

# ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## AIR QUALITY OPERATING PERMIT

Permit No. GPA

Issue Date: January 5, 2016

Expiration Date: January 5, 2021

The Department of Environmental Conservation, under the authority of AS 46.03, AS 46.14, and 18 AAC 50, issues an Air Quality Operating Permit for:

**Permitted Stationary Sources:** Diesel electric generating stations with diesel engines and auxiliary fuel burning equipment that have requested a fuel limit to avoid classification under 18 AAC 50.306.


This permit authorizes the operation of stationary sources for which the Department finds in writing:

- Emission units meet the criteria established on page 1 of this permit; and
- The Department has received a complete application. For the Department to find that the application is complete, the application must provide all of the information described in the application form issued with this permit for all emission units to be operated under this permit.

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 required by AS 46.14.120(c), the Permittee shall comply with the terms and conditions of this permit.

Citations listed herein are contained within 18 AAC 50 dated February 5, 2015 Register 213. All federal regulation citations are from those sections adopted by reference in this version of regulation in 18 AAC 50.040 unless otherwise specified.

This permit becomes effective on February 4, 2016.



for John Kuterbach, Manager  
Air Permit Program

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### List of Abbreviations Used in this Permit

AAC.....	Alaska Administrative Code	NESHAPs.....	Federal National Emission Standards for Hazardous Air Pollutants [NESHAPs as contained in 40 C.F.R. 61 and 63]
ADEC .....	Alaska Department of Environmental Conservation	NO <sub>x</sub> .....	Nitrogen Oxides
AP-42.....	EPA Report, Compilation of Air Pollution Emission Factors	NSPS .....	Federal New Source Performance Standards [NSPS as contained in 40 C.F.R. 60]
AS .....	Alaska Statutes	O & M .....	Operation and Maintenance
ASTM.....	American Society for Testing and Materials	O <sub>2</sub> .....	Oxygen
BHp .....	Boiler Horsepower	PM-10 .....	Particulate Matter less than or equal to a nominal ten microns in diameter
C.F.R. ....	Code of Federal Regulations	ppm .....	Parts per million
dscf .....	Dry standard cubic foot	ppmv, ppmvd .....	Parts per million by volume on a dry basis
EPA .....	US Environmental Protection Agency	psia .....	Pounds per Square Inch (absolute)
EU.....	emission unit	PSD .....	Prevention of Significant Deterioration
gr./dscf.....	grain per dry standard cubic foot (1 pound = 7000 grains)	PTE .....	Potential to Emit
gpy.....	gallons per year	RM .....	Reference Method
HAPs .....	Hazardous Air Pollutants [HAPs as defined in AS 46.14.990]	S .....	Sulfur
ID.....	Emission Unit Identification Number	SIC. ....	Standard Industrial Classification
MMBtu/hr.....	Million British thermal units per hour	SIP.....	State Implementation Plan
MR&R .....	Monitoring, Recordkeeping, and Reporting	SO <sub>2</sub> .....	Sulfur dioxide
NAICS .....	North American Industry Classification System	TPY .....	Tons per year
		VOC .....	volatile organic compound [VOC as defined in 40 C.F.R. 51.100(s)]
		wt% .....	weight percent

## ***Section 1. Qualifying Requirements***

A stationary source may operate under this general operating permit if the stationary source:

- is described by SIC code 4911 or 4931 and NAICS code 221112;
- produces electricity using diesel engines;
- has the potential to emit (PTE) or emits 100 TPY of NO<sub>x</sub> or more (burning 330,000 or more gallons of fuel in any 12 consecutive months);
- has PTE and actual emissions less than 250 TPY of NO<sub>x</sub> (burning 825,000 gallons or less of fuel in any 12 consecutive months);
- requests a limit to restrict NO<sub>x</sub> emissions to less than 250 tons in any 12 consecutive months;
- complies with the emission standards in this permit at the time of application;
- is not subject to an existing stationary source-specific requirement established in a minor or construction permit or in a permit issued before January 18, 1997;
- is either not accessible by the Federal Aid Highway System (FAHS), or meets all of the following:
  - The only connection to the FAHS is through the Alaska Marine Highway System (AMHS), or the stationary RICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.
  - At least 10 percent of the power generated by the stationary RICE on an annual basis is used for residential purposes.
  - The generating capacity of the area source is less than 12 megawatts, or the stationary RICE is used exclusively for backup power for renewable energy.
- contains stationary reciprocating internal combustion engines (RICE) that:
  - comply with the 40 C.F.R. 63 Subpart ZZZZ requirements for non-emergency engines for all engines subject to the requirements of 40 C.F.R. 63 Subpart ZZZZ; or
  - are non-emergency or fire pump engines subject to the requirements of 40 C.F.R. 60 Subpart III.
- contains stationary RICE that all have displacements less than 30 liters/cylinder.
- was not built after January 18, 1997 in a sulfur dioxide special protection area; and
- does not contain any of the following emission units:
  - emission units subject to any federal emission standard in 40 C.F.R. 60, 61, 62, or 63 other than woodstoves for space heating, reciprocating internal combustion engines, or asbestos demolition /renovation projects, including:
    - boilers subject to 40 C.F.R. 60, Subparts D, Da, Db, or Dc;
    - fuel storage tanks subject to 40 C.F.R. 60, Subparts K, Ka, or Kb;
    - incinerators subject to any federal emission standard in 40 C.F.R. 60 or 62;
  - gas turbines; or emission units subject to any standard in 18 AAC 50.055(a) – (f) other than the general standards for fuel burning equipment in (a)(1), (b)(1), and (c).
  - heaters or boilers:

- with a heat input rating of 1.7 MMBtu/hr or more that burn kerosene, No.1 fuel oil, or No. 2 fuel oil.
- with a heat input rating of 0.3 MMBtu/hr or more that burn used oil.

## **Section 2. State Requirements**

### **Visible Emissions Standards**

- 1. Industrial Process and Fuel-Burning Equipment Visible Emissions.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from the diesel engines 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)]

### **Visible Emissions Monitoring, Recordkeeping and Reporting**

- 2. Visible Emissions Monitoring.** The Permittee shall observe the exhaust of the diesel engines for visible emissions using either the Method 9 Plan under Condition 2.1 or the Smoke/No-Smoke Plan under Condition 2.2. The Permittee may change visible-emissions plans for an emission unit at any time unless prohibited from doing so by Condition 2.3. The Permittee may for each unit elect to continue the visible emission monitoring schedule in effect from the previous permit at the time a renewed permit is issued, if applicable.

[18 AAC 50.040(j), 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. For any unit replaced or installed during the term of this permit, observe exhaust for 18 minutes within 30 days of initial startup.
  - b. Monthly Method 9 Observations. After the first Method 9 observation, perform 18-minute observations at least once in each calendar month that an emission unit operates.
  - c. Semiannual Method 9 Observations. After observing emissions for three consecutive operating months under Condition 2.1b, unless a six-minute average is greater than 15 percent and one or more observations are greater than 20 percent, 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, until the criteria in Condition 2.1c for semiannual monitoring are met.
- 2.2 **Smoke/No Smoke Plan.** Observe the exhaust for the presence or absence of visible emissions, excluding condensed water vapor.
- a. **Initial Monitoring Frequency.** Observe the exhaust during each calendar day that an emission unit operates.
  - b. **Reduced Monitoring Frequency.** After the emission unit has been observed on 30 consecutive operating days, if the emission unit operated without visible smoke in the exhaust for those 30 days, then observe emissions at least once in every calendar month that an emission unit operates.
  - c. **Smoke Observed.** If smoke is observed, either begin the Method 9 Plan of Condition 2.1 or perform the corrective action required under Condition 2.3
- 2.3 **Corrective Actions Based on Smoke/No Smoke Observations.** If visible emissions are present in the exhaust during an observation performed under the Smoke/No Smoke Plan of Condition 2.2, then the Permittee shall either follow the Method 9 plan of Condition 2.1 or
- a. initiate actions to eliminate smoke from the emission unit within 24 hours of the observation;
  - b. keep a written record of the starting date, the completion date, and a description of the actions taken to reduce smoke; and
  - c. after completing the actions required under Condition 2.3a,
    - (i) take Smoke/No Smoke observations in accordance with Condition 2.2.
      - (1) at least once per day for the next seven operating days and until the initial 30 day observation period is completed; and
      - (2) continue as described in Condition 2.2b; or

- (3) if the actions taken under Condition 2.3a do not eliminate the smoke, or if subsequent smoke is observed under the schedule of Condition 2.3c(i)(1), then observe the exhaust using the Method 9 Plan unless the Department gives written approval to resume observations under the Smoke/No Smoke Plan; after observing smoke and making observations under the Method 9 Plan, the Permittee may at any time take corrective action that eliminates smoke and restart the Smoke/No Smoke Plan under Condition 2.2a.

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

[18 AAC 50.040(j), 50.326(j), & 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 Emissions Field Data Sheet in Section 10;
- (ii) the time, estimated distance to the emissions location, sun location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), plume background, and operating rate (load or fuel consumption rate) on the sheet at the time opacity observations are initiated and completed;
- (iii) the presence or absence of an attached or detached plume and the approximate distance from the emissions outlet to the point in the plume at which the observations are made;
- (iv) opacity observations to the nearest five percent at 15-second intervals on the Visible Emissions Observation record in Section 10, and
- (v) the minimum number of observations required by the permit; each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period.

b. To determine the six-minute average opacity, divide the observations recorded on the record sheet into sets of 24 consecutive observations; sets need not be consecutive in time and in no case shall two sets overlap; for each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24; record the average opacity on the sheet.

c. Calculate and record the highest 18-consecutive-minute averages observed.

