, observe the exhaust for 60 minutes in accordance with Method 9 and calculate the highest average 6-minute opacity that was measured during each one-hour test run. Submit a copy of these observations with the source test report.
- 7.4 The automatic PM source test requirement in Conditions 7.1 and 7.2 is waived for an emissions unit if a PM source test on that unit has shown compliance with the PM standard during this permit term.
- 8. Particulate Matter Record Keeping for Diesel Engines.** Within 180 calendar days after the effective date of this permit, the Permittee shall record the exhaust stack diameter of EU ID 140. Report the stack diameter in the next operating report under Condition 58.
[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04; 18 AAC 50.346(c), 11/9/08]
[40 C.F.R. 71.6(a)(3)(ii), 7/2/07]
- 9. Particulate Matter Reporting for Diesel Engines.** The Permittee shall report as follows:
[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04; 18 AAC 50.346(c), 11/9/08]
[40 C.F.R. 71.6(a)(3)(iii), 7/2/07]
- 9.1 Report under Condition 57
- a. the results of any PM source test that exceeds the PM emissions limit; or
 - b. if one of the criteria of Condition 7.2 was exceeded and the Permittee did not comply with either Condition 7.1a or 7.1b, this must be reported by the day following the day compliance with Condition 7.1 was required;
- 9.2 Report observations in excess of the threshold of Condition 7.2b within 30 days of the end of the month in which the observations occur;
- 9.3 In each stationary source operating report under Condition 58, include
- a. the dates, EU ID(s), and results when an observed 18-minute average was greater than an applicable threshold in Condition 7.2;
 - b. a summary of the results of any PM testing under Condition 7; and
 - c. copies of any visible emissions observation results (opacity observations) greater than the thresholds of Condition 7.2, if they were not already submitted.

For Used-Oil Burners (EU ID 142)

- 10. Particulate Matter Monitoring for Liquid Fuel-Fired Boilers.** The Permittee shall conduct source tests on EU ID 142 (pursuant to Condition 5.1) to determine the concentration of PM in the exhaust of unit as follows:

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j)(4), 12/1/04]
[40 C.F.R. 71.6(a)(3)(i) & (c)(6), 7/2/07]

- 10.1 Conduct a PM source test according to the requirements set out in Section 6 no later than 90 calendar days after any time corrective maintenance fails to eliminate visible emissions greater than the 20 percent opacity threshold for two or more 18-minute observations in a consecutive six-month period.
- 10.2 During each one-hour PM source test run, observe the exhaust for 60 minutes in accordance with Method 9 and calculate the average opacity that was measured during each one-hour test run.
- 10.3 The PM source test requirement in Condition 10 is waived for an emission unit if:
- a. PM source test during the most recent semiannual reporting period on that unit shows compliance with the PM standard since permit issuance, or
 - b. if a follow-up visible emission observation conducted using Method-9 during the 90 days shows that the excess visible emissions described in Condition 2.1e no longer occur.

- 11. Particulate Matter Recordkeeping for Liquid Fuel-Fired Boilers.** The Permittee shall keep records of the results of any PM testing and visible emissions observations conducted under Condition 10.

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j)(4), 12/1/04]
[40 C.F.R. 71.6(a)(3)(ii) & (c)(6), 7/2/07]

- 12. Particulate Matter Reporting for Liquid Fuel-Fired Boilers.** The Permittee shall report as follows:

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j)(4), 12/1/04]
[40 C.F.R. 71.6(a)(3)(iii) & (c)(6), 7/2/07]

- 12.1 In each operating report required by Condition 58, include
- a. the dates, EU ID(s), and results when an 18-minute opacity observation was greater than the applicable threshold criterion in Condition 2.1e.
 - b. a summary of the results of any PM testing and visible emissions observations conducted under Condition 10.
- 12.2 Report as excess emissions, in accordance with Condition 57, any time the results of a source test for PM exceeds the PM emission limit stated in Condition 5.

Sulfur Compound Emission Standards Requirements

- 13. Sulfur Compound Emissions.** In accordance with 18 AAC 50.055(c), the Permittee shall not cause or allow sulfur compound emissions, expressed as SO₂, from EU IDs 1 – 17, 20, 38, 59 – 61, 80, 81, 84, 85, 95, 96, 138, 139, 140, 142, and 143 to exceed 500 ppm averaged over three hours.

[18 AAC 50.040(j) & 50.055(a)(1), 7/25/08; 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(1), 7/2/07]

For Fuel Oil¹

13.1 For each shipment of fuel:

- a. If the fuel grade requires a sulfur content less than 0.5 percent sulfur by weight, keep receipts that specify fuel grade and amount received; or
- b. If the fuel grade does not require a sulfur content less than 0.5 percent by weight, keep receipts that specify fuel grade and amount received, and
 - (i) test the fuel for sulfur content; or
 - (ii) obtain test results showing the sulfur content of the fuel from the supplier or refinery; the test results must include a statement signed by the supplier or refinery of what fuel they represent.

13.2 Fuel testing under Condition 13.1b(i) must follow an appropriate method listed in 18 AAC 50.035(b)-(c) and 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1).

13.3 If a load of fuel contains greater than 0.75 percent sulfur by weight, the Permittee shall calculate SO₂ emissions in ppm using either Section 12 or Method 19 of 40 C.F.R. 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a).

