DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY OPERATING PERMIT

Permit No. AQ1071TVP02 Issue Date: Public Comment - July 22, 2013
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, **Missile Defense Agency**, for the operation of the **Missile Defense Complex (MDC)**.

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 18 AAC 50 dated January 4, 2013 Register 205. All Federal regulation citations are from those sections adopted by reference in this version of regulation in 18 AAC 50.040 unless otherwise specified.

Upon effective date of this permit, Operating Permit No. AQ1071TVP01 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
ADEC .....Alaska Department of Environmental Conservation
AS .....Alaska Statutes
ASTM.....American Society for Testing and Materials
BACT .....Best Available Control Technology
BHp .....Boiler Horsepower
C.F.R. .....Code of Federal Regulations
The Act .....Clean Air Act
CO .....Carbon Monoxide
dscf .....Dry standard cubic foot
EPA .....US Environmental Protection Agency
EU.....Emission Unit
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]
Hp .....Horsepower
ID.....Emission Unit Identification Number
kPa .....kiloPascals
LAER.....Lowest Achievable Emission Rate
MACT .....Maximum Achievable Control Technology [MACT 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
NESHAPs.....Federal National Emission Standards for Hazardous Air Pollutants [NESHAPs as contained in 40 C.F.R. 61 and 63]
NOx.....Nitrogen Oxides
NSPS .....Federal New Source Performance Standards [NSPS as contained in 40 C.F.R. 60]
O & M .....Operation and Maintenance
O_2 .....Oxygen
PAL .....Plantwide Applicability Limitation
PM-2.5.....Particulate Matter less than or equal to a nominal 2.5 microns in diameter
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
SIC. .....Standard Industrial Classification
SO_2 .....Sulfur dioxide
TPH .....Tons per hour
TPY .....Tons per year
VOC .....volatile organic compound [VOC as defined in 40 C.F.R. 51.100(s)]
VOL .....volatile organic liquid [VOL as defined in 40 C.F.R. 60.111b, Subpart Kb]
vol% .....volume percent
wt% .....weight percent

Section 1. Stationary Source Information

Identification

Permittee:		Missile Defense Agency/ DPF Building 5222 Martin Road Redstone Arsenal, AL 35898
Stationary Source Name:		MDA Missile Defense Complex (MDC) Fort Greely, AK
Location:		63º 58´ North; 145º 43' West
Physical Address:		Po Box 31049 Fort Greely, AK 99731
Owner:		**Missile Defense Agency/ DPF** Ground-Based Missile Defense-Joint Program Office (JPO) Po Box 1500 Huntsville, AL 35807-3801
Operator:		MDA – OSG MDC, Fort Greely, Alaska Missile Defense Agency (MDA) Po Box 31049 Fort Greely, AK 99731 (907) 873-3025
Permittee's Responsible Official:		Mr. Eric Sorrells, P.E. ATTN: MDA/DPF (Eric Sorrels) Building 5222 Martin Road Redstone Arsenal, AL 35898
Designated Agent:		Mr. Robert Roberts, P.E. ATTN: (Mr. R K Roberts) AECOM C/O Computer Sciences Corporation 310 The Bridge Street Huntsville, AL 35806 (256) 799-3282
Stationary Source and Building Contact:		Mr. John Slette, see Operator for address
Fee and Permit Contact:		Mr. Ellis Gilliland ATTN: MDA/ DPF (Ellis Gilliland) Building 5222 Martin Road Redstone Arsenal, AL 35898 (256) 450-2676
Process Description:	SIC Code	9711- Major Group; National Security and International Affairs
	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. 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

EU ID	Emission Unit Name/ Facility No.	Emission Unit Description	Rating/Size	Installation Date
Liquid-Fuel Fired Boilers				
MDC-BF01	Boiler / 3102	Bryan Boiler RV800-W-FD	8.37 MMBtu/hr	2003
MDC-BF02	Boiler / 3102	Bryan Boiler RV800-W-FD	8.37 MMBtu/hr	2003
MDC-BF03	Boiler / 3102	Bryan Boiler RV800-W-FD	8.37 MMBtu/hr	2004/05
Liquid-Fuel Fired Emergency Generator Sets				
MDC-IC01	Genset / 3601	Detroit 16V2000R163K36	1495 Hp	2003/04
MDC-IC07	Genset / 3301	Caterpillar 3456DITA	691 Hp	2004
MDC-IC08	Genset / 3301	Caterpillar 3456DITA	691 Hp	2004
MDC-IC09	Genset / 3106	Caterpillar 3516BDITA	2636 Hp	2004
MDC-IC10	Genset / 3106	Caterpillar 3516BDITA	2636 Hp	2004
MDC-IC11	Genset / 3106	Caterpillar 3516BDITA	2636 Hp	2004
MDC-IC12	Genset / 3106	Caterpillar 3516BDITA	2636 Hp	2004
MDC-IC13	Genset / 3107	Caterpillar 3516CDITA	2695 Hp	2009
MDC-IC14	Genset / 3107	Caterpillar 3516CDITA	2695 Hp	2009
MDC-IC15	Genset / 3107	Caterpillar 3516CDITA	2695 Hp	2009
MDC-IC16	Genset / 3107	Caterpillar 3516CDITA	2695 Hp	2009
MDC-IC17	Genset / 3107	Caterpillar 3516CDITA	2695 Hp	2009

[18 AAC 50.326(a)]
[40 C.F.R. 71.5(c)(3)]

Section 3. State Requirements

Visible Emissions Standards

1. Fuel-Burning Equipment Visible Emissions. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EU IDs MDC-BF01 through MDC-BF03, MDC-IC01 and MDC-IC07 through MDC-IC17 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), &50.326(j)]
[40 C.F.R. 71.6(a)(1)]

1.1. For EU IDs MDC-BF01 through MDC-BF03, monitor, record and report in accordance with Conditions 2 through 4.

1.2. For EU IDs MDC-IC01 and MDC-IC07 through MDC-IC17, as long as they do not exceed the operating thresholds in Table B, monitoring shall consist of an annual compliance certification under Condition 79 with the visible emissions standard in accordance with Conditions 18.1 and 18.4. Otherwise, monitor, record, and report in accordance with Conditions 2 through 4.

a. To determine if the thresholds of Table B have been exceeded, monitor and record the twelve-month rolling operating hours for each of EU IDs MDC-IC01 and MDC-IC07 through MDC-IC17.

b. Report in the operating report required under Condition 78 the twelve-month rolling operating hours for each of EU IDs MDC-IC01 and MDC-IC07 through MDC-IC17 as recorded in Condition 1.2.a.

c. If any of EU IDs MDC-IC01 and MDC-IC07 through MDC-IC17 exceed the applicable threshold in Table B, provide written notice to the Department in the operating report required under Condition 78.

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

Table B – Emission Unit Operating Thresholds

EU ID	12-Month Rolling Operating Hour Checkpoint for VE Monitoring (Condition 1.2)
MDC-IC01	178
MDC-IC07	250
MDC-IC08	250
MDC-IC09	105
MDC-IC10	105
MDC-IC11	105

EU ID	12-Month Rolling Operating Hour Checkpoint for VE Monitoring (Condition 1.2)
MDC-IC12	105
MDC-IC13	105
MDC-IC14	105
MDC-IC15	105
MDC-IC16	105
MDC-IC17	105

Visible Emissions Monitoring, Recordkeeping and Reporting

Liquid Fuel-Fired Emission Units (EU IDs MDC-BF01 through MDC-BF03, MDC-IC01, & MDC-IC07 through MDC-IC17)

2. Visible Emissions Monitoring. The Permittee shall observe the exhaust of EU IDs MDC-BF01 through MDC-BF03, and MDC-IC01, and MDC-IC07 through MDC-IC17 as required by Condition 1.2, 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 emissions monitoring schedule in effect from the previous permit at the time a renewed permit is issued, if applicable.

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

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.

(i) For any unit replaced during the term of this permit, observe exhaust for 18 minutes within 30 days of startup.

(ii) For each existing emission unit that exceeds the operational threshold in Condition 18.1 observe the exhaust for 18 minutes of operations within 30 days after the calendar month during which that threshold has been exceeded, or within 30 days of the unit's next scheduled operations, whichever is later.

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 2.1.b, unless a six-minute average is greater than 15 percent and one or more observations are greater than 20 percent, perform 18-minute observations:

(i) Within six months after the preceding observation, or

(ii) For an emission unit with intermittent operations, during the next scheduled operation immediately following six months after the preceding observation.

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, perform 18-minute observations:

(i) Within twelve months after the preceding observation; or

(ii) For an emission unit with intermittent operations, during the next scheduled operation immediately following twelve months after the preceding observation

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 as described in Condition 2.1.b, until the criteria in Condition 2.1.c 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 2.3.a,

(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 2.2.b; or

(ii) if the actions taken under Condition 2.3.a do not eliminate the smoke, or if subsequent smoke is observed under the schedule of Condition 2.3.c(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 2.2.a.

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

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

3.1. When using the Method 9 Plan of Condition 2.1,

a. the observer shall record

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

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

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

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

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

b. To determine the six-minute average opacity, 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 6-minute and 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 emission 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 emission unit starts operation on the day of the observation, the startup time of the emission unit;

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

g. operating mode (load or fuel consumption rate).

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

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

4.1. Include in each operating report under Condition 78 for the period covered by the report:

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 emission 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 emission 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 77:

a. the results of Method 9 observations that exceed an average of 20 percent opacity 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 MDC-BF01 through MDC-BF03, MDC-IC01, and MDC-IC07 through MDC-IC17 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(b)(1) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

5.1. For EU IDs MDC-BF01 through MDC-BF03, monitor, record and report in accordance with Conditions 9 through 11.

5.2. For EU IDs MDC-IC01 and MDC-IC07 through MDC-IC17, as long as they do not exceed the operating thresholds in Table B, monitoring shall consist of an annual compliance certification under Condition 79 with the particulate matter standard in accordance with Conditions 18.2 and 18.4. Otherwise, monitor, record and report in accordance with Conditions 6 through 8.

PM Monitoring, Recordkeeping and Reporting

Liquid Fuel-Fired Engines (EU IDs MDC-IC01 & MDC-IC07 through MDC-IC17)

6. Particulate Matter Monitoring for Diesel Engines. The Permittee shall conduct source tests on diesel engines, EU IDs MDC-IC01 and MDC-IC07 through MDC-IC17, as required by Condition 5.2 to determine the concentration of particulate matter (PM) in the exhaust of an emission unit in accordance with this Condition 6.

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]

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

6.1. Within six months of exceeding the criteria of Conditions 6.2.a or 6.2.b, 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 6.2; 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.

6.2. Conduct the PM source test or make repairs according to Condition 6.1 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.

6.3. 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.

6.4. The automatic PM source test requirement in Conditions 6.1 and 6.2 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.

7. Particulate Matter Recordkeeping for Diesel Engines. Within 180 calendar days after the effective date of this permit, the Permittee shall record the exhaust stack diameters of EU IDs MDC-IC01 and MDC-IC07 through MDC-IC17. Report the stack diameters in the next operating report under Condition 78.

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

8. Particulate Matter Reporting for Diesel Engines. The Permittee shall report as follows:

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

8.1. Report under Condition 77

a. the results of any PM source test that exceed the PM emissions limit; or

b. if one of the criteria of Condition 6.2 was exceeded and the Permittee did not comply with either Condition 6.1.a or 6.1.b, this must be reported by the day following the day compliance with Condition 6.1 was required

8.2. Report observations in excess of the threshold of Condition 6.2.b within 30 days of the end of the month in which the observations occur;

8.3. In each operating report under Condition 78, include for the period covered by the report:

a. the dates, EU ID(s), and results when an observed 18-minute average was greater than an applicable threshold in Condition 6.2;

b. a summary of the results of any PM testing under Condition 6; and

c. copies of any visible emissions observation results (opacity observations) greater than the thresholds of Condition 6.2, if they were not already submitted.

For Liquid Fuel-Fired Boilers and Heaters (EU IDs MDC-BF01 through MDC-BF03)

9. Particulate Matter Monitoring for Liquid Fuel-Fired Boilers and Heaters. The Permittee shall conduct source tests on EU IDs MDC-BF01 through MDC-BF03 to determine the concentration of PM in the exhaust of EU IDs MDC-BF01 through MDC-BF03 as follows:

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

9.1. Except as required under Condition 9.3, 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.

9.2. 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. Submit a copy of these observations with the source test report.

9.3. The PM source test requirement in Condition 9 is waived for an emission unit if:

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

b. take corrective action and conduct two 18-minute visible emissions observations in a consecutive six-month period to show that the excess visible emissions described in Condition 9.1 no longer occur.

10. Particulate Matter Recordkeeping for Liquid Fuel-Fired Boilers and Heaters. The Permittee shall keep records of the results of any PM testing and visible emissions observations conducted under Condition 9.

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

11. Particulate Matter Reporting for Liquid Fuel-Fired Boilers and Heaters. The Permittee shall report as follows:

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

11.1. In each operating report required by Condition 78, include for the period covered by the report:

a. the dates, EU ID(s), and results when an 18-minute opacity observation was greater than the applicable threshold criterion in Condition 2.1.e.

b. a summary of the results of any PM testing and visible emissions observations conducted under Condition 9.

11.2. Report as excess emissions, in accordance with Condition 77, any time the results of a source test for PM exceed the PM emission limit stated in Condition 5.