3.2 If using the Smoke/No Smoke Plan of Condition 2.2, record the following information in a written log for each observation and submit copies of the recorded information upon request of the Department:



- a. the date and time of the observation;
- b. the diesel engine 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 rate (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 In each stationary source operating report under Condition 50, include 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:
    - (1) number of days observations were made;
    - (2) highest six-minute average observed; and
    - (3) dates when one or more observed six-minute averages were greater than 20 percent;
  - (iii) 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
  - (iv) a summary of any monitoring or recordkeeping required under Conditions 2 and 3 that was not done;

4.2 Report under Condition 49:

- 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 the diesel engines 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 Monitor, record and report in accordance with Condition 6.

### **PM Monitoring, Recordkeeping and Reporting**

- 6. Particulate Matter Monitoring for Diesel Engines.** The Permittee shall conduct source tests on diesel engines 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 Except as provided in Condition 6.4 within six months of exceeding the criteria of Condition 6.2a or 6.2b, either
  - a. conduct a PM source test according to requirements set out in Section 6; or
  - b. make repairs so that emissions no longer exceed the criteria of Condition 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 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 diameter(s) of the diesel engines. Report the stack diameter(s) in the next operating report under Condition 50.

[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 49

- a. the results of any PM source test that exceeds 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 6.1a or 6.1b, 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 6.2b within 30 days of the end of the month in which the observations occur;

8.3 In each operating report under Condition 50, include for the period covered by the report:

- a. the dates 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.

### **Sulfur Compound Emission Standards Requirements**

9. **Sulfur Compound Emissions.** The Permittee shall not cause or allow sulfur compound emissions, expressed as SO<sub>2</sub>, from fuel burning equipment 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)]

9.1 The Permittee shall do one of the following for each shipment of fuel:

- a. If the fuel grade requires a sulfur content less than 0.5 percent by weight, keep receipts that specify fuel grade and amount; or
- b. If the fuel grade does not require a sulfur content less than 0.5 percent by weight, keep receipts that specify fuel grade and amount and
  - (i) test the fuel for sulfur content; or

- (ii) obtain test results showing the sulfur content of the fuel from the supplier or refinery; the test results must include a statement signed by the supplier or refinery of what fuel they represent.
- 9.2 Fuel testing under Condition 9.1 must follow an appropriate method listed in 18 AAC 50.035(b)-(c) and 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1).
- 9.3 The Permittee shall include in the report required by Condition 50
- a. a list of the fuel grades received at the stationary source during the reporting period;
  - b. for any grade with a maximum fuel sulfur greater than 0.5 percent sulfur, the fuel sulfur of each shipment; and
  - c. for fuel with a sulfur content greater than 0.75 percent, the calculated SO<sub>2</sub> emissions in ppm.
- 9.4 If SO<sub>2</sub> emissions are calculated to exceed 500 ppm, the Permittee shall report under condition 49. When reporting under this condition, include the SO<sub>2</sub> emissions calculation.

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3)]  
[40 C.F.R. 71.6(a)(10) & (13)(iii)]

**10. Used Oil in Diesel Engines.** Except for emission testing purposes, the Permittee is prohibited from burning used oil blends in diesel engines until the Department approves of a source test demonstrating that burning the used oil will comply with the particulate matter emission standard of Condition 5 and the visible emission standard of Condition 1.

- 10.1 After Department approval as set out by Condition 10, the Permittee shall comply with the following<sup>1</sup>:
- 10.2 Analyze each batch of used oil to determine the sulfur content using an approved ASTM method listed in Condition 9.2. Maintain records showing the results of each analysis.
- 10.3 Blend the used oil with virgin oil at a ratio that will ensure compliance with the sulfur limit of Condition 9.1. However, the used oil blend shall be mixed at a ratio of no more than tested as set out by Condition 10.
- 10.4 Account for the consumption of used oil blends as set out according to Condition 13.2.
- 10.5 Include with the Operating Report required by Condition 50:
- a. Results of each analysis as set out by Condition 10.1; and

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<sup>1</sup> CAUTION! Although this condition should ensure compliance with the applicable emission standards of 18 AAC 50, this permit does NOT ensure compliance with other applicable state or federal laws concerning management, use, or disposal of used oil.

- b. For each batch of used oil blended, the amounts of virgin oil and used oil; the blend ratio; the final sulfur content; and the blend date.

10.6 Report as set out by Condition 49 any time the blend ratio or other requirements deviate from Condition 10.

[18 AAC 50.326(a)]  
[40 C.F.R. 71.2 and 71.6(a)(1) & (3)]

**11. Used Oil in Boilers or Heaters.** The Permittee may burn used oil blends in the boilers and heaters as follows<sup>2</sup>:

11.1 Analyze each batch of used oil to determine the sulfur content using an approved ASTM method such as ASTM D975-84, D3120-92, D4152-90, D2622-91 and ASTM 396-92. Maintain records showing the results of each analysis.

11.2 Blend the used oil with virgin oil at a ratio that will ensure compliance with the sulfur limit of Condition 9.1. However, the used oil blend shall be mixed at a ratio of no more than 1 part used oil with 6 parts virgin oil, unless the Permittee provides a Department approved demonstration that a greater ratio will comply with the limit in Condition 5.

11.3 Account for the consumption of the used oil blends as set out according to Condition 13.2.

11.4 Include with the Operating Report required by Condition 50:

- a. Results of each analysis as set out by Condition 11.1; and
- b. For each batch of used oil blended, the amounts of virgin oil and used oil; the blend ratio; the final sulfur content; and the blend date.

11.5 Report as set out by Condition 49 any time the blend ratio or other requirements deviate from Conditions 11.1 to 11.4.

[18 AAC 50.326(a)]  
[40 C.F.R. 71.2 and 71.6(a)(1) & (3)]

### **Insignificant Emission Units**

**12.** For emission units at the stationary source that are insignificant as defined in 18 AAC 50.326(d)-(i), the following apply:

12.1 **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)]

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<sup>2</sup> CAUTION! Although this condition should ensure compliance with the applicable emission standards of 18 AAC 50, this permit does NOT ensure compliance with other applicable state or federal laws concerning management, use, or disposal of used oil.

12.2 **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)]

12.3 **Sulfur Compound Standard.** The Permittee shall not cause or allow sulfur compound emissions, expressed as SO<sub>2</sub>, from an industrial process or fuel-burning equipment, to exceed 500 ppm averaged over three hours.

[18 AAC 50.055(c)]

12.4 **General MR&R for Insignificant Emission Units**

- a. The Permittee shall submit the compliance certifications of Condition 51 based on reasonable inquiry for Condition 12;
- b. The Permittee shall comply with the requirements of Condition 33;
- c. The Permittee shall report in the operating report required by Condition 50 if an emission unit is insignificant because of actual emissions less than the thresholds of 18 AAC 50.326(e) and actual emissions become greater than any of those thresholds; and
- d. No other monitoring, recordkeeping or reporting is required.

[18 AAC 50.346(b)(4)]

### **Section 3. Stationary Source-Wide Requirements**

**13. NO<sub>x</sub> PSD Avoidance:** The Permittee shall avoid the requirement of a PSD review for NO<sub>x</sub> by emitting less than 250 tons in any 12 consecutive months, as follows:

13.1 Limit fuel consumption from the stationary source (diesel engines and auxiliary fuel burning equipment, including insignificant emission units) to no more than 825,000 gallons in any 12 consecutive month period.

**13.2 Monitoring and Recordkeeping:**

- a. At a consistent time each month, monitor and record the total monthly fuel consumption<sup>3</sup> at the stationary source using a tank leveling process, fuel delivery records, or a metering system.
- b. Calculate and record the 12 consecutive month total fuel consumption for the stationary source each month.

**13.3 Reporting:**

- a. Report in the Operating Report in accordance with Condition 50, the 12 consecutive month fuel consumption for each month in the reporting period as set out by Condition 13.2b.
- b. Report in accordance with Condition 49, whenever the limit in Condition 13.1 is exceeded and whenever the monitoring and reporting of Condition 13.2 or 13.3 are deviated.

**13.4 Source Testing.** Conduct a one-time NO<sub>x</sub> emission source test when the fuel consumption of the stationary source reaches 750,000 gallons in any 12 consecutive months to confirm the worst case emission factors are equal to or less than 4.41 lb/MMBtu heat input. The source test shall be conducted as follows:

- a. Test each diesel engine rated at greater than 400 hp at no less than three loads (high, mid, and low) within the normal operating range of the units. If the Permittee demonstrates in writing to the Department that a group of units have identical configuration, the Department will allow one unit to be tested within that group;
- b. The source test shall be conducted within 90 days after reaching the fuel trigger;
- c. The source test shall be in accordance with the requirements set forth in Section 6 of this permit;
- d. During each test, monitor and record the units' load, electric generation rate, and fuel consumption no less than once every five minutes;

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<sup>3</sup> Fuel consumption shall include used oil consumption as set out by Conditions 10.4 and 11.3.

