

**DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
AIR QUALITY CONTROL MINOR PERMIT**

**Permit No.:** AQ0241MSS01

**Date:** Final – October 15, 2009

Rescinds and Replaces Table 1, Equations 1 and Equations 2 of Permit 241CPT03

The Alaska Department of Environmental Conservation (Department), under the authority of AS 46.14 and 18 AAC 50, issues Air Quality Control Minor Permit AQ0241MSS01 to the Permittee listed below.

**Permittee:** **Alyeska Seafoods, Inc.**  
551 West Broadway  
P.O. Box 530  
Unalaska, AK 99685

**Owner/Operator/  
Billing:** **Alyeska Seafoods, Inc.**  
P.O. Box 31359  
Seattle, WA 98183-1359

**Stationary Source:** **Unalaska Seafood Processing Facility**

**Location:** 53° 52'43" North; 166° 32' 32" West

**Physical Address:** **Alyeska Seafoods, Inc.**  
551 West Broadway  
P.O. Box 530  
Unalaska, AK 99685

**Permit Contact:** Mr. Greg Peters (907) 581-7543

**Project :** Replace Emission Unit 4 with a Caterpillar 3508

This minor permit is issued under 18 AAC 50.508(6) to revise or rescind terms and conditions of a Title I permit issued under 18 AAC 50. This permit satisfies the obligation of the Permittee to obtain a minor permit under these provisions. As required by AS 46.14.120(c), the Permittee shall comply with the terms and conditions of this minor permit. This permit authorizes the Permittee to operate under the terms and conditions of this permit, and as described in the original permit application and subsequent application supplements listed in Section 10 except as otherwise specified in this permit.

The Permittee shall not operate the stationary source under the terms and conditions of Minor Permit AQ0241MSS01 until Operating Permit AQ0241TVP02 is amended to incorporate the terms and conditions of Minor permit AQ0241MSS01.



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John F. Kuterbach  
Manager, Air Permits Program

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## ***Section 1      Permit Administration***

1. Condition 1 in Operating Permit No. AQ0241TVP02 dated March 24, 2005 is rescinded and replaced by Condition 2.
2. **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
  - 2.1 the stationary source's assessable potential to emit of 366.8 tons per year (tpy); or
  - 2.2 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.

**Section 2 Emission Unit Inventory and Description**

- 3. Emission Unit (EU) Authorization.** Minor Permit No. AQ0241MSS01 authorizes the Permittee to install and operate the emission units listed in Table 1. Except as noted elsewhere in this permit, the information in Table 1 is for identification purposes only. The specific unit descriptions do not restrict the Permittee from replacing an emission unit identified in Table 1. The Permittee shall comply with all applicable provisions of AS 46.14 and 18 AAC 50 when installing a replacement emission unit, including any applicable minor or construction permit requirements

**Table 1 –Emission Unit Inventory**

<b>Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>Rating/size<sup>[a]</sup></b>	<b>Fuel Type</b>	<b>Install Date</b>
4a	Caterpillar Model 3508C-DITA	682 kW / 915 bhp	distillate	2009

Notes [a] - In this Table, kW means kilowatt mechanical. The term bhp means brake horsepower

- 3.1 . The Permittee shall not operate EU 4 and 4a concurrently.
- a. The Permittee shall demonstrate compliance with Condition 3.1 by either removing the EU 4 from the Alyeska Seafood Processing Facility prior to installing EU 4a or permanently disconnecting EU 4 from its fuel source.
  - b. Submit documentation showing that the EU has been removed or had been permanently disconnected in the Operating Report for the period EU 4a begins operation.