Sulfur Compound Emission Standards Requirements

12. Sulfur Compound Emissions. In accordance with 18 AAC 50.055(c), the Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from EU IDs MDC-BF01 through MDC-BF03, MDC-IC01, and MDC-IC07 through MDC-IC17 to exceed 500 ppm averaged over three hours.

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

For Fuel Oil[1] (EU IDs MDC-BF01 through MDC-BF03, MDC-IC01, and MDC-IC07 through MDC-IC17)

12.1. The Permittee shall comply with the fuel sulfur content limit in Condition 13.

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

12.2. The Permittee shall monitor, record, and report as required by Condition 13.

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

[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.

Pre-construction Permit[2] Requirements

Ambient Air Quality Protection Requirements

13. The Permittee shall limit the maximum sulfur content of fuel oil, for all fuel burning equipment listed in Table A to 0.12 percent, by weight. Monitor, record, and report as follows:

[Condition 9, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1) & (3)]

13.1. Obtain a statement or receipt from the fuel supplier certifying the maximum sulfur content of the fuel for each shipment of fuel delivered to the stationary source. If a certificate is not available from the supplier, analyze a representative sample of the fuel to determine the sulfur content using an appropriate method listed in 18 AAC 50.035(b)-(c) and 40 C.F.R. 60.17 incorporated by reference at 18 AAC 50.040(a)(1).

[Condition 9.1, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]

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

[Condition 9.2, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]

13.3. Include the list in the operating report required by Condition 78.

[Condition 9.3, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]

14. The Permittee shall not concurrently operate more than two among EUs MDC-IC09 through MDC-IC12, except for brief periods of concurrent engine startup and shutdown which shall not last more than one hour. Monitor, record, and report as indicated in Condition 17.7.

[Condition 12, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

15. The Permittee shall not concurrently operate more than three among EUs MDC-IC13 through MDC-IC17, except for brief periods of concurrent engine startup and shutdown which shall not last more than one hour. Monitor, record, and report as indicated in Condition 17.7.

[Condition 13, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

[2] *Pre-construction Permit* refers to Federal PSD Permits, State-issued Permits-to-Operate issued before January 18, 1997 (these permits cover both construction and operations), Construction Permits issued after January 17, 1997, and Minor Permits issued after October 1, 2004.

ORL to Avoid Classification as a PSD Major Stationary Source

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

[Condition 18, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]

Boiler Limits

16.1. For EUs MDC-BF01, MDC-BF02, and MDC-BF03 limit the total fuel oil burned to not exceed 1,098,687 gallons ***combined*** per rolling 12-month period.

[Condition 18.1, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]

Emergency Generator Limits

16.2. For EUs MDC-IC01, MDC-IC07, and MDC-IC08 limit the individual total hours of operation to no greater than 350 hours ***each*** per rolling 12-month period.

[Condition 18.2, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]

16.3. For EUs MDC-IC09 through MDC-IC12 limit the total fuel oil burned to no greater than 656,640 gallons ***combined*** per rolling 12-month period.

[Condition 18.3, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]

16.4. For EUs MDC-IC13 through MDC-IC17 limit the total fuel oil burned to no greater than 656,640 gallons ***combined*** per rolling 12-month period.

[Condition 18.4, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]

17. Monitoring, Recordkeeping, and Reporting Requirements

17.1. The Permittee shall monitor the monthly fuel consumption of the emission units as source category totals. For EUs MDC-BF01 through MDC-BF03, MDC-IC09 through MDC-IC12, and MDC-IC13 through MDC-IC17 the Permittee shall accurately monitor and record the quantity of fuel oil burned. The Permittee shall:

[Condition 19.1, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(i)]

a. Install and operate flow meters on each emission unit, or use an alternate method approved by the Department to document the aggregate fuel consumption in each emission unit group in Conditions 16.1, 16.3, and 16.4.

[Condition 19.1.a, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]

b. utilize flow meters with an accuracy of at least plus or minus five percent if for two consecutive months the alternate approved method shows that fuel consumption is equal to or greater than 80% of the limits in Conditions 16.1, 16.3 and 16.4.

[Condition 19.1.b, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]

17.2. The Permittee shall report the monthly and rolling 12-month quantity of fuel oil burned in EUs MDC-BF01 through MDC-BF03, MDC-IC09 through MDC-IC12, and MDC-IC13 through MDC-IC17 in the operating report required by Condition 78.

[Condition 19.2, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii)]

17.3. If the ***combined*** fuel oil burned for EUs MDC-BF01 through MDC-BF03 exceeds the limit in Condition 16.1, the Permittee shall report permit deviation as described in Condition 77.

[Condition 19.3, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii)]

17.4. If the ***combined*** liquid fuel oil burned for EUs MDC-IC09 through MDC-IC12, exceeds the limit in Condition 16.3, the Permittee shall report permit deviation as described in Condition 77.

[Condition 19.4, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii)]

17.5. If the ***combined*** liquid fuel oil burned for EUs MDC-IC13 through MDC-IC17, exceeds the limit in Condition 16.4, the Permittee shall report permit deviation as described in Condition 77.

[Condition 19.5, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii)]

17.6. The Permittee shall equip EUs MDC-IC01, MDC-IC07, and MDC-IC08 with hour totalizers and monitor and maintain records of the monthly and rolling 12-month hours of operation for each emission unit in order to demonstrate compliance with Condition 16.2.

[Condition 19.6, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(i) & (ii)]

a. The Permittee shall report each emission unit's monthly and cumulative rolling 12-month hours of operation recorded in accordance with Condition 37.2

[Condition 19.6.a, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii)]

b. If the individual total hours of operation for any one among EUs MDC-IC01, MDC-IC07, and MDC-IC08 exceed the limit in Condition 16.2, the Permittee shall report permit deviation as described in Condition 77.

[Condition 19.6.b, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii)]

17.7. Record and maintain daily records identifying which emission units among MDC-IC09 through MDC-IC12 and among MDC-IC13 through MDC-IC17 are operating concurrently in compliance with the limits set out in Conditions 14 and 15.

[Condition 19.8, Minor Permit No. AQ1071MSS02 Revision 1, April 4, 2011]
[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(ii) & (iii)]

Insignificant Emission Units

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

18.1. **VE Standard**: 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) & 50.055(a)(1)]

18.2. **PM 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)]

18.3. **Sulfur 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)]

18.4. General MR&R for Insignificant Emission Units

a. The Permittee shall submit the certification of compliance of Condition 79 based on reasonable inquiry;

b. The Permittee shall comply with the requirements of Condition 60;

c. The Permittee shall report in the operating report required by Condition 78 if an emission unit is insignificant because of actual emissions less than the thresholds of 18 AAC 50.326(e) and actual emission become greater than any of those thresholds; and

d. No other monitoring, recordkeeping or reporting is required.

Section 4. Federal Requirements

Emission Units Subject to Federal NSPS Subpart A

19. NSPS Subpart A Notification. For any affected facility[3] or existing facility[4] 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 50.035 & 50.040(a)(1)]
[40 C.F.R. 60.7(a) & 60.15(d), Subpart A]

19.1. the date that construction or reconstruction of an affected facility commences postmarked no later than 30 days after such date;

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

19.2. 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]

19.3. 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), postmarked 60 days or as soon as practicable before the change is commenced and shall include:

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]

19.4. 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)]

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,

[3] Affected facility means, with reference to a stationary source, any apparatus to which a standard applies, as defined in 40 C.F.R. 60.2, effective 7/1/07

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

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 .

20. NSPS Subpart A Startup, Shutdown, & Malfunction Requirements. The Permittee shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of EU IDs MDC-IC01, MDC-IC07 through MDC-IC17, and any malfunctions of associated air-pollution control equipment.

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

21. NSPS Subpart A Good Air Pollution Control Practice. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate EU IDs MDC-IC01, MDC-IC07 through MDC-IC17 including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. The Administrator will determine whether acceptable operating and maintenance procedures are being used based on information available, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance records, and inspections of EU IDs MDC-IC01, MDC-IC07 through MDC-IC17.

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

22. NSPS Subpart A Credible Evidence. For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of the standards set forth in Conditions 25.2 nothing in 40 C.F.R. Part 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether EU IDs MDC-IC01, MDC-IC07 through MDC-IC17 would have been in compliance with applicable requirements of 40 C.F.R. Part 60 if the appropriate performance or compliance test or procedure had been performed.

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

23. 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 25.2. 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]

Compression Ignition Internal Combustion Engines Subject to NSPS Subpart IIII

24. NSPS Subpart IIII Requirements. For EU IDs MDC-IC13 through MDC-IC17, the Permittee shall comply with any applicable requirement for stationary compression ignition (CI) internal combustion engine (ICE) whose construction[5], modification[6], or reconstruction[7] commences after July 11, 2005.

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

24.1. Stationary CI ICE may be eligible for exemption from the requirements of NSPS Subpart IIII as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

[40 C.F.R. 60.4200(d), Subpart IIII]

24.2. The Permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in Condition 26 over the entire life of the engine.

[40 C.F.R. 60.4206, Subpart IIII]

24.3. For EU IDs MDC-IC13 through MDC-IC17, the Permittee must do all of the following, except as permitted under Condition 24.6:

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

a. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

[40 C.F.R. 60.4211(a)(1), Subpart IIII]

b. Change only those emission-related settings that are permitted by the manufacturer; and

[40 C.F.R. 60.4211(a)(2), Subpart IIII]

[5] For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.
[6] As defined in 18 AAC 50.990(59).
[7] As defined in 18 AAC 50.990(88).

c. Meet the requirements of 40 C.F.R. parts 89, 94 and/or 1068, as they apply to you.

[40 C.F.R. 60.4211(a)(3), Subpart IIII]

24.4. For EU IDs MDC-IC13 through MDC-IC17, the Permittee must comply with the emission standards in Condition 26 by purchasing an engine certified to the emission standards in Condition 26, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in Condition 24.6.

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

24.5. For EU IDs MDC-IC13 through MDC-IC17, the Permittee must operate the emergency stationary ICE according to the requirements in Conditions 24.5.a through 24.5.c. In order for the engine to be considered an emergency stationary ICE under NSPS Subpart IIII, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in nonemergency situations for 50 hours per year, as described in Conditions 24.5.a through 24.5.c, is prohibited. If you do not operate the engine according to the requirements in Conditions 24.5.a through 24.5.c, the engine will not be considered an emergency engine under NSPS Subpart IIII and must meet all requirements for non-emergency engines.

[40 C.F.R. 60.4211(f), Subpart IIII]

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

[40 C.F.R. 60.4211(f)(1), Subpart IIII]

b. You may operate your emergency stationary ICE for any combination of the purposes specified in Conditions 24.5.b(i) through 24.5.b(iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition 24.5.c counts as part of the 100 hours per calendar year allowed by this Condition 24.5.b.

[40 C.F.R. 60.4211(f)(2), Subpart IIII]

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

[40 C.F.R. 60.4211(f)(2)(i), Subpart IIII]

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP–002–3, Capacity and Energy Emergencies (incorporated by reference, see 40 C.F.R. 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP–002–3.

[40 C.F.R. 60.4211(f)(2)(ii), Subpart IIII]

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

[40 C.F.R. 60.4211(f)(2)(iii), Subpart IIII]

c. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in Condition 24.5.b. Except as provided in Condition 24.5.c(i), the 50 hours per calendar year for nonemergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 C.F.R. 60.4211(f)(3), Subpart IIII]

(i) The 50 hours per year for nonemergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

[40 C.F.R. 60.4211(f)(3)(i), Subpart IIII]

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

[40 C.F.R. 60.4211(f)(3)(i)(A), Subpart IIII]

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

[40 C.F.R. 60.4211(f)(3)(i)(B), Subpart IIII]

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

[40 C.F.R. 60.4211(f)(3)(i)(C), Subpart IIII]

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

[40 C.F.R. 60.4211(f)(3)(i)(D), Subpart IIII]

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[40 C.F.R. 60.4211(f)(3)(i)(E), Subpart IIII]

24.6. For EU IDs MDC-IC13 through MDC-IC17, the Permittee shall comply with the following:

a. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

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

(i) You must 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, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must 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. 60.4211(g)(3), Subpart IIII]

24.7. For EU IDs MDC-IC13 through MDC-IC17, the Permittee shall comply with the applicable provisions of Subpart A as specified in Table 8 to Subpart IIII.

[40 C.F.R. 60.4218 & Table 8, Subpart IIII]

24.8. **Notification**. For EU IDs MDC-IC13 through MDC-IC17, 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), Subpart IIII]

24.9. **Performance Tests**. For EU IDs MDC-IC13 through MDC-IC17, the Permittee shall comply with the following:

a. Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to NSPS Subpart IIII must do so according to 40 C.F.R. 60.4212(a) through (e).

[40 C.F.R. 60.4212, Subpart IIII]

b. Owners and operators of emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the NTE standards as indicated in 40 C.F.R. 60.4212.

[40 C.F.R. 60.4205(e), Subpart IIII]

25. NSPS Subpart IIII Fuel Requirements. For EU IDs MDC-IC13 through MDC-IC17, the Permittee shall comply with the following:

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

25.1. Beginning October 1, 2010, owners and operators of stationary CI ICE subject to NSPS Subpart IIII with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 C.F.R. 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

[40 C.F.R. 60.4207(b), Subpart IIII]
[40 C.F.R. 80.510(b), Subpart I]

25.2. Stationary CI ICE that have a national security exemption under 40 C.F.R. 60.4200(d) are also exempt from the fuel requirements in Condition 25.