13.4 The Permittee shall report as follows:

- a. If SO₂ emissions calculated under Condition 13.3 exceed 500 ppm, the Permittee shall report under Condition 57. When reporting under this condition, include the calculation under Section 12.
- b. The Permittee shall include in the report required by Condition 58
 - (i) a list of the fuel grades received at the stationary source during the reporting period;

¹ *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, effective 7/1/07.

- (ii) for any grade with a maximum fuel sulfur greater than 0.5 percent sulfur, the fuel sulfur of each shipment; and
- (iii) for fuel with a sulfur content greater than 0.75 percent, the calculated SO₂ emissions in ppm.

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04; 18 AAC 50.346(c), 11/9/08]
[40 C.F.R. 71.6(a)(3), 7/2/07]

*For Fuel Gas*²

13.5 Monitoring. The Permittee shall either

- a. obtain a semiannual statement from the fuel supplier of the fuel total sulfur level in ppm; or
- b. analyze a representative sample of the fuel semiannually to determine the sulfur content using either ASTM D4084, D5504, D4810, D4913, D6228 or GPA Standard 2377, or a listed method approved in 18 AAC 50.035(b)-(c) and 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1).

13.6 Recordkeeping. Keep records of the semiannual statement from the fuel supplier or the sulfur content analysis required under Conditions 13.5a or 13.5b.

13.7 Reporting. The Permittee shall report as follows:

- a. Report as excess emissions, in accordance with Condition 57, whenever the fuel combusted causes sulfur compound emissions to exceed the standard of Condition 13.
- b. Include copies of the records required by Condition 13.6 with the stationary source operating report required by Condition 58 for the period covered by the report.

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j)(4), 12/1/04]
[40 C.F.R. 71.6(a)(3) & (c)(6), 7/2/07]

Used Oil Requirements

14. Burning Used Oil. The Permittee may burn used oil fuel blends in EU ID 20 as follows³:

- 14.1 Analyze each batch of used oil to determine the sulfur content using an approved ASTM method such as ASTM D129, D1266, D1522, D2622, D4045, or D4294. Maintain records showing the results of each analysis.

² *Fuel gas* has the meaning taken as natural gas as defined in 40 C.F.R. 60.41b, effective 7/1/07.

³ Note: Although this condition should ensure compliance with the applicable emission standards of 18 AAC 50, this permit does NOT ensure compliance with other applicable state or federal laws concerning management, use, or disposal of used oil.

14.2 Blend the used fuel oil with virgin fuel oil at a ratio that will ensure compliance with the sulfur limit of Condition 13. However, the used oil fuel blend shall be mixed at a ratio of no more than 1 part used oil with 6 parts fuel oil, unless the Permittee provides a Department approved demonstration that a greater ratio will comply with the limit in Condition 5.

14.3 Include with the operating report required by Condition 58:

- a. Results of each analysis as set out by Condition 14.1; and
- b. For each batch of used oil fuel blended, the amounts of fuel oil and used oil; the blend ratio; the final sulfur content; and the blend date.

14.4 Report as set out by Condition 57 any time the blend ratio or other requirements deviate from this condition.

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j)(4), 12/1/04]
[40 C.F.R. 71.6(a)(3) & (c)(6), 7/2/07]

Existing Permit Requirements

Owner Requested Limits

15. Operational Limits. The Permittee shall limit operations of each of EU IDs 1 – 20 to 500 hours per consecutive 12-month period.

15.1 Monitor and record the monthly hours of operation for each of EU IDs 1 – 20.

15.2 Calculate and record the consecutive 12-month total hours of operation for each of EU IDs 1 – 20.

15.3 Report with the operating report required by Condition 58, the monthly and the consecutive 12-month total hours operated for each of EU IDs 1 – 20 for each month of the reporting period.

15.4 Report under Condition 57 if the consecutive 12-month period total hours of operation for any given month exceed the limit for any of EU IDs 1 – 20.

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a), 7/2/07]

Insignificant Emission Units

16. For EU IDs 1 – 17, 20, 38, 59, 138, 139, 140, 142, and 143 and emission units at the stationary source that are insignificant as defined in 18 AAC 50.326(d)-(i) that are not listed in this permit, the following apply:

16.1 The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from an industrial process, fuel-burning equipment, or an incinerator to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

[18 AAC 50.050(a)(2) & 50.055(a)(1), 7/25/08]

16.2 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), 7/25/08]

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

[18 AAC 50.055(c), 7/25/08]

16.4 General MR&R for Insignificant Emission Units

- a. The Permittee shall submit the compliance certifications of Condition 59 based on reasonable inquiry;
- b. The Permittee shall comply with the requirements of Condition 36;
- c. The Permittee shall report in the operating report required by Condition 58 if an emission unit is insignificant because of actual emissions less than the thresholds of 18 AAC 50.326(e) and actual emissions become greater than any of those thresholds;
- d. No other monitoring, recordkeeping or reporting is required except as indicated in Conditions 6 and 15, and Section 4.