**Section 3      Owner Requested Limit Modification**

4. Table 1 of Construction Permit 241CP03 is rescinded and replaced with the following table:

**Table 1 - Maximum Fuel Consumption Rates**

<b>Unit ID</b>	<b>Maximum Fuel Consumption Rate (gal/hr)</b>
1-3	56.5 each
4a	44.0
5	98.1
6	125.4
7	106.9
8	71.0
9	91.6
10	50.9
11	175.0

5. Equation 1 listed in Construction Permit 241CP03 is rescinded and replaced with the following equation:

$$CET = (0.528)G_{1-3} + (0.776)G_{4a} + (1.755)G_5 + (1.873)G_6$$

- $G_{1-3}$  = Preceding 12 month rolling total fuel burned in Unit IDs 1-3, gallons  
 $G_{4a}$  = Preceding 12 month rolling total fuel burned in Unit ID 4a, gallons  
 $G_5$  = Preceding 12 month rolling total fuel burned in Unit ID 5, gallons  
 $G_6$  = Preceding 12 month rolling total fuel burned in Unit ID 6, gallons

6. Equation 2 listed in Construction Permit 241CP03 is rescinded and replaced with the following equation:

$$Emissions (tpy) = (0.200)G_{1-3} + (0.294)G_{4a} + (0.665)G_5 + (0.710)G_6 / 2000$$

- $G_{1-3}$  = Preceding 12 month rolling total fuel burned in Unit IDs 1-3, gallons  
 $G_{4a}$  = Preceding 12 month rolling total fuel burned in Unit ID 4a, gallons  
 $G_5$  = Preceding 12 month rolling total fuel burned in Unit ID 5, gallons  
 $G_6$  = Preceding 12 month rolling total fuel burned in Unit ID 6, gallons

## **Federal New Source Performance Standards (NSPS)**

### **Emission Units Subject to NSPS, Subpart A**

- 7. NSPS Subpart A Good Air Pollution Control Practice.** At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate EU 4a listed in Table 1 including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. The administrator will determine whether acceptable operating and maintenance procedures are being used based on information available to the Department which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance records, and inspections of Emission Unit 4a.

### **Subpart III**

- 8.** In accordance with 40 CFR 60.4218, EU 4a listed in Table 1 is subject to the applicable NSPS General Provisions as described by “Table 8 to Subpart III of Part 60” as follows:
- 8.1 The definitions and informational requirements of 40 CFR 60.1, 60.2, 60.3, 60.4, 60.5, 60.6, 60.9, 60.10, 60.12, 60.14, 60.15, 60.16, 60.17 and 60.19 apply in their entirety.
- 8.2 The requirements of 40 CFR 60.8, 60.11, 60.13 and 60.18 do not apply.
- 8.3 The initial startup notification and emission unit-specific recordkeeping provisions of 40 CFR 60.7 do not apply, and are replaced by the requirements of 40 CFR 60.4214(a) as follows:
- a. Submit an initial notification as required in 40 CFR 60.7(a)(1). The notification must include the following information:
- (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.
- b. Keep records of the following information:
- (i) All notifications submitted to comply with this subpart and all documentation supporting any notification.
  - (ii) Maintenance conducted on the engine.
  - (iii) If the stationary Compression Ignition (CI) internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.
  - (iv) If the stationary CI internal combustion engine is not a certified engine, documentation that the engine meets the emission standards.

**Subpart III Emission Limits**

9. The new Compression Ignition Internal Compression Engine (CI ICE), EU 4a listed in Table 1, shall be certified by the manufacturer to meet the applicable emission standards found in Table 2 and shall continue to meet them for the useful life of the engine.
10. Any modified or reconstructed CI ICE shall be certified by the entity that conducts the modification or reconstruction (via the appropriate testing according to 40 CFR 60.4212). This certification shall state that emissions will be at or below the applicable emission standards found in Table 2 and the unit shall continue to meet them for the useful life of the engine.
11. The Permittee shall operate and maintain EU 4a according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer, over the entire life of the engine. The Permittee may only change those settings that are permitted by the manufacturer.

**Table 2– Emission Standards for pre-2007 engines<sup>a</sup>**

Engine Size liters/cylinder, rated power	Tier	Model year <sup>b</sup>	NMHC + NOX g/kW-hr	CO g/kW-hr	PM g/kW-hr
kW<560	2	2006	6.4	3.5	0.20

<sup>a</sup> From 40 CFR 94.112(a), Table 1 Primary Tier 2 Exhaust Emission Standards (g/kW-hr)

<sup>b</sup> The model years listed indicate the model years for which the specified standards start.