- e. Obtain for each fuel used during the testing, the fuel specific high heating value (gross heat value) or analyze a representative sample of the fuel using an approved ASTM method such as ASTM D 240, 4809 or 2382;
- f. Determine the load specific NO<sub>x</sub> emission factors (pounds per gallon, pounds per hour, and lb/MMBtu) expressed as NO<sub>2</sub>, using exhaust properties determined by both Method 19 and exhaust gas measurements;
- g. Report information obtained in Conditions 13.4a through 13.4f in the source test report required in Section 6.
- h. Anytime source testing results in a worst case emission factor greater than 4.41 lb/MMBtu heat input:
  - (i) Report in accordance with Condition 49; and
  - (ii) Submit an analysis to show whether or not the fuel limit in Condition 13.1 still limits stationary source NO<sub>x</sub> emissions to no more than 250 tons in any 12 consecutive months.

[18 AAC 50.326(a)]  
[40 C.F.R. 71.2 and 71.6(a)(1) & (3)]



## ***Section 4. Federal Requirements***

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

**14. NSPS Subpart A Notification.** For any affected facility<sup>4</sup> or existing facility<sup>5</sup> 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]

14.1 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]

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

[40 C.F.R. 60.15(d), Subpart A]

- a. the name and address of owner or operator,
- b. the location of the existing facility,
- c. a brief description of the existing facility and the components that are to be replaced,
- d. a description of the existing and proposed air pollution control equipment,
- e. an estimate of the fixed capital cost of the replacements, and of constructing a comparable entirely new facility,
- f. the estimated life of the existing facility after the replacements, and
- g. a discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.

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<sup>4</sup> 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

<sup>5</sup> 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.

- 15. 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 18. 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]

### Engines Subject to NSPS Subpart III

- 16. NSPS Subpart III Requirements.** The Permittee shall comply with all applicable requirements for stationary compression ignition (CI) internal combustion engines (ICE) whose construction<sup>6</sup>, modification<sup>7</sup>, or reconstruction<sup>8</sup> commences after July 11, 2005. Conditions 16 through 20 apply as indicated in Tables 6 and 7 of the GPA application.

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

[18 AAC 50.040(j)(4) & 50.326(j)]  
[40 C.F.R. 71.6(a)(1)]  
[40 C.F.R. 60.4200(a), 60.4206, & 60.4211(a), Subpart III]

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

[18 AAC 50.040(j)(4) & 50.326(j)]  
[40 C.F.R. 71.6(a)(1)]  
[40 C.F.R. 60.4218 & Table 8, Subpart III]

- 16.3 For engines, other than fire pump engines, manufactured in previous model years, the Permittee shall comply with 40 C.F.R. 60.4208(a) through (g) and (i).

[40 C.F.R. 60.4208, Subpart III]

- 16.4 If you own or operate an emergency fire pump stationary ICE, you must operate the emergency stationary ICE according to the requirements in 40 C.F.R. 60.4211(f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under NSPS Subpart III, 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 40 C.F.R. 60.4211(f)(1) through (3), is prohibited. If you do not operate the engine according to the requirements in 40 C.F.R. 60.4211(f)(1) through (3), the engine will not be considered an emergency engine under NSPS Subpart III and must meet all requirements for non-emergency engines.

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

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

<sup>7</sup> As defined in 40 CFR 60.14, incorporated by reference in 18 AAC 50.040(a)(1).

<sup>8</sup> As defined in 40 CFR 60.15, incorporated by reference in 18 AAC 50.040(a)(1).

**16.5 Notification.** For non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, the Permittee must meet the following requirements:

- a. Submit an initial notification as required in Condition 14. The notification shall include the information in Conditions 16.5a(i) through 16.5a(v):
  - (i) Name and address of the owner or operator;
  - (ii) The address of the affected source;
  - (iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
  - (iv) Emission control equipment; and
  - (v) Fuel used.

[40 C.F.R. 60.4214(a)(1), Subpart III]

- b. If the stationary CI ICE is an emergency fire pump stationary ICE, the Permittee is not required to submit an initial notification.

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

**16.6 Performance Tests.** 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 III must do so according to 40 C.F.R. 60.4212.

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

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

17.1 Beginning October 1, 2010, for CI ICE with a displacement of less than 30 liters per cylinder that use diesel fuel, use diesel fuel that meets the requirements of 40 C.F.R. 80.510(b) for non road diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

17.2 Condition 17.1 does not apply to owners and operators of pre-2014 model year stationary CI ICE that are located in areas of Alaska not accessible by the FAHS.

[18 AAC 50.040(j)(4) & 50.326(j)]

[40 C.F.R. 60.4207(b) & 60.4216(d), Subpart III]

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

**18. NSPS Subpart III Emission Standards.** The Permittee shall comply with the applicable emission standards for the affected facility, 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 III]

*For Non-Emergency Engines*

- 18.1 For pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder, the Permittee shall comply with the emission standards in Table 1 to NSPS Subpart III.

[40 C.F.R. 60.4204(a) & Table 1, Subpart III]

- 18.2 For pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder, the Permittee shall comply with the NO<sub>x</sub> emission standards in 40 C.F.R. 94.8(a)(1), as follows:

- a. 17.0 g/kW-hr when maximum test speed is less than 130 rpm, or
- b.  $45.0 \times N^{-0.20}$  when maximum test speed is at least 130 rpm but less than 2000 rpm, where N is the maximum test speed of the engine in revolutions per minute<sup>9</sup>, or
- c. 9.8 g/kW-hr when maximum test speed is 2000 rpm or more.

[40 C.F.R. 60.4204(a), Subpart III]

[40 C.F.R. 94.8(a)(1)(i) - (iii), Subpart A]

- 18.3 For 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder, the Permittee must comply with the emission standards in 40 C.F.R. 60.4201(a) through (f), as applicable, for all pollutants, for the same displacement and maximum engine power.

[40 C.F.R. 60.4204(b) & 4201(a)-(f), Subpart III]

[40 C.F.R. 94.8(a)(1), Subpart A]

*For Emergency Fire Pump Engines*

- 18.4 For fire pump engines with a displacement of less than 30 liters per cylinder, the Permittee shall comply with the emission standards in Table 4 to NSPS Subpart III, for all pollutants.

[40 C.F.R. 60.4205(c) & Table 4, Subpart III]

*For Stationary CI ICE using Special Fuels*

- 18.5 For engines that do not use diesel fuel, the Permittee may petition the Administrator for approval of alternative emission standards, if the Permittee can demonstrate that the fuel used in the affected facility is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required in 40 C.F.R. 60.4204 or 40 C.F.R. 60.4205 using such fuels and that use of such fuel is appropriate and reasonably necessary, considering cost, energy, technical feasibility, human health and environmental, and other factors, for the operation of the engine.

[40 C.F.R. 60.4217, Subpart III]

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<sup>9</sup> Round speed-dependent standards to the nearest 0.1 g/kW-hr.

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

[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) & (b), Subpart III]

19.1 For emergency fire pump stationary CI internal combustion engines that do not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

a. Starting with the model years in Table 5 to NSPS Subpart III, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, keep records of:

- (i) the time of operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter, and
- (ii) the reason the engine was in operation during that time.

[40 C.F.R. 60.4209(a) & 60.4214(b), Subpart III]

19.2 For engines equipped with a diesel particulate filter to comply with the emission standards in 40 C.F.R. 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

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

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

19.3 If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in Condition 18.1 or 18.2, or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in Table 3 to NSPS Subpart III and must comply with the emission standards specified in Condition 18.4, you must demonstrate compliance according to one of the methods specified in Conditions 19.3a through 19.3e:

- a. Purchasing an engine certified according to 40 C.F.R. Part 89 or 40 C.F.R. Part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications;
- b. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in Section 6 and these methods must have been followed correctly;
- c. Keeping records of engine manufacturer data indicating compliance with the standards; and

- d. Keeping records of control device vendor data indicating compliance with the standards.
- e. Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 40 C.F.R. 60.4212, as applicable.

[40 C.F.R. 60.4211(b), Subpart III]

19.4 If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in Condition 18.3, or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in Table 3 to NSPS subpart III and must comply with the emission standards specified in Condition 18.4, you must comply by purchasing an engine certified to the emission standards in Condition 18.3 or 18.4, as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power.

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

19.5 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 in accordance with 40 C.F.R. 60.4211(g)(1) through (3).

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

19.6 For non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, keep records of the information in Conditions 19.6a through 19.6d:

- a. All notifications required in Condition 16.5 and all documentation supporting any notification;
- b. Maintenance conducted on the engine;
- c. If the stationary CI ICE is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards; and
- d. If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

[40 C.F.R. 60.4214(a)(2), Subpart III]

**20. NSPS Subpart III Reporting.** The Permittee shall report in the operating report required by Condition 50 the following:

20.1 upon initial startup, provide in the next operating report:

- a. a copy of the records required in Condition 19.6c or 19.6d;

- b. a copy of any other engine certification under Condition 19.3 or 19.4; or
  - c. a copy of any other record required under Condition 19.3.
- 20.2 the method of compliance used to demonstrate compliance with Condition 19.3; and
- 20.3 copies of any records required in Conditions 19.1 and 19.2.