[40 C.F.R. 60.4207(e), Subpart IIII]

26. NSPS Subpart IIII Emission Standards. The Permittee shall comply with the applicable emission standards for EU IDs MDC-IC13 through MDC-IC17, as listed below.

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

For Emergency Engines

26.1. For all pollutants, the Permittee shall comply with emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113.

[40 C.F.R. 60.4205(b) & 60.4202(a)(2), Subpart IIII]
[40 C.F.R. 89.112 & 40 C.F.R. 89.113, Subpart B]

27. NSPS Subpart IIII Monitoring and Recordkeeping. For EU IDs MDC-IC13 through MDC-IC17, the Permittee shall comply with the following:

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(i) & (ii)]
[40 C.F.R. 60.4209(a), Subpart IIII]

27.1. If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

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

28. NSPS Subpart IIII Reporting. For EU IDs MDC-IC13 through MDC-IC17, the Permittee shall comply with the following:

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

28.1. If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in Condition 24.5.b(ii) and 24.5.b(iii) or that operates for the purposes specified in Condition 24.5.c(i), you must submit an annual report according to the requirements in Conditions 28.1.a through 28.1.c of this section.

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

a. The report must contain the following information:

[40 C.F.R. 60.4214(d)(1), Subpart IIII]

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in Condition 24.5.b(ii) and 24.5.b(iii), including the date, start time, and end time for engine operation for the purposes specified in Condition 24.5.b(ii) and 24.5.b(iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in Condition 24.5.b(ii) and 24.5.b(iii).

(vii) Hours spent for operation for the purposes specified in Condition 24.5.c(i), including the date, start time, and end time for engine operation for the purposes specified in Condition 24.5.c(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

[40 C.F.R. 60.4214(d)(1)(i)-(vii), Subpart IIII]

b. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

[40 C.F.R. 60.4214(d)(2), Subpart IIII]

c. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 C.F.R. 60.4.

[40 C.F.R. 60.4214(d)(3), Subpart IIII]

Emission Units Subject to Federal NESHAP Subpart A

29. NESHAP Subpart A Requirements.

29.1. For EU IDs MDC-IC01 and MDC-IC07 through MDC-IC12, 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 Table 8 to NESHAP Subpart ZZZZ.

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.6665 & Table 8, Subpart ZZZZ]

29.2. For EU IDs MDC-BF01 through MDC-BF03, 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 Table 8 to NESHAP Subpart JJJJJJ.

[18 AAC 50.040(j) & 50.326(j)]
[40 C.F.R. 71.6(a)(1)]
[40 C.F.R. 63.11235 & Table 8, Subpart JJJJJJ]

Reciprocating Internal Combustion Engines Subject to NESHAP Subpart ZZZZ

30. NESHAP Subpart ZZZZ 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)]

30.1. If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of NESHAP Subpart ZZZZ as described in 40 C.F.R. part 1068, subpart C.

[40 C.F.R. 63.6585(e), Subpart ZZZZ]

30.2. For EU IDs MDC-IC13 through MDC-IC17, the Permittee must meet the requirements of 40 C.F.R. 63 by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines. No further requirements apply for such engines under NESHAP Subpart ZZZZ.

[40 C.F.R. 63.6585, 63.6590(a) & (c), Subpart ZZZZ]

30.3. For EU IDs MDC-IC01 and MDC-IC07 through MDC-IC12, the Permittee shall comply with all the applicable requirements of NESHAP Subpart ZZZZ for existing stationary reciprocating internal combustion engines (RICE) located at an area source of HAP emissions.

[40 C.F.R. 63.6585 & 63.6590(a), Subpart ZZZZ]

a. The Permittee must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013.

[40 C.F.R. 63.6595(a)(1), Subpart ZZZZ]

31. NESHAP Subpart ZZZZ Emission Limitations, Operating Limitations, and Other Requirements. For EU IDs MDC-IC01 and MDC-IC07 through MDC-IC12, 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)]

31.1. You must meet the following requirements, except during periods of startup:

a. Change oil and filter every 500 hours of operation or annually, whichever comes first;

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

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

31.2. During periods of startup you must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

31.3. Sources have the option to utilize an oil analysis program as described in Condition 34.4 in order to extend the specified oil change requirement in Condition 31.1.a.

[40 C.F.R. 63.6603(a) & Table 2d, Item 4, Subpart ZZZZ]

32. NESHAP Subpart ZZZZ Fuel Requirements. For EU IDs MDC-IC01 and MDC-IC07 through MDC-IC12, 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)]

32.1. Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in Condition 35.3.b(ii) and 35.3.b(iii) or that operates for the purpose specified in Condition 35.3.c(ii), you must use diesel fuel that meets the requirements in 40 C.F.R. 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

[40 C.F.R. 63.6604(b), Subpart ZZZZ]
[40 C.F.R. 80.510(b), Subpart I]

33. NESHAP Subpart ZZZZ General Requirements. For EU IDs MDC-IC01 and MDC-IC07 through MDC-IC12, 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)]

33.1. You must be in compliance with the emission limitations, operating limitations, and other requirements in NESHAP Subpart ZZZZ that apply to you at all times.

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

33.2. At all times you must operate and maintain any affected source, 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 you to make 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. NESHAP Subpart ZZZZ Monitoring, Installation, Collection, Operation, and Maintenance Requirements. For EU IDs MDC-IC01 and MDC-IC07 through MDC-IC12, 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) & (a)(3)(i)]

34.1. You must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 C.F.R. 63.6625(e) & (e)(3), Subpart ZZZZ]

34.2. You must install a non-resettable hour meter if one is not already installed.

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

34.3. You must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Condition 31 apply.

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

34.4. You have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Condition 31.1.a. The oil analysis must be performed at the same frequency specified for changing the oil in Condition 31.1.a. 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: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must 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. The analysis program must be part of the maintenance plan for the engine.

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

35. NESHAP Subpart ZZZZ Requirements for Demonstration of Continuous Compliance with Emission Limitations, Operating Limitations, and Other Requirements. For EU IDs MDC-IC01 and MDC-IC07 through MDC-IC12, 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) & (a)(3)(i)]

35.1. You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Condition 31 according to methods specified in Condition 35.1.a or 35.1.b.

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

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

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

[Table 6, Item 9, Subpart ZZZZ]

35.2. You must also report each instance in which you did not meet the requirements in Table 8 to NESHAP Subpart ZZZZ that apply to you.

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

35.3. You must operate the emergency stationary RICE according to the requirements in Conditions 35.3.a through 35.3.c. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in Conditions 35.3.a through 35.3.c, is prohibited. If you do not operate the engine according to the requirements in Conditions 35.3.a through 35.3.c, the engine will not be considered an emergency engine under NESHAP Subpart ZZZZ and must meet all requirements for non-emergency engines.

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

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

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

b. You may operate your emergency stationary RICE for any combination of the purposes specified in Conditions 35.3.b(i) through 35.3.b(iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition 35.3.c counts as part of the 100 hours per calendar year allowed by this Condition 35.3.b.

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

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

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

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 C.F.R. 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

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

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

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

c. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in Condition 35.3.b. Except as provided in Condition 35.3.c(i) and 35.3.c(ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

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

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

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

(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

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

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

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

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

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

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

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

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

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

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

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

36. NESHAP Subpart ZZZZ Reporting Requirements. For EU IDs MDC-IC01 and MDC-IC07 through MDC-IC12, 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)(3)(iii)]

36.1. You must report all deviations as defined in NESHAP Subpart ZZZZ in the semiannual monitoring report required by Condition 78.

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

36.2. If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in Condition 35.3.b(ii) and 35.3.b(iii) or that operates for the purpose specified in Condition 35.3.c(ii), you must submit an annual report according to the requirements in Conditions 36.2.a through 36.2.c.

[40 C.F.R. 63.6650(a), (h), & Table 7, Item 4, Subpart ZZZZ]

a. The report must contain the following information:

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

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in Condition 35.3.b(ii) and 35.3.b(iii), including the date, start time, and end time for engine operation for the purposes specified in Condition 35.3.b(ii) and 35.3.b(iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in Condition 35.3.b(ii) and 35.3.b(iii).

(vii) Hours spent for operation for the purpose specified in Condition 35.3.c(ii), including the date, start time, and end time for engine operation for the purposes specified in Condition 35.3.c(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(viii) If there were no deviations from the fuel requirements in Condition 32 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

(ix) If there were deviations from the fuel requirements in Condition 32 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

[40 C.F.R. 63.6650(h)(1)(i)-(ix), Subpart ZZZZ]

b. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

[40 C.F.R. 63.6650(h)(2), Subpart ZZZZ]

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

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

37. NESHAP Subpart ZZZZ Recordkeeping Requirements. For EU IDs MDC-IC01 and MDC-IC07 through MDC-IC12, 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)(3)(ii)]

37.1. You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan.

[40 C.F.R. 63.6655(e) & (e)(2), Subpart ZZZZ]

37.2. You must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in Condition 35.3.b(ii) or 35.3.b(iii) or 35.3.c(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

[40 C.F.R. 63.6655(f) & (f)(2), Subpart ZZZZ]

37.3. Your records must be in a form suitable and readily available for expeditious review according to 40 C.F.R. 63.10(b)(1).

[40 C.F.R. 63.6660(a), Subpart ZZZZ]

37.4. As specified in 40 C.F.R. 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 C.F.R. 63.6660(b), Subpart ZZZZ]

37.5. You must keep each record readily accessible 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).

[40 C.F.R. 63.6660(c), Subpart ZZZZ]

Industrial, Commercial, and Institutional Boilers Subject to NESHAP Subpart JJJJJJ

38. NESHAP Subpart JJJJJJ Requirements. For EU IDs MDC-BF01 through MDC-BF03, the Permittee shall comply with all the applicable requirements of 40 C.F.R. 63 Subpart JJJJJJ for existing industrial, commercial, and institutional boilers located at an area source of HAPs.

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

38.1. For EU IDs MDC-BF01 through MDC-BF03, the Permittee shall comply with the following compliance date requirements:

a. You must achieve compliance with the work practice or management practice standard of a tune-up no later than March 21, 2014.

[40 C.F.R. 63.11196(a)(1), Subpart JJJJJJ]

39. NESHAP Subpart JJJJJJ Work Practice and Management Practice Standards. For EU IDs MDC-BF01 through MDC-BF03, the Permittee shall comply with the following:

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

39.1. You must conduct an initial tune-up as specified in Condition 41.4, and conduct a tune-up of the boiler biennially as specified in Condition 42.2.

[40 C.F.R. 63.11201(b) & Table 2, Item 4, Subpart JJJJJJ]

39.2. These standards apply at all times the affected boiler is operating, except during periods of startup and shutdown as defined in 40 C.F.R. 63.11237, during which time you must comply only with Table 2 to NESHAP Subpart JJJJJJ.

[40 C.F.R. 63.11201(d), Subpart JJJJJJ]

40. NESHAP Subpart JJJJJJ General Requirements. For EU IDs MDC-BF01 through MDC-BF03, the Permittee shall comply with the following:

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

40.1. At all times you must operate and maintain any affected source, 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 you to make 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 that 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. 63.11205(a), Subpart JJJJJJ]

41. NESHAP Subpart JJJJJJ Initial Compliance Requirements. For EU IDs MDC-BF01 through MDC-BF03, the Permittee shall comply with the following:

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

41.1. You must demonstrate initial compliance no later than the compliance date that is specified in Condition 38.1 and according to the applicable provisions in 40 C.F.R. 63.7(a)(2), except as provided in Condition 41.3.

[40 C.F.R. 63.11210(c), Subpart JJJJJJ]

41.2. 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, you must 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), Subpart JJJJJJ]

41.3. For existing affected boilers that have not operated between the effective date of the rule and the compliance date that is specified for your source in Condition 38.1, you must comply with the applicable provisions as specified in Condition 41.3.a.

[40 C.F.R. 63.11210(j), Subpart JJJJJJ]

a. You must complete the initial performance tune-up, if subject to the tune-up requirements in Condition 42.1, by following the procedures described in Condition 42.2 no later than 30 days after the re-start of the affected boiler.

[40 C.F.R. 63.11210(j)(2), Subpart JJJJJJ]

41.4. You must conduct a performance tune-up according to Condition 42.2 and you must 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), Subpart JJJJJJ]

42. NESHAP Subpart JJJJJJ Continuous Compliance Requirements. For EU IDs MDC-BF01 through MDC-BF03, the Permittee shall comply with the following:

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

42.1. You must conduct a performance tune-up according to Condition 42.2 and keep records as required in Condition 44.1 to demonstrate continuous compliance. You must conduct the tune-up while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.

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

42.2. Except as specified in Condition 42.3, you must conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified in Conditions 42.2.a through 42.2.g. 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), Subpart JJJJJJ]

a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection.

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

c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection.

d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available.

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

[40 C.F.R. 63.11223(b)(1)-(6), Subpart JJJJJJ]

f. **Biennial Report.** Maintain on-site and submit, if requested by the Administrator, a report containing the information below:

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

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

(iii) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

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

g. 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.