**Fuel Requirements**

12. The Permittee shall use diesel fuel that meets the following requirements on a per-gallon basis:
  - 12.1 Sulfur content of 500 parts per million (ppm) maximum;
  - 12.2 A minimum Cetane index or aromatic content of 40; or
  - 12.3 A maximum aromatic content of 35 volume percent.
13. Beginning October 1, 2010, use diesel fuel that meets the following requirements on a per-gallon basis:
  - 13.1 Sulfur content of 15 parts per million (ppm) maximum;
  - 13.2 A minimum Cetane index or aromatic content of 40; or
  - 13.3 A maximum aromatic content of 35 volume percent.
14. The Permittee may petition the Administrator (EPA) for approval to use any fuels mixed with used lubricating oil that do not meet the fuel requirements of 12 and 13. Permittee must demonstrate in their petition to the Administrator that there is no other place to use the lubricating oil. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.

15. The Permittee shall not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines in 40 CFR 60, Subpart IIII, as applicable.
16. After December 31, 2009, the Permittee shall not install stationary CI ICE with a maximum engine power of less than 25 hp (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines in 40 CFR 60, Subpart IIII, as applicable.
17. After December 31, 2014, the Permittee shall not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 25 HP and less than 75 HP that do not meet the applicable requirements for 2013 model year non-emergency engines in 40 CFR 60, Subpart IIII, as applicable.
18. After December 31, 2013, the Permittee shall not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 75 HP and less than 175 HP that do not meet the applicable requirements for 2012 model year non-emergency engines in 40 CFR 60, Subpart IIII, as applicable.
19. After December 31, 2012, the Permittee shall not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 175 HP, including those above 750 HP, that do not meet the applicable requirements for 2011 model year non-emergency engines in 40 CFR 60, Subpart IIII, as applicable.
20. After December 31, 2016, the Permittee shall not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 750 HP that do not meet the applicable requirements for 2015 model year non-emergency engines in 40 CFR 60, Subpart IIII, as applicable.
21. The requirements of 15 through 20 do not apply to stationary CI ICE that have been modified or reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location. This provision does not extend to imported units which shall be treated as new sources.

### **Record Keeping**

22. The Permittee shall maintain records of manufacturer certifications that identify the applicable emission limits for the appropriate model year and maximum engine power and certify the applicable units to those standards
23. The Permittee shall maintain records that verify compliance with the diesel fuel requirements of Conditions 12 and 13.

### **Reporting**

24. Report compliance with fuel sulfur standards of Conditions 12 and 13 as set out in Condition 39.

## **Section 4 State Emission Standards**

### **Visible Emissions Standards**

**25. Industrial Process and Fuel-Burning Equipment Visible Emissions.** The Permittee shall comply with the following :

25.1 Do not cause or allow visible emissions, excluding condensed water vapor, emitted from EU 4a listed in Table 1 to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

25.2 For EU 4a monitor, record and report in accordance with Conditions 26 through 28.

### *Liquid Fuel-fired Sources*

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

**26. Visible Emissions Monitoring.** The Permittee shall observe the exhaust of EU 4a listed in Table 1 for visible emissions using either the Method 9 Plan under Condition 26.1 or the Smoke/No-Smoke Plan under Condition 26.2. The Permittee may change visible-emissions plans for an emission unit at any time unless prohibited from doing so by Condition 26.3. The Permittee may elect to continue a visible emission monitoring schedule in effect from the previous permit at the time a renewed permit is issued if applicable.

**26.1 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 EU 4a observe exhaust for 18 minutes within six months after the issue date of this permit. For any unit, observe exhaust for 18 minutes within 14 calendar days after changing from the Smoke/No-Smoke Plan of Condition 26.2. For any units replaced during the term of this permit, observe exhaust for 18 minutes within 30 days of 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 26.1a, unless a six-minute average is greater than 15 percent and one or more observations are greater than 20 percent, perform 18-minute observations at least semiannually.

Semiannual observations must be taken between four and seven months after the previous set of observations.

d. Annual Method 9 Observations. After at least two semiannual 18-minute observations, unless a six-minute average is greater than 15 percent and one or more individual observations are greater than 20 percent, perform 18-minute observations at least annually.