[18 AAC 50.346(b)(4), 12/1/04]

Section 4. Federal Requirements

Emission Units Subject to Federal New Source Performance Standards (NSPS), Subpart A

17. NSPS Subpart A Notification. For any affected facility⁴ or existing facility⁵ regulated under NSPS requirements in 40 C.F.R. 60, the Permittee shall furnish the Department and EPA written or electronic notification of:

[18 AAC 50.040(a)(1), 7/25/08]
[40 C.F.R. 60.15(d), Subpart A, 7/1/07]

17.1 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 60 days (or as soon as practicable) before construction of the replacements is commenced and must include the following information:

[40 C.F.R. 60.15(d), 7/1/07]

- 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.

⁴ *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, effective 7/1/07.

⁵ *Existing facility* means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in this part, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type, as defined in 40 C.F.R. 60.2, effective 7/1/07.

- 18. NSPS Subpart A Concealment of Emissions.** The Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of a standard set forth in Conditions 21 and/or 21. 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), 7/25/08]
[40 C.F.R. 60.12, Subpart A, 7/1/07]

Compression Ignition ICE Subject to NSPS Subpart III

For Emergency Engines, EU IDs 38, 59, 138, 139, and 143

- 19. NSPS Subpart III Requirements.** For EU IDs 38, 59, 138, 139, and 143, the Permittee shall comply with any applicable requirement for stationary compression ignition (CI) internal combustion engine (ICE) whose construction⁶, modification⁷, or reconstruction⁸ commences after July 11, 2005.

- 19.1 Operate and maintain the stationary CI ICE and control device according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer over the entire life of the engine. In addition, the Permittee may only change those settings that are permitted by the manufacturer.

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(1), 7/2/07]
[40 C.F.R. 60.4200(a), 60.4206, & 60.4211(a), 7/11/06]

- 19.2 Comply with the applicable provisions of Subpart A as specified in Table 8 to Subpart III.

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 60.4218 & Table 8, 7/11/06]

- 19.3 Notification. If the stationary CI ICE is an emergency stationary ICE, the Permittee is not required to submit an initial notification.

[40 C.F.R. 60.4214(b), 7/11/06]

- 19.4 Emergency stationary ICE may be operated 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 such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition the EPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours

⁶ For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

⁷ As defined in 18 AAC 50.990(59).

⁸ As defined in 18 AAC 50.990(88).

per year. For owners and operators of emergency engines meeting standards under 40 C.F.R. 60.4205 but not 60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.

[40 C.F.R. 60.4211(e), Subpart III, 7/11/06]

20. NSPS Subpart III Fuel Requirements. The Permittee shall comply with the following:

20.1 For EU IDs 38, 59, 138, 139, and 143, comply with the applicable fuel requirements in 40 C.F.R. 60.4207, as follows:

a. Beginning October 1, 2007, for CI ICE that use diesel fuel, use diesel fuel that meets the requirements of 40 C.F.R. 80.510(a), as follows:

(i) Sulfur content of 500 ppm maximum per-gallon standards

(ii) Cetane index or aromatic content, as follows:

(A) A minimum cetane index of 40; or

(B) A maximum aromatic content of 35 volume percent.

b. Beginning October 1, 2010, for CI ICE with a displacement of less than 30 liters per cylinder that use diesel fuel, use diesel fuel that meets the requirements of 40 C.F.R. 80.510(b) for nonroad diesel fuel, as follows:

(i) Sulfur content of 15 ppm maximum per-gallon standards

(ii) Cetane index or aromatic content, as follows:

(A) A minimum cetane index of 40; or

(B) A maximum aromatic content of 35 volume percent.

c. For pre-2011 model year stationary CI ICE, the Permittee may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of Conditions 20.1a or 20.1b beyond the date required for the purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the Permittee is required to submit a new petition to the Administrator.

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04]

[40 C.F.R. 60.4207(a) – (c), 7/11/06]

[40 C.F.R. 80.510(a) & (b), Subpart I, 7/15/05]

21. NSPS Subpart III Emission Standards. The Permittee shall comply with the applicable emission standards for EU IDs 38, 59, 138, 139, and 143, as listed below.

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04]

[40 C.F.R. 71.6(a)(1), 7/2/07]

[40 C.F.R. 60.4200(a)(2)(i), Subpart III, 7/11/06]

21.1 For emergency stationary CI ICE with a displacement of less than 30 liters per cylinder, the Permittee shall certify to the applicable emission standards for nonroad CI engines in 40 C.F.R. 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

[40 C.F.R. 60.4205(b), 60.4202(a)(1& 2), & Table 2, Subpart III, 7/11/06]
[40 C.F.R. 89.112, 7/13/05; 40 C.F.R. 89.113, Subpart B, 10/23/98]
[40 C.F.R. 1039.104, 105, 107, 115, Subpart B, 9/18/07]

22. NSPS Subpart III Monitoring and Recordkeeping. The Permittee shall meet the monitoring requirements, as follows:

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(3)(i & ii), 7/2/07]
[40 C.F.R. 60.4209(a) & (b), Subpart III, 7/11/06]

22.1 For EU IDs 38, 59, 138, 139, and 143, install a non-resettable hour meter prior to startup of the engine.

[40 C.F.R. 60.4209(a), Subpart III, 7/11/06]

- a. Starting with the model years in Table 5 of Subpart III (i.e., model year 2011, 2012, 2013), if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the Permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The Permittee shall record the time of operation of the engine and the reason the engine was in operation during that time.