[40 CFR 63.11223(b)(7), Subpart JJJJJJ]

42.3. Boilers with an oxygen trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up must conduct a tuneup of the boiler every 5 years as specified in Conditions 42.2.a through 42.2.g. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed boiler with an oxygen trim system, the first 5-year tune-up must be no later than 61 months after the initial startup. You may delay the burner inspection specified in Condition 42.2.a and inspection of the system controlling the air-to-fuel ratio specified in Condition 42.2.c until the next scheduled unit shutdown, but you must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months.

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

43. NESHAP Subpart JJJJJJ Notification Requirements. For EU IDs MDC-BF01 through MDC-BF03, the Permittee shall comply with the following:

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

43.1. You must submit the notifications specified in Conditions 43.1.a through 43.1.c to the Administrator.

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

a. You must submit all of the notifications in 40 C.F.R. 63.7(b), 63.8(e) and (f), 63.9(b) through (e), (g), and (h) that apply to you by the dates specified in those sections except as specified in Conditions 43.1.b and 43.1.c.

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

b. An Initial Notification must be submitted no later than January 20, 2014 or within 120 days after the source becomes subject to the standard.

[40 C.F.R. 63.11225(a)(2), Subpart JJJJJJ]

c. You must submit the Notification of Compliance Status no later than 120 days after the applicable compliance date specified in Condition 38.1. You must submit the Notification of Compliance Status in accordance with Conditions 43.1.c(i) and 43.1.c(iv). The Notification of Compliance Status must include the information and certification(s) of compliance in Conditions 43.1.c(i) through 43.1.c(iii), as applicable, and signed by a responsible official.

[40 CFR 63.11225(a)(4), Subpart JJJJJJ]

(i) You must submit 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), Subpart JJJJJJ]

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

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

(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), Subpart JJJJJJ]

(iv) The notification must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written 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), Subpart JJJJJJ]

43.2. If you intend to commence or recommence combustion of solid waste, the you must provide 30 days prior notice of the date upon which you will commence or recommence 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), Subpart JJJJJJ]

43.3. If you have switched fuels or made a physical change to the boiler and the fuel switch or change resulted in the applicability of a different subcategory within 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 you have taken a permit limit that resulted in you being subject to subpart JJJJJJ, you must provide notice of the date upon which you switched fuels, made the physical change, or took a permit limit within 30 days of the change. The notification must identify the items in 40 C.F.R. 63.11225(g)(1) and (2).

[40 C.F.R. 63.11225(g), Subpart JJJJJJ]

44. NESHAP Subpart JJJJJJ Recordkeeping Requirements. For EU IDs MDC-BF01 through MDC-BF03, the Permittee shall comply with the following:

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

44.1. You must maintain the records specified in Conditions 44.1.a through 44.1.d.

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

a. You must keep a copy of each notification and report that you submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted.

[40 C.F.R. 63.11225(c)(1), Subpart JJJJJJ]

b. You must keep records to document conformance with the work practices, emission reduction measures, and management practices required by 40 C.F.R. 63.11214 and 63.11223 as specified in Condition 44.1.b(i).

[40 C.F.R. 63.11225(c)(2), Subpart JJJJJJ]

(i) 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, and;

[40 C.F.R. 63.11225(c)(2)(i), Subpart JJJJJJ]

c. Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.

[40 C.F.R. 63.11225(c)(4), Subpart JJJJJJ]

d. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in Condition 40.1, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

[40 C.F.R. 63.11225(c)(5), Subpart JJJJJJ]

44.2. Your records must be in a form suitable and readily available for expeditious review. You must keep each record for 5 years following the date of each recorded action. You must keep each record on-site or be 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. You may keep the records off site for the remaining 3 years.

[40 CFR 63.11225(d), Subpart JJJJJJ]

45. NESHAP Subpart JJJJJJ Reporting Requirements. For EU IDs MDC-BF01 through MDC-BF03, the Permittee shall comply with the following:

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

45.1. You must prepare, by March 1, and submit to the Department and EPA upon request, a compliance certification report. For boilers that are subject only to a requirement to conduct a biennial or 5-year tune-up according to Condition 42.1 and not subject to emission limits or operating limits, you may prepare only a biennial or 5-year compliance report as specified in Conditions 45.1.a and 45.1.b.

[40 C.F.R. 63.11225(b), Subpart JJJJJJ]

a. Company name and address.

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

b. Statement by a responsible official, with the official's name, title, phone number, e-mail 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. Your notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

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

(i) ''This facility complies with the requirements in § 63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler.''

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

(ii) 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), Subpart JJJJJJ]

General Federal Requirements

46. 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), & 50.326(j)]
[40 C.F.R. 61, Subparts A & M, and Appendix A]

47. Protection of Stratospheric Ozone, 40 C.F.R. 82

Subpart D – Federal Procurement

47.1. **Subpart D Federal Regulations Requirements.** The Permittee shall conform its ozone depleting substances (ODS) procurement regulations to the requirements listed in 40 CFR 82.84.

[18 AAC 50.040(d) & 40 C.F.R. 82.84]

a. **Subpart D Federal Regulations Reporting Requirements.** The Permittee shall comply with ODS certification requirements listed in 40 CFR 82.86.

[18 AAC 50.040(d) & 40 C.F.R. 82.86]

Subpart F – Recycling and Emissions Reduction

47.2. **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) & 50.326(j)]
[40 C.F.R. 82, Subpart F]

NESHAPs Applicability Determinations

48. 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, the 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).

48.1. 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), & 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), & 63.10(b)(3)]

49. NSPS and NESHAP Reports. The Permittee shall:

49.1. **Reports:** Attach to the operating report required by Condition 78 for the period covered by the report, a copy of any NSPS and NESHAPs reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10; and

49.2. **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 50.326(j)(4) & 50.040(j)]
[40 C.F.R. 60.13, 63.10(d) & (f), & 71.6(c)(6)]

Section 5. General Conditions

Standard Terms and Conditions

50. 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), 50.345(a) & (e)]

51. 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), 50.345(a) & (f)]

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

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

53. **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), 50.400, 50.403, & 50.405]
[AS 37.10.052(b), 11/04; AS 46.14.240, 6/7/03]

54. **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. 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. The quantity for which fees will be assessed is the lesser of

54.1. the stationary source's assessable potential to emit of **243 tpy**; or

54.2. 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), 50.035, 50.326(j)(1), 50.346(b)(1), 50.410, & 50.420]
[40 C.F.R. 71.5(c)(3)(ii)]

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

55.1. 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

55.2. 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 54.1.

[18 AAC 50.040(j)(3), 50.326(j)(1), 50.346(b)(1), 50.410, & 50.420]
[40 C.F.R. 71.5(c)(3)(ii)]

56. Good Air Pollution Control Practice. The Permittee shall do the following for EU IDs MDC-BF01 through MDC-BF03, MDC-IC01, and MDC-IC07 through MDC-IC12:

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

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

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

56.4. EU IDs MDC-BF01 through MDC-BF03, MDC-IC01, and MDC-IC07 through MDC-IC12 are subject to this condition only until the applicable compliance dates as set forth in Conditions 38.1 and 30.3.a.

[18 AAC 50.030, 50.326(j)(3), & 50.346(b)(5)]

57. 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)]

58. 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), 50.040(e), 50. 326(j)(3), & 50.346(c)]

58.1. 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 58.1 or to address the results of Department inspections that found potential problems; and

(ii) to prevent future dust problems.

58.2. The Permittee shall report according to Condition 60.

59. 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)]

60. 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, 50.040(e), 50.326(j)(3), and 50.346(a)]
[40 C.F.R. 71.6(a)(3)]

60.1. Monitoring, Recordkeeping, and Reporting for Condition 60:

a. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 77.

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 60.

60.2. 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 60; or

b. the Department notifies the Permittee that it has found a violation of Condition 60.

60.3. 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 60; and

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

60.4. With each operating report under Condition 78, 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.

60.5. 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.

61. 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 standard[8] listed in Condition 47 (refrigerants), the Permittee shall take all reasonable steps to minimize levels of emissions that exceed the standard. Excess emissions reporting under Condition 77 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 77.

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

Open Burning Requirements

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

62.1. 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.

62.2. Compliance with this condition shall be an annual certification conducted under Condition 79.

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

[8] *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.

Section 6. General Source Testing and Monitoring Requirements

63. 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) & 50.345(a) & (k)]

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

[18 AAC 50.220(b)]

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

64.2. 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.

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

65.1. 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) & 50.040(a)]
[40 C.F.R. 60]

65.2. 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 and may use the form in Section 11 to record data.

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

65.3. 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) & 50.220(c)(1)(E)]
[40 C.F.R. 60, Appendix A]

65.4. 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) & 50.220(c)(1)(F)]
[40 C.F.R. 51, Appendix M]

65.5. 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) & 50.220(c)(2)]
[40 C.F.R. 63, Appendix A, Method 301]

66. 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) & 50.990(102)]

67. Test Exemption. The Permittee is not required to comply with Conditions 69, 70 and 71 when the exhaust is observed for visible emissions by Method 9 Plan (Condition 2.1) or Smoke/No Smoke Plan (Condition 2.2).

[18 AAC 50.345(a)]

68. 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)]

69. Test Plans. Except as provided in Condition 67, 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 63 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 performed without resubmitting the plan.

[18 AAC 50.345(a) & (m)]

70. Test Notification. Except as provided in Condition 67, 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)]

71. Test Reports. Except as provided in Condition 67, 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 certify the results in the manner set out in Condition 74. 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)]

72. Particulate Matter Calculations. In source testing for compliance with the particulate matter standards in Conditions 5 and 18.2, the three-hour average is determined using the average of three one-hour test runs. The source testing must account for those emissions caused by soot blowing, grate cleaning, or other routine maintenance activities by ensuring that at least one test run includes the emissions caused by the routine maintenance activity and is conducted under conditions that lead to representative emissions from that activity. The emissions must be quantified using the following equation:

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

Where:

E = the total PM emissions of the emission unit in grains per dry standard cubic foot ((gr.)/dscf)

E_M = the PM emissions in (gr.)/dscf measured during the test that included the routine maintenance activity

E_{NM} = the arithmetic average of PM emissions in (gr.)/dscf measured during the test runs that did not include the maintenance activity

A = the period of routine maintenance activity occurring during the test run that included routine maintenance activity, expressed to the nearest hundredth of an hour

B = the total period of the test run, less A

R = the maximum period of emission unit operation per 24 hours, expressed to the nearest hundredth of an hour

S = the maximum period of routine maintenance activity per 24 hours, expressed to the nearest hundredth of an hour

[18 AAC 50.220(f)]

Section 7. General Recordkeeping and Reporting Requirements

Recordkeeping Requirements

73. 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 50.040(a)(1) & 50.326(j)]
[40 C.F.R 60.7(f), Subpart A, 40 C.F.R 71.6(a)(3)(ii)(B)]

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

73.2. 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

74. 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.

74.1. 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 74.1.a, that the person accepts or agrees to be bound by an electronic record executed or adopted with that signature.

[18 AAC 50.345(a) & (j), 50.205, & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii)(A)]

75. 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 74.

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

76. 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)]

77. Excess Emissions and Permit Deviation Reports.

77.1. Except as provided in Condition 60, 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 nonroutine 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 excess emissions or deviation occurred, except as provided in Conditions 77.1.c(ii) and 77.1.c(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 77.1.c(i); and

(iii) for failure to monitor, as required in other applicable conditions of this permit.

77.2. When reporting excess emissions or permit deviations, the Permittee shall 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.

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

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

78. Operating Reports. During the life of this permit[9], 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.

78.1. The operating report must include all information required to be in operating reports by other conditions of this permit.

78.2. If excess emissions or permit deviations that occurred during the reporting period are not reported under Condition 78.1,

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

(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 77 the Permittee shall cite the date or dates of those reports.

78.3. The operating report must include a listing of emissions monitored under Conditions 2.1.e and 2.2.c, 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

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

d. the monitoring result which triggered the additional monitoring.

78.4. **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(a) & 50.326(j)]
[40 C.F.R. 71.6(a)(3)(iii)(A)]

79. 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[10].

79.1. 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;

79.2. **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.

79.3. In addition, submit a copy of the report directly to the EPA-Region 10, Office of Air Quality, M/S OAQ-107, 1200 Sixth Avenue, Seattle, WA 98101.

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

80. Emission Inventory Reporting. The Permittee shall submit to the Department reports of actual emissions, by emission unit, of CO, NH_3, NO_X, PM_{10}, $PM_{2.5}$, SO_2, VOCs and Lead (Pb) (and lead compounds) using the form in Section 14 of this permit, as follows:

80.1. Each year by March 31, if the stationary source's potential to emit emissions for the previous calendar year:

a. equal or exceed 250 tons per year (TPY) of NH_3, PM_{10}, $PM_{2.5}$ or VOCs; or

b. equal or exceed 2500 TPY of CO, NO_X or SO_2.

80.2. Every third year by March 31 if the stationary source's potential to emit emissions for the previous calendar year exceed:

[10] See Condition 79.2 for clarification on the number of reports required.

a. 5 tons per year of lead (Pb), 1000 TPY of CO; or

b. 100 TPY of SO_2, NH_3, PM_{10}, $PM_{2.5}$, NO_X or VOCs.

80.3. The Permittee shall commence reporting in 2012 for the calendar year of 2011, 2015 for calendar year 2014, etc.

80.4. Include in the report required by this condition, the required data elements contained within the form in Section 14 or those contained in Table 2A of Appendix A to Subpart A of 40 CFR 51 (final rule published in 73 FR 76556 (December 17, 2008)) for each stack associated with an emission unit.