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

### **Engines Subject to NESHAP Subpart ZZZZ**

- 21. NESHAPS Subpart ZZZZ Requirements.** The Permittee shall comply with all applicable requirements of NESHAP Subpart ZZZZ for stationary reciprocating internal combustion engines (RICE) located at an area source of hazardous air pollutant (HAP) emissions. Conditions 21 through 23 apply as indicated in Table 8 of the GPA application.

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

- 22.** For an affected source that is a new or reconstructed stationary reciprocating internal combustion engine (RICE) located at an area source, the Permittee must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 C.F.R. 60 Subpart IIII in Conditions 16 through 20 for compression ignition engines. No further requirements apply for such engines under NESHAP Subpart ZZZZ.

[18 AAC 50.040(c)(23), (j)(4) & 50.326(j)]  
[40 C.F.R. 63.6590(c), Subpart ZZZZ]

### *NESHAP Subpart ZZZZ Operating Limitations and Other Requirements*

- 23.** For an affected source that is an existing stationary reciprocating internal combustion engine (RICE) located at an area source, the Permittee shall comply with the following:

[18 AAC 50.040(c)(23), (j)(4) & 50.326(j)]

- 23.1 You must meet the following requirements, except during periods of startup:
- a. Change oil and filter every 1,000 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;
  - c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- 23.2 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.
- 23.3 Sources have the option to utilize an oil analysis program as described in Condition 23.7 in order to extend the specified oil change requirement in Condition 23.1a.

[40 C.F.R. 63.6603(a), (b), (b)(1) & (b)(2); 63.6625(h); & Table 2d, Item 1, Subpart ZZZZ]

*NESHAP Subpart ZZZZ General Requirements*

- 23.4 You must be in compliance with the 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]

- 23.5 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 EPA and the Department 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]

- 23.6 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 Subpart ZZZZ.

[40 C.F.R. 63.6665, Subpart ZZZZ]

*NESHAP Subpart ZZZZ Monitoring, Installation, Collection, Operation, and Maintenance Requirements*

- 23.7 The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Condition 23.1a. The oil analysis must be performed at the same frequency specified for changing the oil in Condition 23.1a. 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 Permittee is not required to change the oil. If any of the limits are exceeded, the Permittee 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 Permittee must change the oil within 2 business days or before commencing operation, whichever is later. The Permittee 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]



*NESHAP Subpart ZZZZ Requirements for Demonstration of Continuous Compliance with Operating Limitations and Other Requirements*

23.8 You must demonstrate continuous compliance with each operating limitation and other requirements in Condition 23.1 according to methods specified in Condition 23.8a or 23.8b.

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

- a. Operate and maintain 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]

23.9 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]

*NESHAP Subpart ZZZZ Reporting Requirements*

23.10 You must report all deviations as defined in NESHAP Subpart ZZZZ in the semiannual monitoring report required by Condition 50.

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

*NESHAP Subpart ZZZZ Recording Requirements*

23.11 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)(3), Subpart ZZZZ]

23.12 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]

23.13 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]

23.14 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]

## ***Section 5. General Conditions***

### **Standard Terms and Conditions**

- 24.** 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)]

- 25.** 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)]

- 26.** 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)]

- 27. 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]

- 28. Assessable Emissions.** The Permittee shall pay to the Department an annual emission fee based on the stationary source's assessable emissions as determined by the Department under 18 AAC 50.410. The assessable emission fee rate is set out in 18 AAC 50.410(b). The Department will assess fees per ton of each air pollutant that the stationary source emits or has the potential to emit in quantities greater than 10 tons per year. The quantity for which fees will be assessed is the lesser of

28.1 the stationary source's assessable potential to emit of 369.2 TPY; or

28.2 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)]

**29. Assessable Emission Estimates.** Emission fees will be assessed as follows:

29.1 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

29.2 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 28.1.

[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)]

**30. 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)]

**31. 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)]

31.1 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 31.1 or to address the results of Department inspections that found potential problems; and
  - (ii) to prevent future dust problems.

31.2 The Permittee shall report according to Condition 33.

**32. 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)]

- 33. 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), & 50.346(a)]  
[40 C.F.R. 71.6(a)(3)]

33.1 Monitoring, Recordkeeping, and Reporting for Condition 33

- a. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 49.
- 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 33.

33.2 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 33; or
- b. the Department notifies the Permittee that it has found a violation of Condition 33.

33.3 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 33; and
- d. any corrective actions taken or planned for complaints attributable to emissions from the stationary source.

33.4 With each stationary source operating report under Condition 50, 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.

33.5 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.

**34. 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]

### **Open Burning Requirements**

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

35.1 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.

35.2 Compliance with this condition shall be an annual certification conducted under Condition 51.

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

## ***Section 6. General Source Testing and Monitoring Requirements***

**36. 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)]

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

[18 AAC 50.220(b)]

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

37.2 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.

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

38.1 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]

38.2 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(b) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 61.

[18 AAC 50.040(b) & 50.220(c)(1)(B)]  
[40 C.F.R. 61]

38.3 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(c) must be conducted in accordance with the source test methods and procedures specified in 40 C.F.R. 63.

[18 AAC 50.040(c) & 50.220(c)(1)(C)]  
[40 C.F.R. 63]

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

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

38.5 Source testing for emissions of total particulate matter, sulfur compounds, nitrogen compounds, carbon monoxide, lead, volatile organic compounds, fluorides, sulfuric acid mist, municipal waste combustor organics, metals, and acid gases must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60, Appendix A.

[18 AAC 50.040(a)(3) & 50.220(c)(1)(E)]  
[40 C.F.R. 60, Appendix A]

38.6 Source testing for emissions of PM-10 must be conducted in accordance with the procedures specified in 40 C.F.R. 51, Appendix M, Methods 201 or 201A and 202.

[18 AAC 50.035(b)(2) & 50.220(c)(1)(F)]  
[40 C.F.R. 51, Appendix M]

38.7 Source testing for emissions of any pollutant may be determined using an alternative method approved by the Department in accordance with 40 C.F.R. 63 Appendix A, Method 301.

[18 AAC 50.040(c)(24) & 50.220(c)(2)]  
[40 C.F.R. 63, Appendix A, Method 301]

**39. 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)]

**40. Test Exemption.** The Permittee is not required to comply with Conditions 42, 43 and 44 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)]

**41. 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)]

**42. Test Plans.** Except as provided in Condition 40, 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 36 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)]

- 43. Test Notification.** Except as provided in Condition 40, 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)]

- 44. Test Reports.** Except as provided in Condition 40, within 60 days after completing a source test, the Permittee shall submit two copies of the results in the format set out in the Source Test Report Outline, adopted by reference in 18 AAC 50.030. The Permittee shall additionally certify the results in the manner set out in Condition 46. 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)]



## ***Section 7. General Recordkeeping and Reporting Requirements***

### **Recordkeeping Requirements**

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

[18 AAC 50.326(j)]  
[40 C.F.R 60.7(f), Subpart A]  
[40 C.F.R 71.6(a)(3)(ii)(B)]

- 45.1 copies of all reports and certifications submitted pursuant to this section of the permit; and
- 45.2 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**

- 46. 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.

- 46.1 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 46.1a, 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)]

**47. 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 46.

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

**48. 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)]

**49. Excess Emissions and Permit Deviation Reports.**

49.1 Except as provided in Condition 33, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

- a. in accordance with 18 AAC 50.240(c), as soon as possible after the event commenced or is discovered, report
  - (i) emissions that present a potential threat to human health or safety; and
  - (ii) excess emissions that the Permittee believes to be unavoidable;
- b. in accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or non routine repair that causes emissions in excess of a technology based emission standard;
- c. report all other excess emissions and permit deviations
  - (i) within 30 days of the end of the month in which the emissions or deviation occurs, except as provided in Conditions 49.1c(ii) and 49.1c(iii);
  - (ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the Department provides written permission to report under Condition 49.1c(i); and
  - (iii) for failure to monitor, as required in other applicable conditions of this permit.

49.2 When reporting excess emissions or permit deviations, the Permittee must report using either the Department's on-line form, which can be found at <http://www.dec.state.ak.us/air/ap/site.htm>, or if the Permittee prefers, the form contained in Section 11 of this permit. The Permittee must provide all information called for by the form that is used.

49.3 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)]

**50. Operating Reports.** During the life of this permit<sup>10</sup>, 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.

50.1 The operating report must include all information for the period of this report required to be in operating reports by other conditions of this permit.

50.2 If excess emissions or permit deviations that occurred during the reporting period are not reported under Condition 50.1, either

a. The Permittee shall identify

(i) the date of the deviation;

(ii) the equipment involved;

(iii) the permit condition affected;

(iv) a description of the excess emissions or permit deviation; and

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

50.3 The operating report must include a listing of emissions monitored under Conditions 2.1e and 2.2c which trigger additional testing or monitoring, whether or not the emissions monitored exceed an emission standard. The Permittee shall include in the report.

a. the date of the emissions;

b. the equipment involved;

c. the permit condition affected; and

d. the monitoring result which triggered the additional monitoring.

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<sup>10</sup> *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.

50.4 **Transition from expired to renewed permit.** For the first period of this renewed operating permit, also provide the previous permit's facility 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)]

**51. 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<sup>11</sup>. The Permittee may use the form in Section 13.

51.1 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 1 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;

51.2 **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.