[40 C.F.R. 60.4214(b), Subpart III, 7/11/06]

22.2 For EU IDs 38, 59, 138, 139, and 143, demonstrate compliance according to the method specified in Conditions 22.2a:

- a. For 2007 model year and later stationary CI internal combustion engine that must comply with the emission standards specified in 40 C.F.R. 60.4204(b) or 60.4205(b), the Permittee must comply by purchasing an engine certified to the emission standards in 40 C.F.R. 60.4204(b), or 60.4205(b) or (c), as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
- b. Keep documentation from the manufacturer that the engine is certified to meet the emission standards as set out by Condition 22.2a.

[40 C.F.R. 60.4211(c), Subpart III, 7/11/06]

23. NSPS Subpart III Reporting. The Permittee shall report in the next operating report required by Condition 58, the records of compliance demonstration required in Conditions 22.1 and 22.2.

[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j)(4), 12/1/04]
[40 C.F.R. 71.6(a)(3)(iii) & (c)(6), 7/2/07]

National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart A

- 24. NESHAPs Subpart A.** 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 Subpart ZZZZ (Table 8) as set out by Condition 25.

[18 AAC 50.040(j)(4), 7/25/08]
[40 C.F.R. 63, Subpart A, 7/16/07]

Stationary RICE Units Subject to NESHAPs Subpart ZZZZ

- 25. NESHAPs Subpart ZZZZ Requirements.** The provisions of 40 C.F.R. 63 Subpart ZZZZ is applicable to EU IDs 38, 59, 138, 139, and 143 as follows:

- 25.1 An affected source that is a new or reconstructed stationary reciprocating internal combustion engines (RICE) located at an area source must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 C.F.R. 60 Subpart IIII in Conditions 19 through 23 for compression ignition engines. No further requirements apply for such engines under this part.

[18 AAC 50.040(j), 12/3/05; 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 63.6590(c), Subpart ZZZZ, 7/16/07]

Section 5. General Conditions

Standard Terms and Conditions

- 26.** 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), 12/1/04; 18 AAC 50.345(a) & (e), 11/9/08]

- 27.** 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), 12/1/04; 18 AAC 50.345(a) & (f), 11/9/08]

- 28.** The permit does not convey any property rights of any sort, nor any exclusive privilege.

[18 AAC 50.326(j)(3), 12/1/04; 18 AAC 50.345(a) & (g), 11/9/08]

- 29. Administration Fees.** The Permittee shall pay to the Department all assessed permit administration fees. Administration fee rates are set out in 18 AAC 50.400-405.

[18 AAC 50.326(j)(1), 12/1/04; 18 AAC 50.400, 7/25/2008; 18 AAC 50.403, 12/3/05; 18 AAC 50.405, 1/29/05]
[AS 37.10.052(b), 11/04; AS 46.14.240, 6/7/03]

- 30. Assessable Emissions.** 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 assessable emission fee rate is set out in 18 AAC 50.410(b). The Department will assess fees per ton of each air pollutant that the stationary source emits or has the potential to emit in quantities greater than 10 tons per year (TPY). The quantity for which fees will be assessed is the lesser of

30.1 the stationary source's assessable potential to emit of 570.7 TPY; or

30.2 the stationary source's projected annual rate of emissions that will occur from July 1 to the following June 30, based upon actual annual emissions emitted during the most recent calendar year or another 12-month period approved in writing by the Department, when demonstrated by

- 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.

[18 AAC 50.040(j)(3), 7/25/08; 18 AAC 50.326(j)(1), 12/1/04; 18 AAC 50.035 & 18 AAC 50.346(b)(1), 11/9/08;
18 AAC 50.410, 6/18/09; 18 AAC 50.420, 1/29/05]
[40 C.F.R. 71.5(c)(3)(ii), 7/2/07]

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

31.1 no later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions to ADEC, Air Permits Program, ATTN: Assessable Emissions Estimate, 410 Willoughby Ave., Juneau, AK 99801-1795; the submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates; or

31.2 if no estimate is submitted on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit set forth in Condition 30.1.

[18 AAC 50.040(j)(3), 7/25/08; 18 AAC 50.326(j)(1), 12/1/04; 18 AAC 50.346(b)(1), 11/9/08;
18 AAC 50.410, 6/18/09; 18 AAC 50.420, 1/29/05]
[40 C.F.R. 71.5(c)(3)(ii), 7/2/07]

32. Good Air Pollution Control Practice. The Permittee shall do the following for EU IDs 1, 3 – 5, 60, 61, 80, 81, 84, 85, 95, 96, 140, and 142 (if no longer insignificant), and EU IDs 141, 144, and 145:

32.1 perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;

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

32.3 keep a copy of either the manufacturer's or the operator's maintenance procedures.

[18 AAC 50.030, 50.326(j)(3), & 50.346(b)(5), 12/1/04]

33. 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), 10/1/04]

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

[18 AAC 50.045(d), 10/1/04; 18 AAC 50.346(c), 11/9/08; 18 AAC 50.040(e), 7/25/08;
18 AAC 50.326(j)(3), 12/1/04]

34.1 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 34.1 or to address the results of Department inspections that found potential problems; and
- (ii) to prevent future dust problems.