Annual observations must be taken between 10 and 13 months after the previous observations

- e. Increased Method 9 Frequency. If a six-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more observations are greater than 20 percent, then increase or maintain the 18-minute observation frequency for that emission unit to at least monthly intervals, until the criteria in Condition 26.1b for semiannual monitoring are met.

**26.2 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 26.1 or perform the corrective action required under Condition 26.3

**26.3 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 26.2, then the Permittee shall either follow the Method 9 plan of Condition 26.1 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 26.3a,
  - (i) take Smoke/No Smoke observations in accordance with Condition 26.2.
    - (A) at least once per day for the next seven operating days and until the initial 30 day observation period is completed; and
    - (B) continue as described in Condition 26.2b; or

- (ii) if the actions taken under Condition 26.3a do not eliminate the smoke, or if subsequent smoke is observed under the schedule of Condition 26.3c(i)(A), then observe the exhaust using the Method 9 Plan unless the Department gives written approval to resume observations under the Smoke/No Smoke Plan; after observing smoke and making observations under the Method 9 Plan, the Permittee may at any time take corrective action that eliminates smoke and restart the Smoke/No Smoke Plan under Condition 26.2a.

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

27.1 If using the Method 9 Plan of Condition 26.1,

- a. the observer shall record
  - (i) the name of the stationary source, emission unit and location, stationary source type, observer's name and affiliation, and the date on the Visible Emissions Field Data Sheet in Section 7;
  - (ii) the time, estimated distance to the emissions location, approximate wind direction, estimated wind speed, description of the sky Condition (presence and color of clouds), plume background, and operating rate (load or fuel consumption rate) on the sheet at the time opacity observations are initiated and completed;
  - (iii) the presence or absence of an attached or detached plume and the approximate distance from the emissions outlet to the point in the plume at which the observations are made;
  - (iv) opacity observations to the nearest five percent at 15-second intervals on the Visible Emissions Observation in Section 7, 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.

27.2 If using the Smoke/No Smoke Plan of Condition 26.2, record the following information in a written log for each observation and submit copies of the recorded information upon request of the Department:

- a. the date and time of the observation;

- b. from Table 1, the No. of the unit observed;
- c. whether visible emissions are present or absent in the exhaust;
- d. a description of the background to the exhaust during the observation;
- e. if the unit starts operation on the day of the observation, the startup time of the unit;
- f. name and title of the person making the observation; and
- g. operating rate (load or fuel consumption rate).

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

28.1 include in each stationary source operating report under Condition 39

- a. which visible-emissions plan of Condition 26 was used for each unit; if more than one plan was used, give the time periods covered by each plan;
- b. for each unit under the Method 9 Plan,
  - (i) copies of the observation results (i.e. opacity observations) for each unit that used the Method 9 Plan, except for the observations the Permittee has already supplied to the Department; and
  - (ii) a summary to include:
    - (A) number of days observations were made;
    - (B) highest six-minute average observed; and
    - (C) dates when one or more observed six-minute averages were greater than 20 percent;
- c. for each unit under the Smoke/No Smoke Plan, the number of days that Smoke/No Smoke observations were made and which days, if any, that smoke was observed; and
- d. a summary of any monitoring or record keeping required under Conditions 26 and 27 that was not done;

28.2 report under Condition 38:

- a. the results of Method 9 observations that exceed an average 20 percent for any six-minute period; and
- b. if any monitoring under Condition 26 was not performed when required, report within three days of the date the monitoring was required.

## Particulate Matter Emissions Standards

**29. Industrial Process and Fuel-Burning Equipment Particulate Matter (PM).** The Permittee shall not cause or allow PM emitted from EU 4a listed in Table 1 to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

29.1 For EU 4a monitor, record and report in accordance with Conditions 30 through 32.

## PM Monitoring, Recordkeeping and Reporting

### *Liquid-Fired Engines*

**30. PM Monitoring for Diesel Engines.** The Permittee shall conduct source tests on diesel engines, EU 4a listed in Table 1, to determine the concentration of PM in the exhaust of a source in accordance with this Condition 30.