51.3 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)]

**52. Emission Inventory Reporting.** The Permittee shall submit to the Department reports of actual emissions, by emission unit, of CO, NH<sub>3</sub>, NO<sub>x</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, VOCs and Lead (Pb) (and lead compounds) using the form in Section 16 of this permit, as follows:

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

- a. 5 tons per year of lead (Pb), 1000 TPY of CO; or
- b. 100 TPY of SO<sub>2</sub>, NH<sub>3</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub> or VOCs.

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

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<sup>11</sup> See Condition 51.2 for clarification on the number of reports required.

52.3 Include in the report required by this condition, the required data elements contained within the form in Section 15 or those contained in Table 2A of Appendix A to Subpart A of 40 C.F.R. 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) & 18 AAC 50.200]  
[40 C.F.R. 51.15, 51.30(a)(1) & (b)(1) & 40 C.F.R. 51, Appendix A to Subpart A]

## ***Section 8. Permit Changes and Renewal***

**53. 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)]

**54. 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:

- 54.1 Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition;
- 54.2 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;
- 54.3 The change shall not qualify for the shield under 40 C.F.R. 71.6(f);
- 54.4 The Permittee shall keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- 54.5 The notice under Condition 54.2 shall include any new or revised NESHAP Subpart ZZZZ and/or NSPS Subpart IIII application forms.

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

**55. Operational Flexibility.** The Permittee may make Section 502(b)(10) changes<sup>12</sup> 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):

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

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<sup>12</sup> As defined in 40 C.F.R. 71.2, Section 502(b)(10) changes are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

55.2 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.

55.3 The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made pursuant to Condition 55.

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

**56. Permit Renewal.** To renew this permit, the Permittee shall submit an application under 18 AAC 50.326 no sooner than **July 5, 2019** and no later than **July 5, 2020**. The renewal application shall be complete before the permit expiration date listed on the cover page of this permit. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 40 C.F.R. 71.7(b) and 71.5(a)(1)(iii).

[18 AAC 50.040(j)(3), 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**

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

57.1 included and specifically identified in the permit; or

57.2 determined in writing in the permit to be inapplicable.

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

**58.** The Permittee must comply with each permit term and condition.

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

58.2 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); 18 AAC 50.326(j) & 18 AAC 50.345(a) & (c)]  
[40 CFR 71.6(c)(3) & 71.5(c)(8)(iii)(A)]

**59.** 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)]

**60.** 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

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

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

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

60.4 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)]



- 61.** 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. Visible Emissions Forms**

**Visible Emissions Field Data Sheet**

Certified Observer: \_\_\_\_\_

Company &  
 Stationary  
 Source: \_\_\_\_\_

Location: \_\_\_\_\_

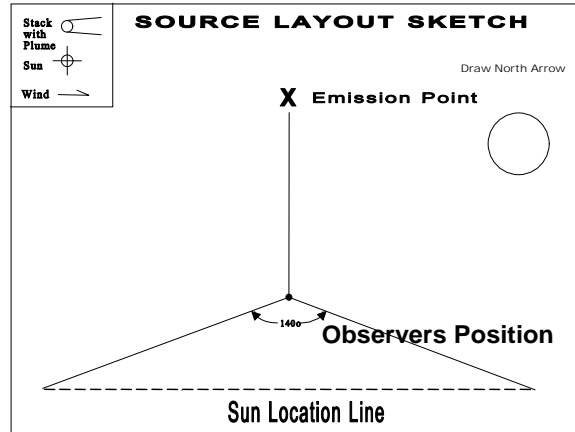
Test No.: \_\_\_\_\_ Date: \_\_\_\_\_

Emission Unit: \_\_\_\_\_

Production Rate/Operating  
 Rate: \_\_\_\_\_

Unit Operating Hours: \_\_\_\_\_

Hrs. of observation: \_\_\_\_\_



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



**Section 11. ADEC Notification Form<sup>13</sup>**

Stationary Source Name \_\_\_\_\_

Air Quality Permit No. \_\_\_\_\_

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

(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: \_\_\_\_\_

<sup>13</sup> Revised as of August 20, 2008.

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  Generally Applicable Requirements
- Failure to Monitor/Report  Reporting/Monitoring for Diesel Engines
- General Source Test/Monitoring Requirements  Recordkeeping Failure
- Recording/Reporting/Compliance Certification  Insignificant Emission Unit
- Standard Conditions Not Included in the Permit  Stationary Source Wide

Other Section: \_\_\_\_\_ (Title of section and section number of your permit).

(b) Emission Unit Involved:

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

EU ID	EU Name	Permit Condition/ Potential Deviation

(c) Description of Potential Deviation:

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

(d) Corrective Actions:

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

**Certification:**

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

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_  
Signature: \_\_\_\_\_ Phone Number: \_\_\_\_\_

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

**To Submit this Report:**

Fax to: 907-451-2187

Or

Email to: [DEC.AQ.Airreports@alaska.gov](mailto: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 50.*

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/dec/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 12. Semiannual Operating Report Form**

Stationary Source Name \_\_\_\_\_

Air Quality Permit Number \_\_\_\_\_

Company Name \_\_\_\_\_

**Operating Report for:**

- 1/1/\_\_\_ - 6/30/\_\_\_ Due on **August 1**, or
- 7/1/\_\_\_ - 12/31/\_\_\_ Due on **February 1 to ADEC.**

1. **NSPS Subpart III Requirements:** As applicable, use the checkbox below or complete the following tables for each emission unit as set out by Condition 19. If NSPS Subpart III requirements are applicable, attach the following documentation:
    - Any records/certifications required under Condition 20.1 that have not already been submitted to the Department.
    - Any records and/or compliance demonstrations required under Conditions 20.2 and 20.3 that have not already been submitted to the Department.
- No engines at the stationary source are subject to the requirements of 40 C.F.R. 60 Subpart III.**

EU ID	Model Year	Emergency Engine?		Non-Resettable Hour Meter Installed?		Backpressure Monitor Installed?		No. of times backpressure limit has been approached
		Yes	No	Yes	No	Yes	No	

EU ID	Compliance Method (Choose one)				
	Purchased a certified engine (Cond. 19.3a or 19.4)	Records of performance tests (Cond. 19.3b)	Records of Vendor Data (Cond. 19.3c)	Records of Control Device Data (Cond. 19.3d)	Initial Performance Test (Cond. 19.3e)

2. **NESHAP Subpart ZZZZ Requirements:** As applicable, use the checkboxes below or complete the following table for each emission unit as set out by Condition 23.10. If NESHAP Subpart ZZZZ is applicable, attach reports of each instance in which you did not meet the requirements in Table 8 to NESHAP Subpart ZZZZ that apply to you.

- No engines at the stationary source are subject to the requirements of 40 C.F.R. 63 Subpart ZZZZ.**

EU ID	Deviations as defined in NESHAP Subpart ZZZZ

- No NESHAP Subpart ZZZZ deviations occurred at the stationary source during the reporting period.**

3. **Sulfur Content:** As applicable, use the checkbox below or complete the following table for each fuel delivery as set out by Condition 9.3.

- No fuel deliveries were received at the stationary source during the reporting period.**

Date of Delivery	Fuel Grade	Tested Fuel Sulfur Content or Maximum Fuel Sulfur for that Fuel Grade	SO <sub>2</sub> emissions in ppm (for fuel with sulfur content greater than 0.75%)



4. **Blending with Used Oil:** As applicable, use the checkbox below or complete the following table when used oil is burned as set out by Conditions 10 and 11. Attach results of each used oil analysis.

**No used oil was burned at the stationary source during the reporting period.**

Date Blended	Used Oil Quantity	Fuel Oil Quantity	Equipment used for the Burn	Calculated Sulfur Content of Blend

5. **Fuel Consumption:** Complete the following table to track fuel (e.g., fuel oil and used oil) consumption for the stationary source per Condition 13.3.

12-Month Period	Fuel Consumption (gallons per 12 month period)

6. **Emission Complaints:** Complete the following table to track complaints received at the stationary source per Condition 33.5.

Number of Complaints Received	Number of Times Corrective Action Necessary	Number of Times Action Taken within 24 hours	Status on Corrective Actions Found Necessary that were not Taken within 24 hours

7. **Excess Emission or Permit Deviations:** As applicable, use the checkbox below or complete the following table to track excess emissions or permit deviations within the reporting period per Conditions 49 and 50.2 or attach copies of all ADEC Notification Forms pursuant to Section 11.

**No excess emissions or permit deviations occurred at the stationary source during the reporting period.**

Not Yet Reported per Condition 49		Previously Reported per Condition 49	
Date of Deviations or Excess Emissions		Dates of Reported Excess Emission or Permit Deviations	
Equipment Involved			
Permit Conditions Affected			
Description of Excess Emissions or Permit Deviations			
Corrective Actions Taken and Dates of such Actions			
Date of anticipated submittal of the notification form pursuant to Condition 49			

8. **Visible Emissions:** Complete the following table to track visible emissions per Condition 4.1. Attach copies of all Method 9 readings.