[18 AAC 50.346(b)(8) and18 AAC 50.200]

[40 CFR 51.15, 51.30(a)(1) & (b)(1) and 40 CFR 51, Appendix A to Subpart A, 73 FR 76556 (12/17/08)]

Section 8. Permit Changes and Renewal

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

81.1. 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[11];

81.2. The information shall be submitted to the same address as in Condition 79.3.

81.3. 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

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

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

82. 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) & 50.326(j)]
[40 C.F.R. 71.6(a)(8)]

83. 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:

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

83.2. 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;

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

83.4. 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.

[11] The documents required in Condition 81.1 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.

[18 AAC 50.040(j)(4) & 50.326(j)]
[40 C.F.R. 71.6(a)(12)]

84. 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):

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

84.2. For each such change, the written notification required above 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.

84.3. The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made pursuant to Condition 84.

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

85. 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 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), 50.326(c)(2) & (j)(2)]
[40 C.F.R. 71.5(a)(1)(iii) & 71.7(b) & (c)(1)(ii)]

Section 9. Compliance Requirements

General Compliance Requirements

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

86.1. included and specifically identified in the permit; or

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

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

87. The Permittee must comply with each permit term and condition.

87.1. For applicable requirements with which the stationary source is in compliance, the Permittee shall continue to comply with such requirements.

87.2. 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), 326(j) & 50.345(a) & (c)]
[40 C.F.R. 71.6(c)(3) & 71.5(c)(8)(iii)(A)]

88. 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) & 50.345(a) & (d)]

89. 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

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

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

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

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

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

90. 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 permit application, this section of the permit contains the requirements determined by the Department not to be applicable to the stationary source.

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

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

91.2. 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)]
[40 C.F.R. 71.6(f)(3)(i) & (ii)]

92. Table C 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 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 50.326(j)]
[40 C.F.R. 71.6(f)(1)(ii)]

Table C - Permit Shields Granted

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
Stationary Source Wide	40 CFR 61 Subpart D- National Emission Standard for Beryllium Rocket Motor Firing	Fort Greely is not a rocket motor test facility covered by 40 CFR 61, Subpart D.
Stationary Source Wide	40 CFR 63, Subpart GG – National Emission Standards for Aerospace Manufacturing and Rework Facilities	Fort Greely will not be engaged in the production, reworking or repair of aerospace vehicles or components. A limited amount of assembly of pre-manufactured missile components will occur, but this does not fall within the scope of 40 CFR 60, Subpart GG
Stationary Source Wide	40 CFR 60 Subpart WWW at 40 CFR 60.752(a) 40CFR 60.757 (a)(1)(ii)	Permittee submitted the one-time initial design capacity report to the EPA.
Insignificant Fuel Storage Tanks MDC-ST01 – 18	40 C.F.R. 60 Subpart K	Subpart K does not apply to vessels with a capacity less than 151,412 liters (40,000 gallons).
Insignificant Fuel Storage Tanks MDC-ST01 – 18	40 C.F.R. 60 Subpart Ka	Subpart Ka does not apply to liquid storage vessels with a capacity of less than 420,000 gallons

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
Insignificant Fuel Storage Tanks MDC-ST03 – 05, MDC-ST09 – 10, MDC-ST15 – 16	40 C.F.R. 60 Subpart Kb	Subpart Kb does not apply to vessels with a capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure less than 15.0 kPa
Insignificant Fuel Storage Tanks MDC-ST01 – 02, MDC-ST06 – 08, MDC-ST11 – 14, and MDC-ST17 – 18	40 C.F.R. 60 Subpart Kb	Subpart Kb does not apply to vessels with a capacity less than 75 m^3.

Section 11. Visible Emissions Forms

VISIBLE EMISSION OBSERVATION FORM

This form is designed to be used in conjunction with EPA Method 9, "Visual Determination of the Opacity of Emissions form 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."

- 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 VE 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, is Plume…: check "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 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.
- Organization: observer's employer.

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			Observation Date		Start Time		End Time
					Sec / Min	0	15	30	45	Comments
Emission Unit Location					1					
City	State	Zip			2					
Phone # (Key Contact)		Stationary Source ID Number			3					
Process Equipment		Operating Mode			4					
Control Equipment		Operating Mode			5					
Describe Emission Point/Location					6					
Height above ground level	Height relative to observer	Clinometer Reading			7					
Distance From Observer		Direction From Observer			8					
Start End		Start End								
Describe Emissions & Color					9					
Start		End								
Visible Water Vapor Present? If yes, determine approximate distance from the					10					
No Yes stack exit to where the plume was read										
Point in Plume at Which Opacity Was Determined					11					
Describe Plume Background		Background Color			12					
Start		Start								
End		End			13					
Sky Conditions:					14					
Start		End								
Wind Speed		Wind Direction From			15					
Start End		Start End								
Ambient Temperature		Wet Bulb Temp		RH percent	16					
SOURCE LAYOUT SKETCH:	1 Stack or Point Being Read	2 Wind Direction From			17					
3 Observer Location 4 Sun Location 5 North Arrow 6 Other Stacks										
					18					
					19					
					20					
					21					
					22					
					23					
					24					
					25					
					26					
					27					
					28					
					29					
					30					
					Range of Opacity					
					Minimum			Maximum		
I have received a copy of these opacity observations					Print Observer's Name					
Print Name:					Observer's Signature					Date
Signature:										Observer's Affiliation:
Title		Date			Certifying Organization					
					Certified By:				Date	

Data Reduction:

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

Average Opacity Summary:

Set Number	Time			Opacity		
	Start	End		Sum	Average	Comments

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 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. = 21 – [**vol%$_{dry}$O2, $_{exhaust}$**] = 21 - _____ = _____

G. = [**vol%$_{dry}$O2, $_{exhaust}$**] ÷ 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 in the fuel. These percentages should total 100%.

The fuel weight percent (wt%) of sulfur is obtained pursuant to Condition 0. 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}l = 1.0%, then enter 1.0 into the equations not 0.01 and if vol%$_{dry}O_2$, exhaust = 3.00%, then enter 3.00, not 0.03.

[18 AAC 50.346(c)]

Section 13. ADEC Notification Form[12]

Missile Defense Complex (MDC)	AQ1071TVP02
Stationary Source Name	**Air Quality Permit No.**
Missile Defense Agency	
Company Name	**Date**

When did you discover the Excess Emissions/Permit Deviation?

Date: _____ / _____ / _____ Time: _____ :/ _____

When did the event/deviation occur?

Begin Date: _____ / _____ / _____ Time: _____ : _____ (Use 24-hr clock.)

End Date _____ / _____ / _____ Time: _____ : _____ (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 ☐ Schedule 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 20, 2008.

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

☐ Opacity _____ % ☐ Venting _____ gas/scf ☐ Control Equipment Down

☐ Fugitive Emissions ☐ Emission Limit Exceeded ☐ Other _____

☐ Marine Vessel Opacity ☐ Flaring _____

(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 only one box, corresponding with the section in the permit):

☐ Emission Unit-Specific
☐ Failure to Monitor/Report
☐ General Source Test/Monitoring Requirements
☐ Recording/Reporting/Compliance Certification
☐ Standard Conditions Not Included in the Permit
☐ Other Section: _____ (Title of section and section number of your permit).
☐ Generally Applicable Requirements
☐ Reporting/Monitoring for Diesel Engines
☐ Recordkeeping Failure
☐ Insignificant Emission Unit
☐ Stationary Source Wide

(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 78.

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.

[18 AAC 50.346(b)(3)]

Section 14. Emission Inventory Form

ADEC Reporting Form Emission Inventory Reporting State of Alaska Department of Environmental Conservation Division of Air Quality	Emission Inventory Year- [ ]

Mandatory information is highlighted. Make additional copies as needed.

Inventory start date:	
Inventory end date:	
Inventory Type:	

Facility Information:	
ADEC Stationary Source ID:	
(Stationary Source) Facility Name:	
AFS ID:	
Census Area/ Community:	
Line of Business (NAICS):	
Contact/Owner Name:	
Contact Owner Address:	
Contact/Owner Phone Number:	
Facility Physical Address:	
	Lat: Long:
Mailing Address :	

Emission Unit:	
ID:	
Description:	
Manufacturer:	
Model Number:	
Serial Number:	
Year of Manufacture:	
Maximum Nameplate Capacity:	
Design Capacity (BTU/hr):	

Control Equipment (List All):	
	Control Equipment Type(Primary or Secondary):
	ID:
	Type:
	Manufacturer:
	Model:
	Control Efficiency (%):
	Capture Efficiency (%):
	Total Capture Efficiency (%):
	Pollutants Controlled
	-

Processes (List All):	
	PROCESS:
	SCC Code:
	Material Processed:
	Operational Periods:
	FUEL INFORMATION
	Ash Content (weight %):
	Elem. Sulfur Content (weight %):
	H2S Sulfur Content (ppmv):
	Heat Content (MMBtu/1000 gal or MMBtu/MMscf):
	Heat Input (MMBtu/hr):
	Heat Output (MMBtu/hr):
	THROUGHPUT
	Total Amount:
	Summer %:
	Fall %:
	Winter %:
	Spring %:
	Days/Week of Operation:
	Weeks/Year of Operation:

	Hours/Day of Operation:
	Hours/Year of Operation:

EMISSIONS					
Pollutant	**Emission Factor**	**Emission Factor Numerator**	**Emission Factor Denominator**	**Emission Factor Source**	**Tons Emitted**
CO					
NH3					
NOX					
PM10-PRI					
PM25-PRI					
SO2					
VOC					
Lead and lead compounds					

Stack Description:	
	Stack Detail:
	ID:
	Type:
	Measurement Units:
	Base Elevation:
	Stack Height:
	Stack Diameter:
	Exit Gas Temp:
	Exit Gas Velocity:
	Actual Exit Gas Flow Rate:
	Data Source:
	Description:
	Latitude:
	Longitude:
	Location Description:
	Accuracy (m):

	Datum:

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:

1. Fax this form to: 907-465-5129; or
2. E-mail to: DEC.AQ.airreports@alaska.gov; or
3. Mail to: ADEC
   Air Permits Program
   410 Willoughby Ave., Suite 303
   PO Box 111800
   Juneau, AK 99801-1800

Or

4. Submission of information can be made via a full electronic batch submittal (XML files). This will require each data element to be tagged with XML (Extensible Markup Language) code before it can be uploaded to ADEC database.
   https://myalaska.state.ak.us/dec/air/airtoolsweb/EiXmlValidator.aspx

[18 AAC 50.346(b)(9)]

Alaska Department of Environmental Conservation
Air Permits Program

Public Comment – July 22, 2013
Missile Defense Agency
Missile Defense Complex (MDC)

STATEMENT OF BASIS
of the terms and conditions for
Permit No. AQ1071TVP02

Prepared by Isaac Jackson

INTRODUCTION

This document sets forth the statement of basis for the terms and conditions of Operating Permit No. AQ1071TVP02.

STATIONARY SOURCE IDENTIFICATION

Section 1 of Operating Permit No. AQ1071TVP02 contains information on the stationary source as provided in the Title V permit application.

The stationary source is owned and operated by, Missile Defense Agency/ DPF and Missile Defense Agency is the Permittee for the stationary source's operating permit. The SIC code for this stationary source is 9711-National Security.

The stationary source previously belonged to part of a larger facility complex that was transferred on 1 October 2002 from the U.S. Army Alaska (USARAK), a subordinate command of the U.S. Army Pacific, to the U.S. Army Space and Missile Defense Command (USASMDC). On 23 August 2002, the Alaska Department of Environmental Conservation (ADEC) granted an administrative revision to USARAK's original operating permit application AQ0238TVP01 to reflect Fort Greely's change in ownership. The transfer in ownership recognized that only a portion of the original Fort Greely, approximately 7,000 acres, was to be transferred from USARAK to USASMDC.

On 20 January 2006 the Department concurred that Fort Greely's owners and operators could choose to disaggregate the existing source according to functionality along SIC classifications. This allows separate and distinct functional areas to be grouped into separate permits by source classification. This new permit was developed to include only the MDC functions and emission units (EUs). The purpose of the SIC-specific base re-organization is to support the U.S. Army's defense program development consistent with the U.S. EAP's 1996 Military Installation Policy. Irrespective of whether Fort Greely is one or multiple Title V sources, Alaska Statute AS 46.14.190, allows the Department to issue more than one operating permit for a stationary source based upon the owner or operator's request.

EMISSION UNIT INVENTORY AND DESCRIPTION

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

The emission units at the Missile Defense Complex (MDC) that have specific monitoring, recordkeeping, and reporting requirements are listed in Table A of Operating Permit No. AQ1071TVP02.

As part of the source permit reorganization that accompanied disaggregation of the previous governing Operating Permit, AQ0238TVP01, Revision 2 all MDC-related and SIC major grouping 97-related EU sources were removed from the Operating Permit through Revision 3 and became part of this stand-alone Operating Permit organized by major SIC groupings

Table A of Operating Permit No. AQ1071TVP02 contains information on the emission units regulated by this permit as provided in the application. The change to the table is the removal of Permanent and Interim Phase description, as only the Permanent Phase will be applicable at the issuance date of the permit. The table is provided for informational and identification purposes

only. Specifically, the emission unit rating/size provided in the table is not intended to create an enforceable limit.

EMISSIONS

A summary of the potential to emit (PTE)[1] and assessable PTE as indicated in the application as verified by the Department from the Missile Defense Complex (MDC) is shown in the table below.

