

# DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## AIR QUALITY CONTROL MINOR PERMIT

**Permit AQ0318MSS02**

Preliminary – June 4, 2010

The Alaska Department of Environmental Conservation (Department), under the authority of AS 46.14 and 18 AAC 50, issues Air Quality Control Minor AQ0318MSS02 to the Permittee listed below.

**Operator and Permittee:** **United States Air Force**  
13 SWS/CC, P. O. Box 40013  
Clear Air Force Base, AK, 99704-0013

**Owner:** United States Air Force

**Stationary Source** Clear Air Force Station

**Location:** Latitude 64° 17' 31" North; Longitude 149° 11' 6" West

**Physical Address:** Mile Post 284 on Parks Highway, Clear, AK 99704

**Permit Contact:** John Moylan, (907) 585-6341; john.moylan.ctr@clear.af.mil

**Project:** Emergency Diesel Generators

This permit establishes an Owner Requested Limit (ORL) under 18 AAC 50.508(5) to avoid classification under 18 AAC 50.502(c)(3). The permit satisfies the obligation of the Permittee to obtain a minor permit under 18 AAC 50.

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 7 except as specified in this permit.

The Permittee may operate under the terms and conditions of this minor permit upon issuance.

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John F. Kuterbach  
Manager, Air Permits Program

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**Section 1. Emission Unit Inventory**

- 1. Emission Units (EU) Authorization.** The Permittee is authorized to install and operate the emission units listed in Table 1. Emission units listed in Table 1 have specific monitoring, record keeping, or reporting conditions in this permit. Except as noted elsewhere in the permit, the information in Table 1 is for information 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 –Minor Permit Emission Unit Inventory

<b>EU ID</b>	<b>Description</b>	<b>Make/Model</b>	<b>Rating</b>	<b>Fuel</b>	<b>Install Date</b>
101	Emergency Generator	Detroit Diesel 16V4000G83	2,500 kW	Diesel	2010
102	Emergency Generator	Detroit Diesel 16V4000G83	2,500 kW	Diesel	2010
103	Emergency Generator	Detroit Diesel 16V4000G83	2,500 kW	Diesel	2010

## ***Section 2. Emission Fees***

- 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 2,143 TPY; or
  - 2.2 the stationary source's projected annual rate of emissions that will occur from July 1<sup>st</sup> to the following June 30<sup>th</sup>, 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.
- 3. Assessable Emission Estimates.** Emission fees will be assessed as follows:
- 3.1 no later than March 31<sup>st</sup> 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
  - 3.2 if no estimate is submitted on or before March 31<sup>st</sup> of each year, emission fees for the next fiscal year will be based on the potential to emit set forth in Condition 2.1.

***Section 3. Owner Requested Limit to Avoid Classification Under  
18 AAC 50.502(c)(3)***

4. The Permittee shall limit the operation of the emission units listed in Table 1 to a combined total of 450 hours for a consecutive 12-month period.
  - 4.1 Monitor, record, and report the operating hours as follows:
    - a. Track the number of hours with a non-resetting operating hour gauge on each of the emission units.
    - b. Record the number of hours each generator is operated every calendar month on a permanent electronic log. At the end of every calendar month, calculate and record the number of operating hours for all three generators for the month and for the preceding 12 consecutive calendar months.
    - c. Include the records described in Condition 4.1 a with the operating report described in Condition 11. If the number of operating hours for the preceding 12 consecutive calendar months exceeds 450 hours, submit an excess emission report to the Department as described in Condition 10.
5. The sulfur content of the diesel fuel burned in the emission units listed in Table 1 shall not exceed 0.015 percent by weight (15 parts per million by weight). The Permittee shall comply with Condition 5 as follows:
  - 5.1 Keep receipts of fuel delivery or certified statements from the fuel suppliers that specify the grade and amount of fuel burned in each unit.
  - 5.2 The Permittee shall include the records described in Condition 5.1 with the operating report described in Condition 11. If the sulfur content of the fuel exceeds 15 parts per million by weight, submit an excess emission report to the Department as described in Condition 10.