Emission Unit Identification	Visible Emission Plan (list either Method 9 or smoke/no-smoke)	For Method 9 Readings		For Smoke/No-Smoke	
		Dates of Reading	Highest 6 Minute Averages	Dates of Readings	Smoke or No-Smoke

9. **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: \_\_\_\_\_

Responsible Official Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### Section 13. Annual Compliance Certification Form

Stationary Source Name \_\_\_\_\_

Air Quality Permit Number \_\_\_\_\_

Company Name \_\_\_\_\_

**Annual Compliance Certification for:**

1/1/\_\_\_ - 12/31/\_\_\_ Due on **March 31 to ADEC and EPA.**

Condition	Compliance Status	Continuous/ Intermittent	Method Used to Determine Compliance
1-4, VE	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Smoke/No-smoke monitoring plan <input type="checkbox"/> Method 9 visual observation <input type="checkbox"/> Other (attach description & documentation)
5-8, PM	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Smoke/No-smoke monitoring plan <input type="checkbox"/> Method 5 source test <input type="checkbox"/> Other (attach description & documentation)
9, SO <sub>2</sub>	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Fuel grade/sulfur content records <input type="checkbox"/> Other (attach description & documentation)
10, used oil	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Method 5 source test & fuel sulfur content records <input type="checkbox"/> Other (attach description & documentation)
11, used oil	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Fuel grade/sulfur content records <input type="checkbox"/> Other (attach description & documentation)
12, insignificant units	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Records kept & reported <input type="checkbox"/> Other (attach description & documentation)
13, NO <sub>x</sub>	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Fuel Records kept <input type="checkbox"/> Other (attach description & documentation)
14 & 15, NSPS Subpart A	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Records kept & applicable notifications submitted <input type="checkbox"/> Other (attach description & documentation)
16-20, NSPS Subpart III	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Records kept & reported <input type="checkbox"/> Other (attach description & documentation)
21-23, NESHAP Subpart ZZZZ	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Records kept & applicable reports submitted <input type="checkbox"/> Other (attach description & documentation)
27, admin fees	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Fees paid <input type="checkbox"/> Fees not paid <input type="checkbox"/> Other (attach description & documentation)
28, emission fees	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Fees paid upon billing <input type="checkbox"/> Fees not paid <input type="checkbox"/> Other (attach description & documentation)
29, emission fees	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Fee Form Submitted ___/___/___ <input type="checkbox"/> Form Not Submitted <input type="checkbox"/> Other (attach description & documentation)

Condition	Compliance Status	Continuous/ Intermittent	Method Used to Determine Compliance
30, dilution	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> units do not allow for dilution of exhaust <input type="checkbox"/> units allow for dilution, but dilution not used during compliance tests <input type="checkbox"/> Other (attach description & documentation)
31, fugitive dust	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Records kept <input type="checkbox"/> Other (attach description & documentation)
32, stack injection	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Records kept <input type="checkbox"/> Other (attach description & documentation)
33, air pollution	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Records kept & reported <input type="checkbox"/> Other (attach description & documentation)
34, asbestos	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Records kept and Reported <input type="checkbox"/> No asbestos demolition/renovation done <input type="checkbox"/> Other (attach description & documentation)
35, open burning	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> No burning conducted <input type="checkbox"/> Other (attach description & documentation)
36, requested tests	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Test not requested <input type="checkbox"/> Test requested and conducted <input type="checkbox"/> Other (attach description & documentation)
37-39, source tests	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Test not conducted <input type="checkbox"/> Test conducted and records kept <input type="checkbox"/> Other (attach description & documentation)
40-44, source tests	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Test not conducted <input type="checkbox"/> Test conducted and reported <input type="checkbox"/> Other (attach description & documentation)
45, records kept	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Records kept <input type="checkbox"/> Records not kept <input type="checkbox"/> Other (attach description & documentation)
46, certification	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> reports are certified <input type="checkbox"/> reports are not certified <input type="checkbox"/> Other (attach description & documentation)
47, submittals	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> reports are submitted as directed <input type="checkbox"/> reports are not submitted as directed <input type="checkbox"/> Other (attach description & documentation)
48, information requests	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> No information requests <input type="checkbox"/> Information provided timely <input type="checkbox"/> Other (attach description & documentation)
49, excess emissions	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> No excess emissions or deviations generated <input type="checkbox"/> Excess emissions and deviation reports filed
50, operating reports	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> January through June Report submitted timely <input type="checkbox"/> July through December Report submitted timely
51, annual compliance	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Compliance Certification submitted to EPA and ADEC timely <input type="checkbox"/> Compliance Certification not submitted to EPA and ADEC timely

Condition	Compliance Status	Continuous/ Intermittent	Method Used to Determine Compliance
52, emission inventory	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Emission inventory submitted <input type="checkbox"/> Other (attach description & documentation)
54, off permit change	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Records kept & written notice provided <input type="checkbox"/> Other (attach description & documentation)
55, operational flexibility	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Notification provided <input type="checkbox"/> Other (attach description & documentation)
56, permit renewal	<input type="checkbox"/> In Compliance <input type="checkbox"/> Not in Compliance <input type="checkbox"/> Not Applicable	<input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent	<input type="checkbox"/> Renewal submitted <input type="checkbox"/> Other (attach description & documentation)

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: \_\_\_\_\_

Responsible Official Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Section 14. Emission Calculations for Emission Fees**

Stationary Source Name \_\_\_\_\_

Air Quality Permit Number \_\_\_\_\_

Company Name \_\_\_\_\_

**Emission Fees Assessment Estimated from:**

1/1/\_\_\_ - 12/31/\_\_\_ Due on **March 31 to ADEC.**

Step 1: Use the following table to identify your emission factor, based on your yearly fuel consumption.

Fuel Consumption Range, gal/yr	Emission Factor, tons/gal
0 to 33,061	Zero
33,062 to 153,473	0.000302
153,474 to 288,712	0.000368
288,713 to 416,571	0.000402
416,572 to 470,322	0.000426
Over 470,322	0.000448

Step 2: Use the following table to calculate your emission fees.

Actual Fuel Consumption, gal/yr		Emission Factor, tons/gal		Emissions Estimate, tons/yr		Emission Fee Rate, \$/ton		Emission Fee, \$/yr
	x		=		x	\$28.57 [or current fee rate under 18 AAC 50.410(b)(1)]	=	

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: \_\_\_\_\_

Responsible Official Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Section 15. Emission Inventory Form**

ADEC Reporting Form Emission Inventory Reporting  State of Alaska Department of Environmental Conservation Division of Air Quality	Emission Inventory Year- [   ]
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Mandatory information is highlighted. Make additional copies as needed.

<b>Inventory start date:</b>	
<b>Inventory end date:</b>	
<b>Inventory Type:</b>	

**Facility Information:**

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

**Emission Unit:**

<b>ID:</b>	
<b>Description:</b>	
<b>Manufacturer:</b>	
<b>Model Number:</b>	
<b>Serial Number:</b>	
<b>Year of Manufacture:</b>	
<b>Maximum Nameplate Capacity:</b>	
<b>Design Capacity (BTU/hr):</b>	

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

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



	<b>Hours/Day of Operation:</b>
	<b>Hours/Year of Operation:</b>

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

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

	<b>Datum:</b>
--	---------------

**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](mailto: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**

**General Permit for  
Diesel Electric Generating Stations**

**STATEMENT OF BASIS  
of the terms and conditions for  
GPA**

**Prepared by Scott Faber**

**January 5, 2016**

## INTRODUCTION

This document sets forth the legal and factual basis for the terms and conditions of the General Permit A (GPA) for diesel electric generating stations with diesel engines and auxiliary fuel burning equipment.

## PROCESS DESCRIPTION

The GPA regulates emissions from diesel-electric generating stations that have requested a fuel limit to avoid classification as Prevention of Significant Deterioration (PSD) major under 18 AAC 50.306. The stationary sources are described under SIC Codes 4911 and 4931.

Diesel-engine powered electric generators provide electric power for many communities in rural Alaska. These stationary sources have primary and backup generator sets to accommodate peak power demands, and to provide uninterrupted service during scheduled and unscheduled maintenance. Emission sources include diesel engines and auxiliary fuel burning equipment.

## QUALIFYING CRITERIA

1. Described by SIC codes 4911 or 4931 and NAICS code 221112 and produces electricity - this defines the group of stationary source.
2. The stationary source is classified under 18 AAC 50.326 - restricts the permit to those stationary sources that have the potential to emit at least 100 TPY.
3. Will not consume more than 825,000 gallons of fuel oil in any consecutive twelve months at the entire stationary source - ensures that emissions of NO<sub>x</sub> remain less than 250 TPY, and that the stationary source can comply with the permit.
4. Not subject to an existing stationary source-specific requirement, other than the fuel use limit in the GPA permit - permit does not provide for compliance with these types of limits. This ensures that stationary sources subject to BACT or LAER limits, or any other Title I permit requirements, cannot use the permit.
5. Not subject to a fuel-use limit that ensures compliance with ambient air quality standards - permit does not ensure compliance with ambient air quality standards; ensures that stationary sources that need a limit to comply with the AAQS cannot use the permit.
6. The stationary source is either not accessible by the Federal Aid Highway System (FAHS), or meets all of the requirements under 40 C.F.R. 63.6603(b)(2); the displacement of each engine is less than 30 liters/cylinder; and all engines, other than fire pump engines subject to NSPS Subpart IIII, comply with NSPS/NESHAP requirements for non-emergency engines. GPA does not include all the applicable NSPS/NESHAP requirements for other engine categories. Therefore, stationary sources containing other engines may not use the permit.
7. Was not built in a sulfur dioxide special protection area after January 18, 1997 - the permit does not protect ambient air quality from a new stationary source in an SO<sub>2</sub> special protection area; this criterion prevents new stationary sources in an SO<sub>2</sub> special protection area from using the permit.