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

Pollutant	NOx	CO	PM-10	SO_2	VOC	CO_2e	HAPs	Total
PTE	197.08	25.59	5.1	19.94	6.1	28997	0.1	254
Assessable PTE	197	26	0	20	0	0	0	243

The Department used the PTE from permit AQ1071MSS02 TAR for NOx, CO, PM-10, SO2, and VOC emissions. The assessable PTE listed under Condition 54.1 is the sum of the emissions of each individual regulated air pollutant for which the stationary source has the potential to emit quantities greater than 10 TPY, or greater than GHG permitting thresholds[2]. The emissions listed in Table D are estimates that are for informational use only. The listing of the emissions does not create an enforceable limit to the stationary source.

For criteria pollutants, emissions are as provided in the application, as follows:

Emission factors for MDC-BF01 through MDC-BF03 are found in AP-42.

Emission factors for MDC-IC01 and MDC-IC07 through MDC-IC17 are found in vendor data provided by the Permittee to the Department.

The Department calculated CO_2e and HAP emissions using AP-42.

BASIS FOR REQUIRING AN OPERATING PERMIT

In accordance with AS 46.14.130(b), an owner or operator of a Title V source[3] must obtain a Title V permit consistent with 40 C.F.R. Part 71, as adopted by reference in 18 AAC 50.040.

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

- A major source;

[1] *Potential to Emit* or *PTE* means the maximum capacity of a stationary source to emit a pollutant under its physical or operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is Federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source, as defined in AS 46.14.990(23), effective 12/3/05.

[2] See EPA's November 2010 PSD and Title V Permitting Guidance, Table V-A.

[3] *Title V source* means a stationary source classified as needing a permit under AS 14.130(b) [ref. 18 AAC 50.990(111)].

- A stationary source including an area source subject to Federal new source performance standards under Section 111 of the Clean Air Act or national emission standards under Section 112 of the Clean Air Act;
- Another stationary source designated by the Federal administrator by regulation.

This stationary source requires an operating permit because it is classified under 18 AAC 50.326(a) and 40 C.F.R. 71.3(a) as:

- A major stationary source as defined in Section 302 of the Clean Air Act that directly emits, or has the potential to emit, 100 TPY or more of any air pollutant;

AIR QUALITY PERMITS

Title I (Construction and Minor) Permits

The Department issued Minor Permit No. AQ1071MSS01 to this stationary source on April 14, 2008.

The Department issued Minor Permit No. AQ1071MSS02 to this stationary source on April 28, 2010. This permit rescinded Minor Permit No. AQ1071MSS01.

The Department issued Minor Permit No. AQ1071MSS02 Revision 1 to this stationary source on April 4, 2011. This permit rescinded Minor Permit No. AQ1071MSS02. The Department established stationary source-specific requirements in this Title I permit included in the new operating permit as described in Table E.

Title V Operating Permit Application, Revisions and Renewal History

The owner or operator submitted an application for the activities at this stationary source on October 17, 2006. The Department issued Operating Permit No. AQ1071TVP01 on March 13, 2008.

Revision No. 1: The Permittee requested a significant modification and Revision No. 1 was issued on January 31, 2012.

The owner or operator submitted a permit renewal application on September 12, 2012.

COMPLIANCE HISTORY

Portions of Ft. Greely have operated at its current location since 1955 under varying names and command relationships. The Department first permitted the Missile Defense Command portion of Fort Greely through Construction Permit AQ0238CP01. Review of the permit files for this stationary source, which includes the past inspection reports and compliance evaluations indicate a stationary source generally operating in compliance with its operating permit.

APPLICABLE REQUIREMENTS FROM PRE-CONSTRUCTION PERMITS

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

Alaska’s SIP includes the following types of pre-construction permits:

- Permit-to-operate issued before January 18, 1997 (these permits cover both construction and operations);
- Construction Permits issued after January 17, 1997; and
- Minor permits issued after October 1, 2004.

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

These requirements include, but not limited to, each emission unit- or source-specific requirement established in these permits issued under 18 AAC 50 that are still in effect at the time of this operating permit issuance. Table E below lists the requirements carried over from Minor Permit No. AQ1071MSS02 Revision 1 into Operating Permit No. AQ1071TVP02 to ensure compliance with the applicable requirements.

Table E - Comparison of Minor Permit No. AQ1071MSS02 Rev 1 Conditions to Operating Permit No. AQ1071TVP02 Conditions[4]

Permit No. AQ1071MSS02 Rev 1 Condition No.	Description of Requirement	Permit No. AQ1071TVP02 Condition No.	How Condition was Revised
Entire Permit	Permanent / Interim Power Phases	Entire Permit	Removal of the Interim Power Phase
Table 1	Emission Units	Table A	Included installation dates and revised 'Proposed EU ID No.' to 'EU ID No.'
9	Fuel Sulfur Content Requirements	13	No revisions
10	Interim Power Phase Operational Limits	NA	Interim Power Phase requirements were not carried over since the stationary source is now operating in the Permanent Power Phase.
11	Permanent Power Phase Operational Limits	NA	Not necessary to identify Permanent Power Phase requirements, since Interim Power Phase requirements were not carried over.
12 & 13	Concurrent Engine Operation Requirements	14 & 15	No revisions
14-16	Interim Power Phase ORL to Avoid PSD for NOx	NA	Interim Power Phase requirements were not carried over since the stationary source is now operating in the Permanent Power Phase.

[4] This table does not include all standard and general conditions.

Permit No. AQ1071MSS02 Rev 1 Condition No.	Description of Requirement	Permit No. AQ1071TVP02 Condition No.	How Condition was Revised
17	Permanent Power Phase Report	NA	Report was submitted December 10, 2012. This was a one-time requirement so it was not carried over.
18 & 19	Permanent Power Phase ORL to Avoid PSD for NOx	16 & 17	Removed Permanent Power Phase, Condition 17, and Performance Test Requirements. MDC complied with AQ1071MSS02 Rev 1 Condition 19.7(i).
20	Equations for Calculating NOx Emissions	NA	MDC complied with AQ1071MSS02 Rev 1 Condition 19.7(i).
21 & 22	NESHAP Subpart ZZZZ Requirements	30-37	EU IDs MDC-IC13 through MDC-IC17 must meet the requirements of Subpart ZZZZ by complying with 40 C.F.R. part 60 Subpart IIII.

STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The State and Federal regulations for each condition are cited in Operating Permit No. AQ1071TVP02. This Statement of Basis provides the legal and factual basis for each term and condition as set forth in 40 C.F.R. 71.6(a)(1)(i).

Conditions 1 - 4 : Visible Emissions Standard and MR&R

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

- 18 AAC 50.055(a) applies to the operation of fuel-burning equipment and industrial processes. EU IDs MDC-BF01 through MDC-BF03, MDC-IC01, and MDC-IC07 through MDC-IC17 are fuel-burning equipment.

U.S. EPA incorporated these standards as revised in 2002 into the SIP effective September 13, 2007.

Factual Basis: Condition 1 prohibits the Permittee from causing or allowing visible emissions in excess of the applicable standard in 18 AAC 50.055(a)(1).

MR&R requirements are listed in Conditions 2 through 4 of the permit.

These conditions have been adopted into regulation as Standard Conditions.

The Permittee must establish by actual visual observations that can be supplemented by other means, such as a defined Stationary Source Operation and Maintenance Program that the stationary source is in continuous compliance with the State's emission standards for visible emissions and particulate matter.

These conditions detail a stepwise process for monitoring compliance with the State's visible emissions and particulate matter standards for liquid and gas fired emission units. Equipment types covered by these conditions are internal combustion engines, turbines, heaters, boilers, and flares. Initial monitoring frequency schedules are established along with subsequent reductions or increases in frequency depending on the results of the self-monitoring program.

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

Liquid Fuel-Fired Burning Equipment:

Monitoring – The Permittee is required to conduct PM source testing if threshold values for opacity are exceeded.

Recordkeeping - The Permittee is required to record the results of PM source tests.

Reporting - The Permittee is required to report: 1) incidents when emissions in excess of the opacity threshold values have been observed, 2) and results of PM source tests. The Permittee is required to include copies of the results of all visible emission observations with the operating report.

Conditions 5 - 11 Particulate Matter (PM) Standard

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.055(b). This requirement applies to operation of all industrial processes and fuel burning equipment in Alaska.

- EU IDs MDC-BF01 through MDC-BF03, MDC-IC01, and MDC-IC07 through MDC-IC17 are fuel-burning equipment.

These PM standards also apply because they are contained in the Federally approved SIP effective September 13, 2007.

Factual Basis: Condition 5 prohibits emissions in excess of the state PM (also called grain loading) standard applicable to fuel-burning equipment and industrial processes. The Permittee shall not cause or allow fuel-burning equipment nor industrial processes to violate this standard.

MR&R requirements are listed in Conditions 6 through 11.

The Permittee must establish by actual visual observations which can be supplemented by other means, such as a defined Operation and Maintenance Program that the emission unit is in continuous compliance with the State's emission standards for particulate matter.

Conditions 6 through 8 for IC engines and Conditions 9 through 11 for boilers detail a stepwise process for monitoring compliance with the State's particulate matter standards for liquid fuel fired sources. Equipment types covered by these Conditions are internal combustion engines and boilers. Internal monitoring frequency schedules are established along with subsequent reductions or increases in frequency depending on the results of the self-monitoring program.

Monitoring frequencies for liquid hydrocarbon fuels are detailed in these conditions.

Liquid Fuel-Fired Burning Equipment:

Monitoring – The Permittee is required to conduct PM source testing if threshold values for opacity are exceeded.

Recordkeeping - The Permittee is required to record the results of PM source tests.

Reporting - The Permittee is required to report: 1) incidents when emissions in excess of the opacity threshold values have been observed, 2) and results of PM source tests. The Permittee is required to include copies of the results of all visible emission observations with the operating report.

Condition 12, Sulfur Compound Emissions

Legal Basis: This condition requires the Permittee to comply with the sulfur compound emission standard for all fuel-burning equipment and industrial processes in the State of Alaska as provided in 18 AAC 50.055(c) and (d).

- EU IDs MDC-BF01 through MDC-BF03, MDC-IC01, and MDC-IC07 through MDC-IC17 are fuel-burning equipment.

These sulfur compound standards under 18 AAC 50.055(c) also apply because they are contained in the Federally approved SIP effective September 13, 2007.

This condition also requires compliance with the fuel sulfur content limit in Condition 13. Compliance with the sulfur content limit ensures compliance with the sulfur compound standard in this condition.

Factual Basis: The condition requires the Permittee to comply with the sulfur compound emission standard applicable to fuel-burning equipment. The Permittee may not cause or allow the affected equipment to violate this standard.

Sulfur dioxide comes from the sulfur in the fuel (e.g. coal, natural gas, fuel oils).

Liquid Fuels:

MR&R requirements were established in Minor Permit No. AQ1071MSS02 Rev 1 for the fuel sulfur content limit, which also ensures compliance with the sulfur compound standard in Condition 12. Therefore, compliance with the MR&R requirements of Condition 13 is required instead of using the MR&R in Standard Permit Conditions XI and XII adopted into regulation pursuant to AS 46.14.010(e).

Conditions 13 - 17, Pre-construction Permit Requirements

Legal Basis: The Permittee is required to comply with all effective stationary source-specific requirements that were carried forward from previous EPA PSD permits, SIP approved permits to operate issued before January 18, 1997, SIP approved construction permit(s), SIP approved minor permits, operating permits issued between January 18, 1997 and September 30, 2004, or owner requested limits established under 18 AAC 50.225. These requirements include Best Available Control Technology limits, limits to ensure compliance with the attainment or maintenance of ambient air quality standards or maximum allowable ambient concentrations, and owner requested limits. State pre-construction requirements apply because they were originally developed through case-by-case action under a Federally approved SIP or approved Operating Permit program. EPA approved the latest SIP effective September 13, 2007.

Factual Basis: Conditions 13 through 15 incorporate ambient air quality protection requirements. Monitoring, recordkeeping, and reporting requirements are included in these conditions.

Condition 16 incorporates owner requested limits to prevent classification as a PSD major source. Monitoring, recordkeeping, and reporting requirements are included in Condition 17.

Conditions 18, Insignificant Emission Units

Legal Basis: The Permittee is required to meet state emission standards set out in 18 AAC 50.055 for all industrial processes fuel-burning equipment, and incinerators regardless of size.

Factual Basis: The conditions re-iterate the emission standards and require compliance for insignificant emission units. The Permittee may not cause or allow their equipment to violate these standards. Insignificant emission units are not listed in the permit unless specific monitoring, recordkeeping and reporting are necessary to ensure compliance.

Conditions 19 - 23, NSPS Subpart A Requirements

Legal Basis: The Permittee must comply with those New Source Performance Standard (NSPS) provisions incorporated by reference the NSPS effective July 1, 2007, for specific industrial activities, as listed in 18 AAC 50.040[5].

Most affected facilities (with the exception of some storage tanks) subject to an NSPS are subject to Subpart A. At this stationary source, EU IDs MDC-IC13 through MDC-IC17 are subject to NSPS Subpart IIII and therefore subject to Subpart A.