34.2 The Permittee shall report according to Condition 36.

35. 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 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), 7/25/08]

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

[18 AAC 50.110, 5/26/72; 18 AAC 50.040(e), 7/25/08; 18 AAC 50.326(j)(3), 12/1/04;
18 AAC 50.346(a), 11/9/08]
[40 C.F.R. 71.6(a)(3), 7/2/07]

36.1 Monitoring, Recordkeeping, and Reporting for Air Pollution Prohibited:

- a. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 57.
- b. As soon as practicable after becoming aware of a complaint that is attributable to emissions from the stationary source, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of Condition 36.

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

- a. 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 36; or
- b. the Department notifies the Permittee that it has found a violation of Condition 36.

36.3 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 36; and
- d. any corrective actions taken or planned for complaints attributable to emissions from the stationary source.

36.4 With each stationary source operating report under Condition 58, the Permittee shall include a brief summary report which must include

- a. the number of complaints received;
- b. the number of times the Permittee or the Department found corrective action necessary;
- c. the number of times action was taken on a complaint within 24 hours; and
- d. the status of corrective actions the Permittee or Department found necessary that were not taken within 24 hours.

36.5 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.

37. Technology-Based Emission Standard. If an unavoidable emergency, malfunction, or non-routine repair, as defined in 18 AAC 50.235(d), causes emissions in excess of a technology-based emission standard⁹ listed in Conditions 21 or 39 (refrigerants), the Permittee shall take all reasonable steps to minimize levels of emissions that exceed the standard. Excess emissions reporting under Condition 57 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 57.

[18 AAC 50.235(a) & 50.326(j)(4), 12/1/04 and 18 AAC 50.040(j)(4), 7/25/08]
[40 C.F.R. 71.6(c)(6), 7/2/07]

38. Asbestos NESHAP. The Permittee shall comply with the 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), 7/25/08; 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 61, Subparts A & M, & Appendix A, 5/16/07]

⁹ *Technology-based emission standard* means a best available control technology standard (BACT); a lowest achievable emission rate standard (LAER); a maximum achievable control technology 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.

- 39. Refrigerant Recycling and Disposal.** The Permittee shall comply with the standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F.

[18 AAC 50.040(d), 7/25/08; 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 82, Subpart F, 7/1/07]

NESHAPs Applicability Determinations

- 40.** The Permittee shall determine rule applicability and designation of affected sources under National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories (40 C.F.R. 63) in accordance with the procedures described in 40 C.F.R. 63.1(b) and 63.10(b)(3). If a source becomes affected by an applicable subpart of 40 C.F.R. 63, Permittee 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).

- 40.1 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 §63.9(b).

[18 AAC 50.040(c)(1) & 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(3)(ii), 7/2/07]
[40 C.F.R. 63.1(b), 63.5(b)(4), 63.6(c)(1), & 63.10(b)(3), 7/16/07]

Halon Prohibitions, 40 C.F.R. 82

- 41.** 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), 7/25/08]
[40 C.F.R. 82.174 (b) - (d), 7/1/07]

- 42.** 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), 7/25/08]
[40 C.F.R. 82.270 (b)-(f), 7/1/07]

Open Burning Requirements

- 43. Open Burning.** If the Permittee conducts open burning at this stationary source, the Permittee shall comply with the requirements of 18 AAC 50.065.

- 43.1 The Permittee shall 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.

43.2 Compliance with this condition shall be an annual certification conducted under Condition 59.

[18 AAC 50.065, 1/18/97; 18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(3), 7/2/07]

Section 6. General Source Testing and Monitoring Requirements

- 44. 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), 10/1/04; 18 AAC 50.345(a) & (k), 11/9/08]

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

[18 AAC 50.220(b), 10/1/04]

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

45.2 at the maximum rated burning or operating capacity of the emission unit or another rate determined by the Department to characterize the actual discharge into the ambient air.

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

46.1 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), 10/1/04; 18 AAC 50.040(a), 7/25/08]
[40 C.F.R. 60, 7/1/07]

46.2 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), 7/25/08; 18 AAC 50.220(c)(1)(B), 10/1/04]
[40 C.F.R. 61, 5/16/07]

46.3 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), 7/25/08; 18 AAC 50.220(c)(1)(C), 10/1/04]
[40 C.F.R. 63, 7/16/07]

46.4 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.