30.1 Within six months of exceeding the criteria of Conditions 30.2a or 30.2b, 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 30.2; to show that emissions are below those criteria, observe emissions as described in Condition 26.1 under load conditions comparable to those when the criteria were exceeded.

30.2 Conduct the test according to Condition 30.1 if

- a. 18 consecutive minutes of Method 9 observations result in an 18-minute average opacity greater than 20 percent; or
- b. for a source 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.

30.3 During each one-hour PM source test run, observe the exhaust for 60 minutes in accordance with Method 9 and calculate the average opacity that was measured during each one-hour test run. Submit a copy of these observations with the source test report.

30.4 The automatic PM source test requirement in Conditions 30.1 and 30.2 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.

**31. PM Record Keeping for Diesel Engines.** Within 180 calendar days after the effective date of this permit, the Permittee shall record the exhaust stack diameter(s) of Emission Unit 4a listed in Table 1. Report the stack diameter(s) in the next operating report under Condition 39

**32. PM Reporting for Diesel Engines.** The Permittee shall report as follows:

- 32.1 report under Condition 38
- a. the results of any PM source test that exceeds the PM emissions limit; or
  - b. if one of the criteria of Condition 30.2 was exceeded and the Permittee did not comply with either Condition 30.1a or 30.1b, this must be reported by the day following the day compliance with Condition 30.1 was required;
- 32.2 report observations in excess of the threshold of Condition 30.2b within 30 days of the end of the month in which the observations occur;
- 32.3 in each stationary source operating report under Condition 39 include
- a. the dates, EU No., and results when an observed 18-minute average was greater than an applicable threshold in Condition 30.2;
  - b. a summary of the results of any PM testing under Condition 30; and
  - c. copies of any visible emissions observation results (opacity observations) greater than the thresholds of Condition 30.2, if they were not already submitted.

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

**33. Sulfur Compound Emissions.** In accordance with 18 AAC 50.055(c), the Permittee shall not cause or allow sulfur compound emissions, expressed as SO<sub>2</sub>, from Emission Unit 4a listed in Table 1 to exceed 500 ppm averaged over three hours.

- 33.1 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.
- 33.2 Fuel testing under Condition 33.1 must follow an appropriate method listed in 18 AAC 50.035 or another method approved in writing by the Department.
- 33.3 If a load of fuel contains greater than 0.75 percent sulfur by weight, the Permittee shall calculate SO<sub>2</sub> emissions in ppm using either Section 9 or Method 19 of 40 C.F.R. 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a).
- 33.4 The Permittee shall report as follows:

- a. If SO<sub>2</sub> emissions calculated under Condition 33.3 exceed 500 ppm, the Permittee shall report under Condition 38. When reporting under this condition, include the calculation under Section 9
  - b. The Permittee shall include in the report required by Condition 39
    - (i) a list of the fuel grades received at the stationary source during the reporting period;
    - (ii) for any grade with a maximum fuel sulfur greater than 0.5 percent sulfur, the fuel sulfur of each shipment; and
    - (iii) for fuel with a sulfur content greater than 0.75 percent, the calculated SO<sub>2</sub> emissions in ppm.
- 33.5 For liquid fuel from a North Slope topping plant, the Permittee shall obtain from the topping plant the results of a monthly fuel sulfur analysis.
- a. The Permittee shall include in the report required by Condition 39 a list of the sulfur content measured for each month covered by the report.
  - b. The Permittee shall report under Condition 38 if the sulfur content for any month exceeds 0.75 percent.

## **Section 5      *General Recordkeeping, Reporting, and Certification Requirements***

- 34. 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.
- 34.1 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 34.1a, that the person accepts or agrees to be bound by an electronic record executed or adopted with that signature,
- 35. Submittals.** Unless otherwise directed by the Department or this permit, the Permittee shall send two copies 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 34.
- 36. Information Requests. 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.
- 37. Recordkeeping Requirements.** The Permittee shall keep all records required by this permit for at least five years after the date of collection, including:
- 37.1 copies of all reports and certifications submitted pursuant to this section of the permit; and
- 37.2 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.