Conditions 19.1 through 19.3 - The Permittee has already complied with the notification requirements in 40 C.F.R. 60.7 (a)(1) - (4) for EU IDs MDC-IC13 through MDC-IC17. However, the Permittee is still subject to these requirements in the event of a new NSPS affected facility[6] or in the event of a modification or reconstruction of an existing facility[7] into an affected facility.

Condition 19.4 - The requirements to notify the EPA and the Department of any proposed replacement of components of an existing facility (40 C.F.R. 60.15) apply in the event that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility.

Condition 20 - Start-up, shutdown, or malfunction record maintenance requirements in 40 C.F.R. 60.7(b) are applicable to all NSPS affected facilities subject to Subpart A.

Recordkeeping requirements in 40 C.F.R. 60.7(f) are applicable to all NSPS affected facilities. (Satisfied by Condition 73)

Condition 21 - states that any credible evidence may be used to demonstrate compliance or establishing violations of relevant NSPS standards for EU IDs MDC-IC13 through MDC-IC17.

Condition 23 - Concealment of emissions prohibitions in 40 C.F. R. 60.12 are applicable to EU IDs MDC-IC13 through MDC-IC17.

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

Conditions 24 - 28, NSPS Subpart IIII Requirements

Legal Basis: NSPS Subpart IIII applies to stationary compression ignition internal combustion engines (CI ICE) that commence construction, modification, or reconstruction after July 11, 2005 where the stationary CI ICE are manufactured after April 1, 2006 for non-fire pump engines and after July 1, 2006 for certified fire pump engines. EU IDs MDC-IC13 through MDC-IC17 are subject to Subpart IIII under 40 C.F.R. 60.4200 because they were constructed in 2009.

[5] EPA has not delegated to the Department the authority to administer the NSPS program as of the issue date of this permit

[6] *Affected facility* means, with reference to a stationary source, any apparatus to which a standard applies, as defined in 40 C.F.R. 60.2, effective 7/1/07.

[7] *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.

Factual Basis: These conditions incorporate the Subpart IIII emissions standards applicable to EU IDs MDC-IC13 through MDC-IC17. The Permittee may not cause or allow EU IDs MDC-IC13 through MDC-IC17 to violate these standards. These conditions also provide MR&R specifically called out for within the Subpart. The Permittee is required to operate and maintain the stationary CI ICE according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer. Each engine must comply with the emission standards in 40 C.F.R. 89.112 and 89.113.

Condition 29, NESHAP Subpart A Requirements

Legal Basis: This applies because the Permittee is subject to NESHAP requirements.

Factual Basis: The Permittee is subject to NESHAP Subparts ZZZZ and JJJJJJ, which have NESHAP Subpart A requirements.

Conditions 30 - 37, NESHAP Subpart ZZZZ Requirements

Legal Basis: NESHAP Subpart ZZZZ applies to owners and operators of stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. Missile Defense Complex (MDC) is an area source that owns and operates several RICE units subject to NESHAP Subpart ZZZZ.

Factual Basis: NESHAP Subpart ZZZZ applies to any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE units being tested at a stationary RICE test cell/stand. EU IDs MDC-IC01 and MDC-IC07 through MDC-IC12 are existing stationary RICE and must comply with the requirements under NESHAP Subpart ZZZZ. EU IDs MDC-IC13 through MDC-IC17 are new stationary RICE and must comply with the requirements under 40 C.F.R. 60 Subpart IIII.

Conditions 38 - 45, NESHAP Subpart JJJJJJ Requirements

Legal Basis: The Permittee is subject to this subpart if owning or operating an industrial, commercial, or institutional boiler as defined in 40 C.F.R. 63.11237 that is located at, or is part of, an area source of HAP emissions, as defined in 40 C.F.R. 63.2, except as specified in 40 C.F.R. 63.11195. EU IDs MDC-BF01 through MDC-BF03 are subject to Subpart JJJJJJ.

Factual Basis: These conditions incorporate the Subpart JJJJJJ emissions standards applicable to EU IDs MDC MDC-BF01 through MDC-BF03. The Permittee may not cause or allow EU IDs MDC MDC-BF01 through MDC-BF03 to violate these standards. These conditions also provide MR&R specifically called out for within the Subpart. The Permittee is required to operate and maintain the boilers according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the boiler manufacturer. The Permittee is required to comply with work practices, emission reduction measures, and management practices set forth in Table 2 in Subpart JJJJJJ. The Permittee shall submit an Initial Notification, Notification of Compliance, and a biennial compliance report.

Condition 46, Asbestos NESHAP

Legal Basis: The condition requires the Permittee to comply with asbestos demolition or renovation requirements in 40 C.F.R. 61, Subpart M. This condition ensures compliance with the applicable requirement in 18 AAC 50.040(b)(1) and (2)(F). The asbestos demolition and renovation requirements apply if the Permittee engages in asbestos demolition or renovation.

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

Condition 47, Protection of Stratospheric Ozone, 40 C.F.R. 82

Legal Basis: Condition 47.1 ensures compliance with the procurement requirements in Subpart D of 40 C.F.R. 82 and the applicable requirement in 18 AAC 50.040(d).

Condition 47.2 ensures compliance with the applicable requirement in 18 AAC 50.040(d) and applies if the Permittee engages in the recycling or disposal of certain refrigerants. The condition requires the Permittee to comply with the standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F that will apply if the Permittee uses certain refrigerants.

Factual Basis: Because these regulations include adequate monitoring and reporting requirements and because the Permittee is not currently engaged in the activity referenced in Condition 47.2, simply citing the regulatory requirements is sufficient to ensure compliance with these Federal regulations. These conditions also incorporate applicable 40 C.F.R. 82 requirements. The Permittee may not cause or allow violations of these prohibitions.

Condition 48, NESHAPs Applicability Determinations

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

Factual Basis: The Permittee has conducted an analysis of the stationary source and determined that it is not a major HAPs stationary source based on emissions. This condition requires the Permittee to notify the Department and Administrator if the stationary source becomes an affected facility and to keep and make available to the Department copies of the major stationary source determination.

Condition 49, NSPS and NESHAP Reports

Legal Basis: The Permittee is required to provide the Federal Administrator and Department a copy of each emission unit report for units subject to NSPS or NESHAP Federal regulations under 18 AAC 50.326(j)(4). 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

Factual Basis: The condition supplements the specific reporting requirements in 40 C.F.R. 60, 40 C.F.R. 61, and 40 C.F.R. 63. The reports themselves provide monitoring for compliance with this condition.

Conditions 50 - 52, Standard Terms and Conditions

Legal Basis: These are standard conditions required under 18 AAC 50.345(a) and (e)-(g) for all operating permits. This provision is incorporated in the Federally approved Alaska operating permit program of November 30, 2001, as updated effective November 9, 2008.

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

Condition 53, Administration Fees

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.400-405 as derived from AS 46.14.130. This condition requires the Permittee, owner, or operator to pay administration fees as set out in regulation. Paying administration fees is required as part of obtaining and holding a permit with the Department or as a fee for a Department action.

Factual Basis: The owner or operator of a stationary source who is required to apply for a permit under AS 46.14.130 shall pay to the Department all assessed permit administration fees. The regulations in 18 AAC 50.400-405 specify the amount, payment period, and the frequency of fees applicable to a permit action.

Conditions 54 - 55, Emission Fees

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.410-420. The regulations require all permits to include due dates for the payment of fees and any method the Permittee may use to re-compute assessable emissions.

Factual Basis: These emission fee conditions are Standard Permit Condition I under 18 AAC 50.346(b) adopted pursuant to AS 46.14.010(e). Except for the modification noted in the last paragraph of this "Factual Basis", the Department determined that these standard conditions adequately meet the requirements of AS 46.14.250. No emission unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source specific conditions would better meet these requirements. Therefore, the Department concluded that the standard conditions meet the requirements of AS 46.14.250.

These standard conditions require the Permittee to pay fees in accordance with the Department's billing regulations. The billing regulations set the due dates for payment of fees based on the billing date.

The default assessable emissions are generally potential emissions of each air pollutant in excess of 10 tons per year authorized by the permit (AS 46.14.250(h)(1)(A)).

The conditions allow the Permittee to calculate actual annual assessable emissions based on previous actual annual emissions. According to AS 46.14.250(h)(1)(B), assessable emissions are based on each air pollutant. Therefore, fees based on actual emissions shall be paid on any pollutant emitted whether or not the permit contains any limitation of that pollutant.

This standard condition specifies that, unless otherwise approved by the Department, calculations of assessable emission based on actual emissions use the most recent previous calendar year's emissions. Since each current year's assessable emission are based on the

previous year, the Department will not give refunds or make additional billings at the end of the current year if the estimated emissions and current year actual emissions do not match.

The Department modified the standard condition to correct Condition 55.2 such that it referenced "submitted" (i.e., postmarked) rather than "received" in accordance with the timeframe of Condition 55.1.

Condition 56, Good Air Pollution Control Practice

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.346(b)(5) and applies to all emission units, **except** those subject to Federal emission standards, those subject to continuous emission or parametric monitoring, and for insignificant emission units.

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

The Department adopted this condition under 18 AAC 50.346(b) as Standard Permit Condition VI pursuant to AS 46.14.010(e). This condition has been modified in the permit as follows. The Department added the text "EU IDs MDC-BF01 through MDC-BF03, MDC-IC01, and MDC-IC07 through MDC-IC12 are subject to this condition only until the applicable compliance date as set forth in Conditions 38.1 and 30.3.a" because on the compliance date in Conditions 38.1 and 30.3.a, EU IDs MDC-BF01 through MDC-BF03, MDC-IC01, and MDC-IC07 through MDC-IC12 subject to NESHAPs Subpart ZZZZ or JJJJJJ will no longer be subject to this condition (as units subject to Federal emission standards) and will instead be required to comply with Conditions 33.2 and 40.1. Records kept in accordance with Condition 56.2 for units previously subject to GAPCP need to be maintained for 5 years in accordance with Condition 73 even if a unit is no longer subject to this condition.

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

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

The Permittee is required to keep maintenance records to show that proper maintenance procedures were followed, and to make the records available to the Department. The Department may use these records as a trigger for requesting source testing if the records show that maintenance has been deferred.

Condition 57, Dilution

Legal Basis: This condition prohibits the Permittee from using dilution as an emission control strategy as set out in 18 AAC 50.045(a). This state regulation applies to the Permittee because the Permittee is subject to emission standards in 18 AAC 50.

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

Condition 58, Reasonable Precautions to Prevent Fugitive Dust

Legal Basis: This condition requires the Permittee to use reasonable precautions when handling, storing or transporting bulk materials or engaging in an industrial activity in accordance with the applicable requirement in 18 AAC 50.045(d). Bulk material handling requirements apply to the Permittee because the Permittee will engage in bulk material handling, transporting, or storing; or will engage in industrial activity at the stationary source.

This condition applies to stationary source operating permits that do not have an approved dust control plan, and contain one of the following: coal-fired boilers; coal handling facilities; construction of gravel pads or roads that are part of a permitted stationary source or other construction that has the potential to generate fugitive dust that reaches ambient air; commercial/industrial/municipal solid waste, air curtain, and medical waste incinerators; sewage sludge incinerators not using wet methods to handle that ash; mines; urea manufacturing; soil remediation units; or dirt roads under the control of the operator with frequent vehicle traffic.

Factual Basis: The condition requires the Permittee to comply with 18 AAC 50.045(d), and take reasonable action to prevent particulate matter (PM) from being emitted into the ambient air.

The Department adopted this standard condition as Standard Permit Condition X under 18 AAC 50.346(c) pursuant to AS 46.14.010(e). The Department determined that this standard condition adequately meets the requirements of 40 C.F.R. 71.6(a)(3). No emission unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source specific conditions would better meet these requirements. Therefore, the Department concluded that the standard condition meet the requirements of 40 C.F.R. 71.6(a)(3).

Condition 59, Stack Injection

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.055(g). It prohibits the Permittee from releasing materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack (i.e. disposing of material by injecting it into a stack). Stack injection requirements apply to the stationary source because the stationary source contains a stack or unit constructed or modified after November 1, 1982.

Factual Basis: No specific monitoring for this condition is practical. Compliance is ensured by inspections, because the unit or stack would need to be modified to accommodate stack injection.

Condition 60, Air Pollution Prohibited

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.110. The condition prohibits the Permittee from causing any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property. Air Pollution Prohibited requirements apply to the stationary source because the stationary source will have emissions.

Factual Basis: While the other permit conditions and emissions limitation should ensure compliance with this condition, unforeseen emission impacts can cause violations of this standard. These violations would go undetected except for complaints from affected persons. Therefore, to monitor compliance, the Permittee must monitor and respond to complaints.

ADEC adopted this standard condition into 18 AAC 50.346(a) pursuant to AS 46.14.010(e). The Department determined that this condition adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No emission unit or stationary source operational or compliance factors indicate that unit-specific or stationary-source specific conditions would better meet these requirements. Therefore, the Department concluded that the standard condition meets the requirements of 40 C.F.R. 71.6(a)(3).

The Permittee is required to report any complaints and injurious emissions. The Permittee must keep records of the date, time, and nature of all complaints received and summary of the investigation and corrective actions undertaken for these complaints, and to submit copies of these records upon request of the Department.

Condition 61, Technology-Based Emission Standard

Legal Basis: The Permittee is required to take reasonable steps to minimize emissions if certain activity causes an exceedance of any technology-based emission standard in this permit. This condition ensures compliance with the applicable requirement in 18 AAC 50.235. Technology Based Emission Standard requirements apply to the stationary source because the stationary source contains equipment subject to a technology-based emission standard, such as BACT, MACT, LAER, NSPS or other "technologically feasible" determinations.