[18 AAC 50.030, 11/9/08; 18 AAC 50.220(c)(1)(D), 10/1/04]

- 46.5 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), 7/25/08; 18 AAC 50.220(c)(1)(E), 10/1/04]
[40 C.F.R. 60, Appendix A, 7/1/07]
- 46.6 Source testing for emissions of PM-10 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), 11/9/08; 18 AAC 50.220(c)(1)(F), 10/1/04]
[40 C.F.R. 51, Appendix M, 7/1/07]
- 46.7 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)(24), 7/25/08; 18 AAC 50.220(c)(2), 10/1/04]
[40 C.F.R. 63, Appendix A Method 301, 7/16/07]
- 47. 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 emission 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), 10/1/04; 18 AAC 50.990(102), 7/25/08]
- 48. Test Exemption.** The Permittee is not required to comply with Conditions 50, 51 and 52 when the exhaust is observed for visible emissions by Method 9 Plan.
[18 AAC 50.345(a), 11/9/08]
- 49. 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), 11/9/08]
- 50. Test Plans.** Except as provided in Condition 48, 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 emission 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 44 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), 11/9/08]

51. Test Notification. Except as provided in Condition 48, 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), 11/9/08]

52. Test Reports. Except as provided in Condition 48, within 60 days after completing a source test, the Permittee shall submit two copies 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 additionally certify the results in the manner set out in Condition 54. 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), 11/9/08]

Section 7. General Recordkeeping and Reporting Requirements

Recordkeeping Requirements

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

[18 AAC 50.326(j), 12/1/04]
[40 C.F.R 60.7(f), Subpart A, 7/1/07; 40 C.F.R. 71.6(a)(3)(ii)(B), 7/2/07]

- 53.1 copies of all reports and certifications submitted pursuant to this section of the permit; and
- 53.2 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.

Reporting Requirements

- 54. 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.

- 54.1 The Department may accept an electronic signature on an electronic application or other electronic record required by the Department if
- a. a certifying authority registered under AS 09.25.510 verifies that the electronic signature is authentic; and

- b. the person providing the electronic signature has made an agreement, with the certifying authority described in Condition 54.1a, that the person accepts or agrees to be bound by an electronic record executed or adopted with that signature.

[18 AAC 50.205, 10/1/04; 18 AAC 50.345(a) & (j), 11/9/08; 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(3)(iii)(A), 7/2/07]

- 55. Submittals.** Unless otherwise directed by the Department or this permit, the Permittee shall send an original and one copy of reports, compliance certifications, and other submittals required by this permit to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician. The Permittee may, upon consultation with the Compliance Technician regarding software compatibility, provide electronic copies of data reports, emission source test reports, or other records under a cover letter certified in accordance with Condition 54.

[18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(3)(iii)(A), 7/2/07]

- 56. 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 50.200, 10/1/04; 18 AAC 50.345(a) & (i), 11/9/08; 18 AAC 50.326(a) & (j), 12/1/04]
[40 C.F.R. 71.5(a)(2) & 71.6(a)(3), 7/2/07]

- 57. Excess Emissions and Permit Deviation Reports.**

[18 AAC 50.235(a)(2); 50.240(c); & 50.346(b)(2) & (3), 10/1/04; 18 AAC 50.326(j)(3), 10/1/04]

57.1 Except as provided in Condition 36, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

- a. in accordance with 18 AAC 50.240(c), as soon as possible after the event commenced or is discovered, report
 - (i) emissions that present a potential threat to human health or safety; and
 - (ii) excess emissions that the Permittee believes to be unavoidable;
- b. in accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or non routine repair that causes emissions in excess of a technology based emission standard;
- c. report all other excess emissions and permit deviations
 - (i) within 30 days of the end of the month in which the emissions or deviation occurs, except as provided in Conditions 57.1c(ii) and 57.1c(iii);

- (ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the Department provides written permission to report under Condition 57.1c(i); and
- (iii) for failure to monitor, as required in other applicable conditions of this permit.

57.2 When reporting excess emissions or permit deviations, the Permittee must report using either the Department's on-line form, which can be found at <http://www.dec.state.ak.us/air/ap/site.htm> or <https://myalaska.state.ak.us/deca/air/airtoolsweb/>, or if the Permittee prefers, the form contained in Section 13 of this permit. The Permittee must provide all information called for by the form that is used.

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

58. Operating Reports. During the life of this permit¹⁰, the Permittee shall submit to the Department an original and one copy of an operating report by August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year.

[18 AAC 50.346(b)(6), 11/9/08; 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(3)(iii)(A), 7/2/07]

58.1 The operating report must include all information required to be in operating reports by other conditions of this permit. The Permittee may, upon consultation with the Compliance Technician regarding software compatibility, provide electronic copies of data reports, emission source test reports, or other records under a cover letter certified in accordance with Departmental submission requirements.

58.2 If excess emissions or permit deviations that occurred during the reporting period are not reported under Condition 58.1, either

- a. The Permittee shall identify
 - (i) the date of the deviation;
 - (ii) the equipment involved;
 - (iii) the permit condition affected;
 - (iv) a description of the excess emissions or permit deviation; and

¹⁰ *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.

- (v) any corrective action or preventive measures taken and the date of such actions; or
 - b. When excess emissions or permit deviations have already been reported under Condition 57, the Permittee may cite the date or dates of those reports.
- 58.3 The operating report must include a listing of emissions, which trigger additional testing or monitoring, whether or not the emissions monitored exceed an emission standard. The Permittee shall include in the report
 - a. the date of the emissions;
 - b. the equipment involved;
 - c. the permit condition affected; and
 - d. the monitoring result which triggered the additional monitoring.
- 58.4 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.
- 59. Annual Compliance Certification.** Each year by March 31, the Permittee shall compile and submit to the Department an original and one copy of an annual compliance certification report. The Permittee, at their discretion, may submit one copy in electronic format (PDF or other Department compatible image format).
 - 59.1 Certify the compliance status of the stationary source over the preceding calendar year consistent with the monitoring required by this permit, as follows:
 - a. identify each term or condition set forth in Section 3 through Section 9, that is the basis of the certification;
 - b. briefly describe each method used to determine the compliance status;
 - c. state whether compliance is intermittent or continuous; and
 - d. identify each deviation and take it into account in the compliance certification;
 - 59.2 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.