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

38.1 Except as provided in Condition 40, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

- a. in accordance with 18 AAC 50.240(c), as soon as possible after the event commenced or is discovered, report
  - (i) emissions that present a potential threat to human health or safety; and
  - (ii) excess emissions that the Permittee believes to be unavoidable;
- b. in accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or nonroutine repair that causes emissions in excess of a technology based emission standard;
- c. report all other excess emissions and permit deviations
  - (i) within 30 days of the end of the month in which the emissions or deviation occurs or is discovered, except as provided in Conditions 38.1c(ii) and 38.1c(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 38.1c(i); and
  - (iii) for failure to monitor, as required in other applicable conditions of this permit.

38.2 When reporting excess emissions, the Permittee must report using either the Department's on-line form, which can be found at <http://www.dec.state.ak.us/air/ap/site.htm> or <https://myalaska.state.ak.us/deca/air/airtoolsweb/>, or if the Permittee prefers, the form contained in Section 8 of this permit. The Permittee must provide all information called for by the form that is used.

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

**39. Operating Reports.** During the life of this permit, 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.

- 39.1 The operating report must include all information required to be in operating reports by other conditions of this permit. The Permittee may, upon consultation with the Compliance Technician regarding software compatibility, provide electronic copies of data reports, emission source test reports, or other records under a cover letter certified in accordance with Departmental submission requirements.
- 39.2 If excess emissions or permit deviations that occurred during the reporting period are not reported under Condition 39.1, 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 38 the Permittee may cite the date or dates of those reports.

**40. 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.

40.1 Monitoring, Record Keeping, and Reporting for Air Pollution Prohibited

- a. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 38.
  - 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 40.
- 40.2 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 40; or
  - b. the Department notifies the Permittee that it has found a violation of Condition 40.
- 40.3 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 40; and
  - d. any corrective actions taken or planned for complaints attributable to emissions from the stationary source.
- 40.4 With each stationary source operating report under Condition 39, 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.
- 40.5 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.

## ***Section 6      Standard Conditions***

- 41.** The Permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 18 AAC 50, and, except for those terms or conditions designated in the permit as not federally enforceable, the Clean Air Act, and is grounds for
  - 41.1 an enforcement action; or
  - 41.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280.
- 42.** 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.
- 43.** 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.
- 44.** The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- 45.** The permit does not convey any property rights of any sort, nor any exclusive privilege
- 46.** 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
  - 46.1 enter upon the premises where an emission unit subject to the permit is located or where records required by the permit are kept;
  - 46.2 have access to and copy any records required by the permit;
  - 46.3 inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and
  - 46.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

### Section 7 Visible Emissions Forms

#### Visible Emissions Field Data Sheet

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

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

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

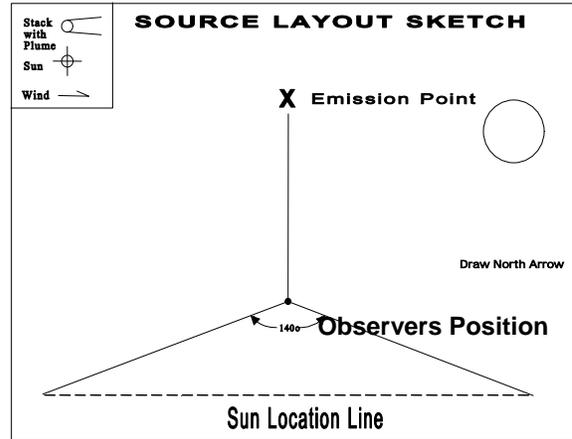
Test No.: \_\_\_\_\_ Date: \_\_\_\_\_

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 8 ADEC Notification Form<sup>1</sup>**

Stationary Source (Facility) Name \_\_\_\_\_

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

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

**When did you discover the Excess Emissions/Permit Deviation?**

Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Time: \_\_\_\_\_ : \_\_\_\_\_

**When did the event/deviation occur?**

Begin Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Time: \_\_\_\_\_ : \_\_\_\_\_ (please use 24hr clock)

End Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Time: \_\_\_\_\_ : \_\_\_\_\_ (please use 24hr 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 :  Continuous

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

- Start Up /Shut Down
- Natural Cause (weather/earthquake/flood)
- Control Equipment Failure
- Scheduled Maintenance/Equipment Adjustment
- Bad fuel/coal/gas
- Upset Condition
- Other \_\_\_\_\_

(c) **Description**

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

(d) Emissions Units Involved:

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

Unit ID	Emission Unit Name	Permit Condition Exceeded/Limit/Potential Exceedance

<sup>1</sup> Revised as of August 24, 2006.