Factual Basis: The conditions of this permit list applicable technology-based emission standards and require excess emission reporting for each standard in accordance with Condition 77. Excess emission reporting under Condition 81 requires information on the steps taken to minimize emissions. Monitoring of compliance for this condition consists of the report required under Condition 77.

Condition 62, Open Burning

Legal Basis: The condition requires the Permittee to comply with the regulatory requirements when conducting open burning at the stationary source. This condition ensures compliance with the applicable requirement in 18 AAC 50.065. The open burning state regulation in 18 AAC 50.065 applies to the Permittee if the Permittee conducts open burning at the stationary source.

Factual Basis: No specific monitoring is required for this condition. Condition 62.1 requires the Permittee to keep "sufficient records" to demonstrate compliance with the standards for conducting open burning, but does not specify what these records should contain.

More extensive monitoring and recordkeeping is not warranted because the Permittee does not conduct open burning as a routine part of their business. Also, most of the requirements are prohibitions, which are not easily monitored. Compliance is demonstrated through annual certification required under Condition 79.

Condition 63, Requested Source Tests

Legal Basis: The Permittee is required to conduct source tests as requested by the Department. The Department adopted this condition under 18 AAC 50.345(k) as part of its operating permit program approved by EPA November 30, 2001.

Factual Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.220(a) and applies because this is a standard condition to be included in all operating permits. Monitoring consists of conducting the requested source test.

Conditions 64 - 66, Operating Conditions, Reference Test Methods, Excess Air Requirements

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.220(b) and apply because the Permittee is required to conduct source tests by this permit. The Permittee is required to conduct source tests as set out in Conditions 64 through 66.

Factual Basis: These conditions supplement the specific monitoring requirements stated elsewhere in this permit. Compliance monitoring with Conditions 64 through 66 consist of the test reports required by Condition 71.

Condition 67, Test Exemption

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.345(a) and applies when the unit exhaust is observed for visible emissions.

Factual Basis: As provided in 18 AAC 50.345(a), amended November 9, 2008, the requirements for test plans, notifications and reports do not apply to visible emissions observations by smoke readers, except in connection with required particulate matter testing.

Conditions 68 - 71, Test Deadline Extension, Test Plans, Notifications and Reports

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.345(l)-(o) and apply because the Permittee is required to conduct source test by this permit.

Factual Basis: Standard conditions 18 AAC 50.345(l) - (o) are incorporated through these conditions. These standard conditions supplement specific monitoring requirements stated elsewhere in this permit. The source test itself monitors compliance with this condition.

Condition 72, Particulate Matter (PM) Calculations

Legal Basis: This condition requires the Permittee to reduce particulate matter data in accord with 18 AAC 50.220(f). It applies when the Permittee tests for compliance with the PM standards in 18 AAC 50.050 or 50.055.

Factual Basis: The condition incorporates a regulatory requirement for PM source tests. This condition supplements specific monitoring requirements stated elsewhere in this permit.

Condition 73, Recordkeeping Requirements

Legal Basis: Applies because the Permittee is required by the permit to keep records.

Factual Basis: The condition restates the regulatory requirements for recordkeeping, and supplements the recordkeeping defined for specific conditions in the permit. The records being kept provide an evidence of compliance with this requirement.

Condition 74, Certification

Legal Basis: This condition requires the Permittee to comply with the certification requirement in 18 AAC 50.205 and applies to all Permittees under EPA's approved operating permit program of November 30, 2001.

Factual Basis: This standard condition is required in all operating permits under 18 AAC 50.345(j). This condition requires the Permittee to certify any permit application, report, affirmation, or compliance certification submitted to the Department. To ease the certification burden on the Permittee, the condition allows the excess emission reports to be certified with the stationary source report, even though it must still be submitted more frequently than the stationary source operating report. This condition supplements the reporting requirements of this permit.

Condition 75, Submittals

Legal Basis: This condition requires the Permittee to comply with standardized reporting requirement in 18 AAC 50.326(j) and applies because the Permittee is required to send reports to the Department.

Factual Basis: This condition lists the Department's appropriate address for reports and written notices. The Permittee is required to submit an original and one copy of reports, compliance certifications, and other submittals required by this permit. Receipt of the submittal at the correct Department office is sufficient monitoring for this condition. This condition supplements the standard reporting and notification requirements of this permit.

Condition 76, Information Requests

Legal Basis: This condition requires the Permittee to submit requested information to the Department. This is a standard condition from 18 AAC 50.345(i) of the state approved operating permit program effective November 30, 2001.

Factual Basis: This condition requires the Permittee to submit information requested by the Department. Monitoring consists of receipt of the requested information.

Condition 77, Excess Emission and Permit Deviation Reports

Legal Basis: This condition requires the Permittee to comply with the applicable requirement in 18 AAC 50.235(a)(2) and 18 AAC 50.240. Also, the Permittee is required to notify the Department when emissions or operations deviate from the requirements of the permit.

Factual Basis: This condition satisfies two state regulations related to excess emissions - the technology-based emission standard regulation and the excess emission regulation. Although there are some differences between the regulations, the condition satisfies the requirements of each regulation.

The Department adopted this condition as Standard Permit Condition III under 18 AAC 50.346(c) pursuant to AS 46.14.010(e). The Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emission unit or stationary source operational or compliance factors indicate the unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard condition meets the requirements of 40 C.F.R. 71.6(a)(3).

Section 13, Notification Form

The notification form contained in Standard Permit Condition IV meets the requirements of Chapter 50, Air Quality Control.

Condition 78, Operating Reports

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.346(b)(6) and applies to all permits.

Factual Basis: The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements elsewhere in the permit. The reports themselves provide monitoring for compliance with this condition.

The Department used the Standard Permit Condition VII as adopted into regulation on August 20, 2008 pursuant to AS 46.14.010(e). The Department has determined that the standard conditions adequately meet the requirements of 40 C.F.R. 71.6(a)(3). No additional emission unit or stationary source operational or compliance factors indicate the unit-specific or stationary-source-specific conditions would better meet the requirements. Therefore, the Department concludes that the standard condition meets the requirements of 40 C.F.R. 71.6(a)(3). The Department deleted the text "*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*." since it duplicates Condition 75.

For renewal permits, the condition specifies that for the transition periods between an expiring permit and a renewal permit the Permittee shall ensure that there is date-to-date continuity between the expired permit and the renewal permit such that the Permittee reports against the permit terms and conditions of the permit that was in effect during those partial date periods of the transition. No format is specified. The Permittee may provide one report accounting for each permit term or condition and the effective permit at that time.

Alternatively, the Permittee may chose to provide two reports – one accounting for reporting elements of permit terms and conditions from the end date of the previous operating report until the date of expiration of the old permit, and a second operating report accounting for reporting elements of terms and conditions in effect from the effective date of the renewal permit until the end of the reporting period.

Condition 79, Annual Compliance Certification

Legal Basis: This condition ensures compliance with the applicable requirement in 18 AAC 50.040(j)(4) and applies to all Permittees.

Factual Basis: This condition specifies the periodic compliance certification requirements, and specifies a due date for the annual compliance certification. Each annual certification provides monitoring records for compliance with this condition.

Condition 79.2 provides clarification of transition periods between an expiring permit and a renewal permit to ensure that the Permittee certifies compliance with the permit terms and conditions of the permit that was in effect during those partial date periods involved in the transition. No format is specified: the Permittee may provide one report certifying compliance with each permit term or condition for each of the effective permits during the certification period, or may choose to provide two reports – one certifying compliance with permit terms and conditions from January 1 until the date of expiration of the old permit, and a second report certifying compliance with terms and conditions in effect from the effective date of the renewal permit until December 31.

The Permittee is required to submit to the Department an original and one copy of an annual compliance certification report. The Permittee may submit one of the required copies electronically at their discretion. This change more adequately meets the requirements of 18 AAC 50 and agency needs, as the Department can more efficiently distribute the electronic copy to staff in other locations. The Department deleted the text "*The Permittee, at their discretion, may submit one copy in electronic format (PDF or other Department compatible image format).*" since it duplicates Condition 75.

Condition 80, Emission Inventory Reporting

Legal Basis: This condition requires the Permittee to submit emissions data to the State to satisfy the Federal requirement to submit emission inventory data from point sources as required under 40 CFR 51.321 (6/10/02). It applies to sources defined as point sources in 40 C.F.R. 51.50. The State must report all data elements in Table 2A of Appendix A to Subpart A of 40 C.F.R. 51 to EPA (73 FR 76556).

Factual Basis: The emission inventory data is due to EPA 12 months after the end of the reporting year (40 CFR 51.30(a)(1) and (b)(1), 12/17/08). A due date of March 31 corresponds with sources reporting actual emissions for assessable emissions purposes and provides the Department sufficient time to enter the data into EPA's electronic reporting system.

The air emissions reporting requirements under 40 CFR Part 51 Subpart A apply to States; however, States rely on information provided by point sources to meet the reporting requirements of Part 51 Subpart A. In the past, the department has made information requests to point sources, to which the point source is obligated to reply under 18 AAC 50.200. The information requests occur on a routine basis as established by Part 51 Subpart

A and consume significant staff resources. To increase governmental efficiency and reduce costs associated with information requests that occur on a routine basis, it has been determined that a standard permit condition best fulfills the need to gather the information needed to satisfy the requirements of Subpart A of 40 CFR 51.

To ensure that the Department's electronic system reports complete information to the National Emissions Inventory, Title V stationary sources classified as Type A in Table 1 of Appendix A to Subpart A of 40 CFR 51 are required to submit with each annual report all the data elements required for the Type B source triennial reports (see also Table 2A of Appendix A to Subpart A of 40 CFR Part 51). All Type A sources are also classified as Type B sources. However the department has streamlined the reporting requirements so Type A sources only need to submit a single type of report every year instead of both an annual report and a separate triennial report every third year.

Condition 81, Permit Applications and Submittals

Legal Basis: The Permittee may need to submit permit applications and related correspondence.

Factual Basis: Standard Permit Condition XIV directs the applicant to send copies of all application materials required to be submitted to the Department directly to the EPA, in electronic format if practicable. This condition shifts the burden of compliance from the Department to ensure that copies of application materials are submitted to EPA by transferring that responsibility to the Permittee.

Conditions 82 - 84, Permit Changes and Revisions Requirements

Legal Basis: The Permittee is obligated to notify the Department of certain off-permit source changes and operational changes under18 AAC 50.326(j)(4). 40 C.F.R. 71.6(a)(10), (12), and (13) incorporated by reference under 18 AAC 50.040(j) require these provisions within this permit. 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

Factual Basis: These conditions are required in 40 C.F.R. 71.6 for all operating permits to allow changes within a permitted stationary source without requiring a permit revision.

The Permittee did not request trading of emission increases and decreases as described in 40 C.F.R. 71.6(a)(13)(iii).

Condition 85, Permit Renewal

Legal Basis: The Permittee must submit a timely and complete operating permit renewal application if the Permittee intends to continue source operations in accord with the operating permit program under18 AAC 50.326(j)(3). The obligations for a timely and complete operating permit application are set out in 40 C.F.R. 71.5 incorporated by reference in 18 AAC 50.040(j)(3). 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

Factual Basis: In accordance with AS 46.14.230(a), this operating permit is issued for a fixed term of five years after the date of issuance, unless a shorter term is requested by the permit applicant. The Permittee is required to submit an application for permit renewal by the specific dates applicable to the stationary source as listed in this condition. As stated in 40 C.F.R. 71.5(a)(1)(iii), submission for a permit renewal application is considered timely if

it is submitted at least six months but no more than eighteen months prior to expiration of the operating permit. According to 40 C.F.R. 71.5(a)(2), a complete renewal application is one that provides all information required pursuant to 40 C.F.R. 71.5(c) and must remit payment of fees owed under the fee schedule established pursuant to 18 AAC 50.400. 40 C.F.R. 71.7(b) states that if a source submits a timely and complete application for permit issuance (including renewal), the source's failure to have a permit is not a violation until the permitting authority takes final action on the permit application.

Therefore, for as long as an application has been submitted within the timeframe allowed under 40 C.F.R. 71.5(a)(1)(iii), and is complete before the expiration date of the existing permit, then the expiration of the existing permit is extended and the Permittee has the right to operate under that permit until the effective date of the new permit. However, this protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit by the deadline specified in writing by the Department any additional information needed to process the application. Monitoring, recordkeeping, and reporting for this condition consist of the application submittal.

Conditions 86 - 90, General Compliance Requirements

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.326(j)(3). The Permittee is required to comply with these standard conditions set out in 18 AAC 50.345 included in all operating permits. 40 C.F.R. 70 Appendix A documents that EPA fully approved the Alaska operating permit program effective November 30, 2001.

Factual Basis: These are standard conditions for compliance required for all operating permits.

Conditions 91 - 92, Permit Shield

Legal Basis: These conditions ensure compliance with the applicable requirement in 18 AAC 50.326(j) and apply because the Permittee has requested that the Department shield the source from the non-applicable requirements listed under this condition under the Federally approved State operating program effective November 30, 2001

Factual Basis: Table C of Operating Permit No. AQ1071TVP02 shows the permit shield that the Department granted to the Permittee. The permit conditions set forth the requirements that the Department determined were not applicable to the stationary source.