59.3 In addition, submit a copy of the report directly to the US EPA, Region 10, 1200 Sixth Avenue, Suite 900 (AWT-107), Seattle, WA 98101.

[18 AAC 50.205, 10/1/04; 18AAC 50.345(a) & (j), 11/9/08; 50.326(j), 12/1/04]
[40 C.F.R. 71.6(c)(5), 7/2/07]

60. NSPS and NESHAP Reports. The Permittee shall:

60.1 attach to the operating report required by Condition 58, a copy of any NSPS and NESHAPs reports submitted to the EPA-Region 10; and

60.2 upon request by the Department, notify and provide a written copy of any EPA-granted waiver of the federal emission standards, recordkeeping, monitoring, performance testing, or reporting requirements, or approved custom monitoring schedules.

[18 AAC 50.326(j)(4), 12/1/04; 18 AAC 50.040, 7/25/08]

Section 8. Permit Changes and Renewal

61. Permit Applications and Submittals. The Permittee shall comply with the following requirements for submitting application information to the EPA-Region 10:

61.1 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 Department¹¹;

61.2 The information shall be submitted to the same address as in Condition 59.3.

61.3 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

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

[18 AAC 50.040(j)(7) & 18 AAC 50.326(b), 12/1/04]
[40 C.F.R. 71.10(d)(1), 7/2/07]

62. 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), 7/25/08; 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(8), 7/2/07]

63. 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. Part 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:

[18 AAC 50.040(j)(4), 7/25/08; 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(12), 7/2/07]

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

63.2 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;

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

¹¹ The documents required in Condition 61.1 are submitted to the Department's Anchorage office. The current address for the Anchorage office is: ADEC, 619 East Ship Creek, Suite 249, Anchorage, AK 99501.

63.4 The Permittee shall keep a record describing changes made at the 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.

64. Operational Flexibility. The Permittee may make 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):

64.1 The Permittee shall provide EPA and the Department with a notification no less than 7 days in advance of the proposed change.

64.2 For each such change, the written notification required above shall include a brief description of the change within the permitted facility, 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.

64.3 The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made pursuant to Condition 64.

[18 AAC 50.040(j)(4), 7/25/08; 18 AAC 50.326(j), 12/1/04]
[40 C.F.R. 71.6(a)(13), 7/2/07]

65. Permit Renewal. To renew this permit, the Permittee shall submit an application under 18 AAC 50.326 no sooner than **[18 months before]** and no later than **[6 months before the expiration date of this permit]**. **The renewal application shall be complete before the permit expiration date listed on the cover page of this permit.** Permit expiration terminates the 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), 7/25/08; 18 AAC 50.326(c)(2) & (j)(2), 12/1/04]
[40 C.F.R. 71.5(a)(1)(iii), 71.7(b) & (c)(1)(ii), 7/2/07]

Section 9. Compliance Requirements

General Compliance Requirements

- 66.** Compliance with permit terms and conditions is considered to be compliance with those requirements that are
- 66.1 included and specifically identified in the permit; or
 - 66.2 determined in writing in the permit to be inapplicable.
[18 AAC 50.326(j)(3), 12/1/04; 18 AAC 50.345(a) & (b), 11/9/08]
- 67.** The Permittee must comply with each permit term and condition.
- 67.1 For applicable requirements with which the Elmendorf Air Force Base - Flight Line is in compliance, the Permittee shall continue to comply with such requirements.
 - 67.2 Noncompliance with a permit term or condition constitutes a violation of AS 46.14.120(c), 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
 - a. an enforcement action;
 - b. permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or
 - c. denial of an operating permit renewal application.
[18 AAC 50.040(j), 7/25/08; 18 AAC 50.326(j), 12/1/04; 18 AAC 50.345(a) & (c), 11/9/08]
[40 C.F.R. 71.6(c)(3) & 71.5(c)(8)(iii)(A), 7/2/07]
- 68.** 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), 12/1/04; 18 AAC 50.345(a) & (d), 11/9/08]
- 69.** 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
- 69.1 enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;
 - 69.2 have access to and copy any records required by the permit;
 - 69.3 inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and
 - 69.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.
[18 AAC 50.326(j)(3), 12/1/04; 18 AAC 50.345(a) & (h), 11/9/08]
-

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

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

Section 10. Permit As Shield from Inapplicable Requirements

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

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

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

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

[18 AAC 50.326(j), 12/1/04]
 [40 C.F.R. 71.6(f)(3)(i) & (ii), 7/2/07]

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

[18 AAC 50.326(j), 12/1/04]
 [40 C.F.R. 71.6(f)(1)(ii), 7/2/07]