(e) Type of Incident (Please Check only one).

- Opacity \_\_\_\_\_ %     
  Venting \_\_\_\_\_ (gas/scf)     
  Control Equipment Down  
 Fugitive Emissions     
  Emission Limit Exceeded     
  Record Keeping Failure  
 Marine Vessel Opacity     
  Flaring     
  Other: \_\_\_\_\_

(f) Unavoidable Emissions:

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

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

Certify Report (go to end of form)

**Section 2 Permit Deviations**

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

- Source Specific  
 Failure to monitor/report  
 General Source Test/Monitoring Requirements  
 Recordkeeping/Reporting/Compliance Certification  
 Standard Conditions Not Included in Permit  
 Generally Applicable Requirements  
 Reporting/Monitoring for Diesel Engines  
 Insignificant Source  
  
 Facility 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.

(c) Description of Potential Deviation:

Unit ID	Unit Name	Permit Condition / 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:**

1. Fax to: 907-451-2187;

Or

2. Email to: [DEC.AQ.Airreports@alaska.gov](mailto:DEC.AQ.Airreports@alaska.gov) - *if faxed or emailed,*

Or

;

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

Or

4. Phone Notification: 907-451-5173

*Phone notifications require a written follow-up report.*

Or

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

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

*if submitted online, report must be submitted by an authorized E-Signer for the Stationary Source.*

**Section 9 Material Balance Calculation**

If the sulfur content of a fuel shipment is greater than 0.75% by weight, calculate the three-hour exhaust concentration of SO<sub>2</sub> using the following equations:

A. = 31,200 x [wt%**S**<sub>fuel</sub>] = 31,200 x \_\_\_\_\_ = \_\_\_\_\_

B. = 0.148 x [wt%**S**<sub>fuel</sub>] = 0.148 x \_\_\_\_\_ = \_\_\_\_\_

C. = 0.396 x [wt%**C**<sub>fuel</sub>] = 0.396 x \_\_\_\_\_ = \_\_\_\_\_

D. = 0.933 x [wt%**H**<sub>fuel</sub>] = 0.933 x \_\_\_\_\_ = \_\_\_\_\_

E. = B + C + D = \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

F. = 21 - [vol%**dry O**<sub>2, exhaust</sub>] = 21 - \_\_\_\_\_ = \_\_\_\_\_

G. = [vol%**dry O**<sub>2, exhaust</sub>] ÷ F = \_\_\_\_\_ ÷ \_\_\_\_\_ = \_\_\_\_\_

H. = 1 + G = 1 + \_\_\_\_\_ = \_\_\_\_\_

I. = E x H = \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

**SO**<sub>2</sub> concentration = A ÷ I = \_\_\_\_\_ ÷ \_\_\_\_\_ = \_\_\_\_\_ ppm

The wt%**S**<sub>fuel</sub>, wt%**C**<sub>fuel</sub>, and wt%**H**<sub>fuel</sub> are equal to the weight percents of sulfur, carbon, and hydrogen in the fuel. These percentages should total 100%.

The fuel weight percent (wt%) of sulfur is obtained pursuant to Condition 33.1. The fuel weight percents of carbon and hydrogen are obtained from the fuel refiner.

The volume percent of oxygen in the exhaust (vol%**dry O**<sub>2, exhaust</sub>) is obtained from oxygen meters, manufacturer’s data, or from the most recent ORSAT analysis at the same engine load used in the calculation.

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

***Section 10 Permit Documentation***

June 4, 2009

Minor permit application