8. As GPA does not contain the applicable requirements for the following list of devices, the power plant must not contain any
- 8.1 boiler subject to 40 C.F.R. 60, Subparts D, Da, Db, or Dc;
  - 8.2 heaters or boilers rated at 1.7 MMBtu/hour heat input or more that burn kerosene, No. 1 fuel oil, or No.2 fuel oil;
  - 8.3 heaters or boilers rated at 0.3 MMBtu/hour heat input or more that burn used oil;
  - 8.4 gas turbine;
  - 8.5 fuel storage tank subject to 40 C.F.R. 60, Subparts K, Ka, or Kb;
  - 8.6 unit subject to any other federal emission standard in 40 C.F.R. 60, 61, 62, or 63 other than a reciprocating internal combustion engine, woodstove for space heating or an asbestos demolition /renovation project;
  - 8.7 incinerator; or
  - 8.8 unit subject to any standard in 18 AAC 50.055(a) – (f) other than the general standards for fuel burning equipment in (a)(1), (b)(1), and (c).
9. The stationary source obtained all required air quality permits when the stationary source was built or modified - if a stationary source had not obtained required pre-construction/pre-modification permits, the stationary source would be in violation of these requirements. The operating permit would have to include a plan to bring the stationary source into compliance. Because this general permit does not include such a plan, stationary sources that require the compliance plan may not use this general permit.

### EMISSIONS

A summary of the potential to emit (PTE)<sup>1</sup> and assessable PTE as indicated in the application as calculated by the Department is shown in the table below.

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

Pollutant	NO <sub>x</sub>	CO	PM-10	SO <sub>2</sub>	VOC	HAPs	Total
PTE	249.5	53.8	17.5	28.6	19.8	0.2	369.4
Assessable PTE	249.5	53.8	17.5	28.6	19.8	0	369.2

<sup>1</sup> *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.

The assessable PTE listed under Condition 28.1 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. The emissions listed in Table A are estimates that are for informational use only. The Department used emission factors from EPA's AP-42, Section 3.3, Table 3.3.1 for diesel engines smaller than 600 HP. This is the more conservative of the two available sets of emission factors for diesel-fired reciprocating internal combustion engines. The listing of the emissions does not create an enforceable limit to the stationary source.

Emissions of hazardous air pollutants (HAPs) are less than 10 TPY, estimated at 0.2 TPY. Therefore, these stationary sources are area sources of HAP emissions.

### **BASIS FOR REQUIRING AN OPERATING PERMIT**

Stationary sources operating under the GPA require an operating permit because they have the potential to emit 100 TPY or more of a regulated air pollutant as set out by 18 AAC 50.326(a) and 40 C.F.R. 71.3(a)(5).

These stationary sources avoid classification as PSD major as defined in 18 AAC 50.306 because potential to emit is limited to less than 250 TPY of a regulated air pollutant in an area classified as attainment or unclassifiable.

Alaska regulations require operating permit applications to include identification of "regulated emission units." As it applies to this stationary source, the state regulations require a description of:

- ⇒ Each emission unit regulated by a standard in 18 AAC 50.055, Industrial Processes and Fuel Burning Equipment, under 18 AAC 50.326(a);
- ⇒ Each emission unit regulated by a standard incorporated by reference in 18 AAC 50.040(a)-(d); and
- ⇒ Emission units subject to requirements in an existing Department permit 18 AAC 50.326(a).

## STATEMENT OF BASIS FOR THE PERMIT CONDITIONS

The state and federal regulations for each condition are cited in the GPA.

### Conditions 1 - 4 & Section 10, Visible Emissions Standard and MR&R

**Legal Basis:** These conditions ensure compliance with the applicable requirements in 18 AAC 50.050(a) and 18 AAC 50.055(a).

- 18 AAC 50.055(a) applies to the operation of fuel-burning equipment and. Diesel engines 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). The Permittee shall not cause or allow the equipment to violate these standards.

Conditions 2 through 4 and Section 10 MR&R conditions are standard conditions adopted into regulation pursuant to AS 46.14.010(e).

Beyond as noted above, the Department has previously 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 conditions as modified meets the requirements of 40 C.F.R. 71.6(a)(3).

#### **Liquid Fuel-Fired Burning Equipment:**

Monitoring – The visible emissions may be observed by either Method-9 or the Smoke/No Smoke plans as detailed in Condition 2. Corrective actions such as maintenance procedures and either more frequent or less frequent testing may be required depending on the results of the observations.

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

Reporting – The Permittee is required to report: 1) emissions in excess of the federal and the state visible emissions standard and 2) deviations from permit conditions. The Permittee is required to include copies of the results of all visible emission observations with the stationary source operating report.

### Conditions 5 - 8 & Section 10, 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.

- Diesel engines 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 or industrial processes to violate this standard.

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.

**Liquid Fuel-Fired Burning Equipment:**

For liquid fuel units the MR&R conditions are Standard Permit Condition IX adopted into regulation pursuant to AS 46.14.010(e). The Department determined that these standard conditions 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 conditions meet the requirements of 40 C.F.R. 71.6(a)(3).

**Condition 9, 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.

- Diesel Engines are fuel-burning equipment.

These sulfur compound standards also apply because they are contained in the federally approved SIP effective September 13, 2007.

**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:**

For oil fired fuel burning equipment, the MR&R conditions are Standard Permit Condition XI adopted into regulation pursuant to AS 46.14.010(e). These conditions have been modified in this permit as follows. The Department corrected Condition 9.2 to replace the text "...method listed in 18 AAC 50.035 or an alternative method approved by the Department" with "...method listed in 18 AAC 50.035(b)-(c) and 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1)". The text "...or an alternative method approved by the Department" was discarded during the Revised Action Plan submitted to EPA on July 15, 2007, as a result of the EPA Audit of the September 2006 Title V Program Review. This text is not to be used in subsequent permits since it allows a Permittee to bypass the public process for changing monitoring requirements by submitting off-record requests to change monitoring methods.



Beyond as noted above, the Department has previously 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 conditions as modified meets the requirements of 40 C.F.R. 71.6(a)(3).

### **Condition 10, Used Oil in Diesel Engines**

**Legal Basis:** If the Permittee burns used oil fuel in engines, then these requirements apply.

**Factual Basis:** This condition sets out the requirements for burning used oil in engines.

Some owners and operators blend used crankcase oil (used oil fuels) to supplement engine fuel oil. The Permittee is prohibited from burning used oil blends in the engines, except for testing purposes, until the Department approves of a source test demonstrating that burning the used oil will comply with the particulate matter emission standard of Condition 5 and the visible emission standard of Condition 1. Because of various metal pollutants, used oil may have higher particulate emissions and sulfur emissions than virgin fuel oil. Applying typical ash content of used oil published in AP-42, and stoichiometric combustion conditions, the Department determined that used oil fuel emissions may exceed state particulate matter emission standards in 18 AAC 50.055(b)(1). Sulfur content may approach that equivalent to the State sulfur compound standard of 18 AAC 50.055 (c).

Used oil fuel is limited and monitored as set out by Condition 10. In addition, although this condition should ensure compliance with the applicable emission standards of 18 AAC 50, this permit does NOT ensure compliance with other applicable state or federal laws concerning management, use, or disposal of used oil.

The permit lists blending, testing, recording, and reporting requirements equivalent to that protective of state emission standards. The Department added a requirement to blend at a ratio of no more than that demonstrated within a particulate matter source test, unless Department approved to mix at a greater ratio. However, the Permittee must still test used oil fuels for sulfur and ensure that the ratio of used oil fuel with other fuel oils comply with the sulfur limit.

### **Condition 11, Used Oil in Boilers or Heaters**

**Legal Basis:** If the Permittee burns used oil in boilers and heaters, then these requirements may apply.

**Factual Basis:** This condition specifies requirements for burning used oil at the stationary source in only boilers and heaters.

The Permittee shall remember that used oil is fuel that is limited and monitored as set out by Condition 11. In addition, although this condition should ensure compliance with the applicable emission standards of 18 AAC 50, this permit does NOT ensure compliance with other applicable state or federal laws concerning management, use, or disposal of used oil.

The permit lists blending, testing, recording, and reporting requirements. The Department added a requirement to blend at a ratio of no more than 1 part used oil with 6 parts virgin oil to comply with the State particulate matter standard in 18 AAC 50.055(b)(1), unless Department approved to mix at a greater ratio. However, the Permittee must still test for sulfur and ensure that the ratio of used oil with other fuel oils comply with the sulfur limit.

### **Condition 12, Insignificant Emission Units (IEUs)**

**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 IEUs. 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.

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

Condition 12.4a requires certification under Condition 51 that each IEU did not exceed state emission standards during the previous year and did not emit any prohibited air pollution. As long as they do not exceed the actual emissions thresholds in 18 AAC 50.326(e) and are not subject to a federal emission limitation in accord with 18 AAC 50.326(d), they are considered insignificant units and no monitoring is required in accordance with Department Policy and Procedure No. AWQ 04.02.103, Topic # 3, 10/8/04 for standby emission units.