Table B – Permit Shields Granted

| Non-Applicable Requirements | Reason for Non-Applicability |
|---|--|
| Bulk Tank 738, Bulk Tank 739, Bulk Tank 740, West Ramp Bulk Tank 736, West Ramp Bulk Tank 737, Hydrant Phase 1 Tank 741, Hydrant Phase 1 Tank 742, Hydrant Phase 2 Tank 743, Hydrant Phase 2 Tank 744, Deicing Tank 31, Deicing Tank 32, Farm 5 Tank 116, Farm 5 Tank 117, Gas Station Tank 124B, Farm 3 Tank 6, Hangar Tank 8 Tank 303A, Hangar Tank 8 Tank 303B, AVF Tank 410A, AVF Tank 410B | |
| 40 C.F.R. 60 Subpart Kb | Tanks meet the exemption requirements of 40 C.F.R. 60.110b(b), as amended 10/15/03, and therefore are not subject to Subpart Kb. |

Section 11. Visible Emissions Forms

Visible Emissions Field Data Sheet

Certified Observer: _____

Company &
 Stationary
 Source: _____

Location: _____

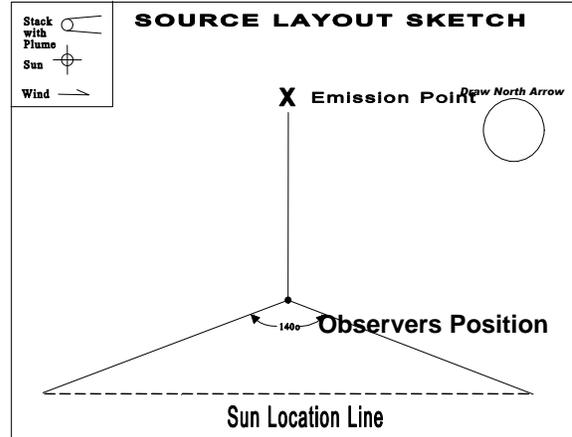
Test No.: _____ Date: _____

Emission Unit: _____

Production Rate/Operating
 Rate: _____

Unit Operating Hours: _____

Hrs. of observation: _____



| Clock Time | Initial | | | | Final |
|---|---------|--|--|--|-------|
| Observer location | | | | | |
| Distance to discharge | | | | | |
| Direction from discharge | | | | | |
| Height of observer point | | | | | |
| Background description | | | | | |
| Weather conditions | | | | | |
| Wind Direction | | | | | |
| Wind speed | | | | | |
| Ambient Temperature | | | | | |
| Relative humidity | | | | | |
| Sky conditions: (clear, overcast, % clouds, etc.) | | | | | |
| Plume description: | | | | | |
| Color | | | | | |
| Distance visible | | | | | |
| Water droplet plume? (Attached or detached?) | | | | | |
| Other information | | | | | |

Section 12. Material Balance Calculation

If the sulfur content of a fuel shipment is greater than 0.75 percent by weight, calculate the three-hour exhaust concentration of SO₂ 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. = 21 - [vol%**dry O**_{2, exhaust}] = 21 - _____ = _____

G. = [vol%**dry O**_{2, exhaust}] ÷ F = _____ ÷ _____ = _____

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

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

SO₂ 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 in the fuel. These percentages should total 100%.

The fuel weight percent (wt%) of sulfur is obtained pursuant to Condition 13.1. 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 ORSAT analysis at the same engine load used in the calculation.

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

[18 AAC 50.346(c), 11/9/08]

Section 13. ADEC Notification Form¹²

Stationary Source Name _____

Air Quality Permit Number _____

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.

Deviation from Permit Condition - Complete Section 2 and Certify

Deviations from COBC, CO, or Settlement Agreement - Complete Section 2 and Certify

Section 1. Excess Emissions

(a) Was the Exceedance: Intermittent or Continuous

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

Start Up /Shut Down

Natural Cause (weather/earthquake/flood)

Control Equipment Failure

Scheduled Maintenance/Equipment Adjustment

Bad fuel/coal/gas

Upset Condition

Other _____

(c) Description:

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

(d) Emissions Units Involved:

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

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

¹² Revised as of August 24, 2008.

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

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

(f) Unavoidable Emissions:

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

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

Certify Report (go to end of form)

Section 2 Permit Deviations

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

- Emission Unit Specific
 Failure to monitor/report
 General Source Test/Monitoring Requirements
 Recordkeeping/Reporting/Compliance Certification
 Standard Conditions Not Included in Permit
 Generally Applicable Requirements
 Reporting/Monitoring for Diesel Engines
 Insignificant Emission Unit
 Record Keeping Failure
 Stationary Source Wide
 Other Section _____ (title of section and section number of your permit).

(b) Emission Unit Involved:

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

| EU ID | EU Name | Permit Condition / Potential Deviation |
|-------|---------|--|
| | | |
| | | |
| | | |

(c) Description of Potential Deviation:

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

(d) Corrective Actions:

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

Certification:

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

Printed Name: _____ Title: _____ Date: _____

Signature: _____ Phone Number: _____

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

To Submit this Report:

Fax to: 907-451-2187

Or

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

If faxed or emailed, the report must be certified within the Operating Report required for the same reporting period per Condition 58.

Or

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

Or

Phone Notification: 907-451-5173

Phone notifications require a written follow-up report.

Or

Submission of information contained in this report can be made electronically at the following website:

<https://myalaska.state.ak.us/deca/air/airtoolsweb/>

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