### **Condition 13, NO<sub>x</sub> PSD Avoidance**

**Legal Basis:** These conditions are owner requested limits to avoid a PSD review for NO<sub>x</sub>.

**Factual Basis:** Condition 13 limits emission of NO<sub>x</sub> to less than 250 TPY to avoid classification as PSD major. The limit is applicable to all emission units at the stationary source, including auxiliary equipment and insignificant emission units. If the stationary source were permitted to emit 250 TPY or more, it would be subject to PSD review which entails the imposition of best available control technology.

The Permittee shall monitor compliance with the TPY limit by limiting fuel consumption to 825,000 gallons in any 12 consecutive month period. Total fuel consumption must be tracked to ensure compliance with this limit. To simplify the monitoring process, the stationary source does not track diesel engines fuel consumption separate from boilers or heater fuel consumption. Instead, all fuel is assumed to be consumed in the diesel engines--a conservative approach.

The Department calculated the amount of fuel that would result in the production of just under 250 tons of NO<sub>x</sub> based on AP-42 emission factors for a diesel engine. The Department used Table 3.3-1 for diesel engines up to 600 hp, because these factors were greater (worst-case) than using Table 3.4-1 for diesel engines greater than 600 hp. See calculations as follows:

Diesel fuel density assumed at 7.1 lbs/gallon  
Diesel fuel heating value assumed at 19,300 Btu/lb  
 $19,300 \text{ Btu/lb} \times 7.1 \text{ lb/gal} = 137,030 \text{ Btu/gal}$   
 $1,000,000 \text{ Btu} / 137,030 \text{ Btu/gal} = 7.29 \text{ gal/MMBtu}$   
AP-42 Emission Factor for  $\text{NO}_x = 4.41 \text{ lb/MMBtu} = 4.41 \text{ lb NO}_x / 7.29 \text{ gal}$   
 $4.41 \text{ lb NO}_x / 7.29 \text{ gal} = 250 \text{ ton} \times 2,000 \text{ lb/ton} / X$   
 $X = 826,530 \text{ gal/year}$   
the fuel limit was set at 825,000 gallons per year.

The emission factors used to set this limit are inexact and may vary by more than 10%. Therefore, Condition 13 has the requirement to source test diesel engines rated greater than 400 hp to determine equipment specific emission factors when the stationary source annual fuel consumption exceeds 750,000 gallons per 12 months.

A fuel limit analysis is required if testing shows an emission factor greater than 4.41 lb/MMBtu to evaluate whether or not the 825,000 gallon/yr fuel limit still limits the stationary source  $\text{NO}_x$  emissions to less than 250 tons per 12 consecutive month period. Since engines greater than 600 hp have a lower  $\text{NO}_x$  emission factor than engines 600 hp or less, the fuel limit may continue to limit  $\text{NO}_x$  emissions to 250 tons per 12 consecutive month period.

#### Conditions 14 – 15, 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<sup>2</sup>.

Most affected facilities (with the exception of some storage tanks) subject to an NSPS are subject to Subpart A. At this stationary source, the affected facility is subject to NSPS Subpart IIII and therefore subject to Subpart A.

Condition 14.1 - The Permittee has already complied with the notification requirements in 40 C.F.R. 60.7 (a)(1) for the affected facility. However, the Permittee is still subject to these requirements in the event of a new NSPS affected facility<sup>3</sup>.

Condition 14.2- 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.

Recordkeeping requirements in 40 C.F.R. 60.7(f) are applicable to all NSPS affected facilities. (Satisfied by Condition 45)

Condition 15 - Concealment of emissions prohibitions in 40 C.F. R. 60.12 are applicable to the affected facility.

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<sup>2</sup> EPA has not delegated to the Department the authority to administer the NSPS program as of the issue date of this permit

<sup>3</sup> *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.

**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 16 - 20, 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.

**Factual Basis:** These conditions incorporate the NSPS Subpart IIII emissions standards applicable to the affected facility. The Permittee may not cause or allow the affected facility 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 emission-related written instructions. Compliance with the fuel requirements under 40 C.F.R. 60.4207 is not required for engines with a model year prior to 2014 because the stationary source is in an area not accessible by the Federal Aid Highway System (FAHS). If applicable, upon initial startup the Permittee shall provide a copy of the Manufacturer's Engine Certification in the next operating report required by Condition 50. The requirement in Condition 20 is added to fill a gap in the reporting requirement under this subpart.

### **Conditions 21 - 23, 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.

**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. As indicated in Table A, the stationary source is not a major source of HAP emissions and is therefore subject to the requirements for area sources of HAPs. The affected facility is subject to NESHAP Subpart ZZZZ based on its construction, manufacturer, or reconstruction date. Per 40 C.F.R.63.6590(c), affected new or reconstructed stationary reciprocating internal combustion engines (RICE) located at an area source must meet the requirements of Subpart ZZZZ by meeting the requirements of NSPS Subpart IIII and no further requirements apply for such engines under 40 C.F.R. 63.

For affected existing RICE located at an area source, the Permittee is required to perform inspections and maintenance at intervals specified by the subpart and 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 area source is located in an area of Alaska that is either not accessible by the Federal Aid Highway System (FAHS), or meets all of the requirements under 40 C.F.R. 63.6603(b)(2). Therefore, under 40 C.F.R. 63.6603(b), existing RICE greater than 300 hp do not have to comply with the numerical CO limits specified in Table 2d. Also, existing RICE are exempt from the fuel requirements of 40 C.F.R. 63.6604 under 40 C.F.R. 63.6604(d). Additionally, existing RICE are exempt from the notification requirements of 40 C.F.R. 63.6645(a) under 40 C.F.R. 63.6645(a)(5) since none of the emission units are subject to numerical emission standards.

## Conditions 24 - 26, 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 27, 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 28 - 29 & Section 14, 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 29.2 such that it referenced “submitted” (i.e., postmarked) rather than “received” in accordance with the timeframe of Condition 29.1.

### **Condition 30, 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 31, 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.

**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 32, 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 33, 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 34, Asbestos NESHP**

**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 35, 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 35.1 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 51.

### **Condition 36, 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 37 - 39, 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 37 through 39.

**Factual Basis:** These conditions supplement the specific monitoring requirements stated elsewhere in this permit. Compliance monitoring with Conditions 37 through 39 consist of the test reports required by Condition 44.

### **Condition 40, 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 41 - 44, 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 45, 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 46, 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 47, 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 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 48, 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 49 & Section 11, 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 made a correction to the Standard Operating Permit Condition III to allow identical reporting methodology for both Excess Emissions and Permit Deviations reports which use identical forms and should have identical submissions methods. Beyond as noted above, the Department has previously 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 conditions as modified meets the requirements of 40 C.F.R. 71.6(a)(3).

#### *Section 11, Notification Form*

The Department modified the notification form contained in Standard Permit Condition IV in a revised rulemaking dated August 20, 2008 to more adequately meet the requirements of Chapter 50, Air Quality Control. The rulemaking for these changes took effect November 9, 2008. The modification consisted of correcting typos and moving “Failure to Monitor/Report” and “Recordkeeping Failure” to Section 2 - permit deviations.

#### **Condition 50 & Section 12, 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 Standard Permit Condition VII as adopted into regulation pursuant to AS 46.14.010(e) and revised on September 27, 2010. Beyond as noted above, the Department has previously 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 conditions as modified meets the requirements of 40 C.F.R. 71.6(a)(3).

#### **Condition 51 & Section 13, 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 51.2 provides clarification of transition periods between an expiring permit and a renewal permit to ensure that the Permittee certifies compliance with the permit terms and conditions of the permit that was in effect during those partial date periods involved in the transition. No format is specified: the Permittee may provide one report certifying compliance with each permit term or condition for each of the effective permits during the certification period, or may choose to provide two reports – one certifying compliance with permit terms and conditions from January 1 until the date of expiration of the old permit, and a second report certifying compliance with terms and conditions in effect from the effective date of the renewal permit until December 31.

The Permittee is required to submit to the Department an annual compliance certification report. The Permittee may submit the required certification electronically in accordance with Condition 47. 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.

### **Condition 52, 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 C.F.R. 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 C.F.R. 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 C.F.R. 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 C.F.R. 51.

To ensure that the Department's electronic system reports complete information to the National Emissions Inventory, Title V stationary sources are required to submit all the data elements required for the Type B source triennial reports (see also Table 2A of Appendix A to Subpart A of 40 C.F.R. Part 51).

### Conditions 53 - 55, Permit Changes and Revisions Requirements

**Legal Basis:** The Permittee is obligated to notify the Department of certain off-permit source changes and operational changes under 18 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 are conditions 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.

### Condition 56, 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 under 18 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 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 57 - 61, General Compliance Requirements and Schedule

**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. Additionally, Permit Condition 58 includes the compliance plan and schedule element as required by 40 CFR 71.6(c)(3) and 71.5(c)(8) by reference.

**Factual Basis:** These are standard conditions for compliance required for all operating permits and for Condition 58.1, minimum elements of an operating permit incorporated by reference in 18 AAC 50.040(j).