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#### ***Section 4. General Certification and Information Requirements***

- 6. Recordkeeping Requirements.** The Permittee shall keep all records required by this permit for at least five years after the date of collection, including:
- 6.1 copies of all reports and certifications submitted pursuant to this section of the permit; and
  - 6.2 records of all monitoring required by this permit, and information about the monitoring including the:
    - a. date, place, and time of sampling or measurements;
    - b. date(s) analyses were performed;
    - c. company or entity that performed the analyses;
    - d. analytical techniques or methods used;
    - e. results of such analyses; and,
    - f. operating conditions that existed at the time of sampling or measurement.
- 7. 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.
- 7.1 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 7, that the person accepts or agrees to be bound by an electronic record executed or adopted with that signature.
- 8. 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.

**9. 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 7.

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

10.1 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 or is discovered, except as provided in Conditions 10.1c(ii) and 10.1c(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 10.1c(i); and
  - (iii) for failure to monitor, as required in other applicable conditions of this permit.

10.2 The Permittee must report using either the Department's on-line form, or if the Permittee prefers, the ADEC Notification Form in Attachment 3 of this permit. The Permittee must provide all information called for by the form that is used.

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

**11. 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<sup>st</sup> for the period January 1<sup>st</sup> to June 30<sup>th</sup> of the current year, and by February 1<sup>st</sup> for the period July 1<sup>st</sup> to December 31<sup>st</sup> of the previous year.

11.1 The operating report must include all information required to be in the operating

reports as specified by other conditions of this permit.

- 11.2 If excess emissions or permit deviations that occurred during the reporting period are not reported under Condition 11.1, 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 10 the Permittee may cite the date or dates of those reports.
- 11.3 Periodic Affirmation: Each year by March 31<sup>st</sup>, the Permittee shall affirm whether the:
- a. application submitted for the permit and the permit issued still accurately describe the stationary source, and
  - b. the owner or operator has made changes that would trigger the requirement for a new permit.

***Section 5. Standard Conditions***

- 12.** 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
  - 12.1 an enforcement action; or
  - 12.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280.
- 13.** 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.
- 14.** 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.
- 15.** 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.
- 16.** The permit does not convey any property rights of any sort, nor any exclusive privilege.

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

- 17. Requested Source Tests.** In addition to any source testing explicitly required by this permit, the Permittee shall conduct source testing as requested by the department to determine compliance with applicable permit requirements.
- 18. 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.
- 19. Test Plans.** Except as provided in Condition 22, 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 17 and at least 30 days before the scheduled date of any test unless the department agrees in writing to some other time period. Retesting may be done without resubmitting the plan.
- 20. Test Notification.** Except as provided in Condition 22, 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.
- 21. Test Reports.** Except as provided in Condition 22, within 60 days after completing a source test, the Permittee shall submit two copies of the results in the format set out in the *Source Test Report Outline*, adopted by reference in 18 AAC 50.030. The Permittee shall certify the results in the manner set out in Condition 7. If requested in writing by the Department, the Permittee must provide preliminary results in a shorter period of time specified by the Department.
- 22. Test Exemption.** The Permittee is not required to comply with Conditions 19, 20, and 21 (Test Plans, Test Notification and Test Reports) when exhaust is observed for visible emissions using Method 9.

***Section 7. Permit Documentation***

Date                      Description

March 5, 2010:            Minor Permit Application for the Emergency Diesel Generators at Clear  
Air Force Station

**Attachment 1. Visible Emission Field Data Sheet**

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

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

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

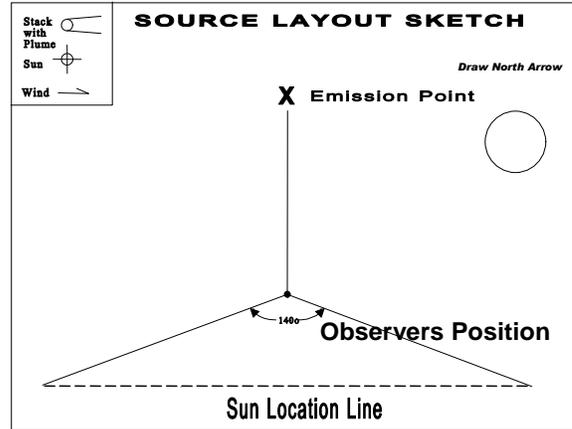
Test No.: \_\_\_\_\_ Date: \_\_\_\_\_

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					



**Attachment 3. 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 20, 2008.

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

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

(f) Unavoidable Emissions:

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

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

Certify Report (go to end of form)

**Section 2 Permit Deviations**

(a) Permit Deviation Type (check 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  
 Record Keeping Failure  
 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.

Unit ID	Emission Unit Name and Description	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:**

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, the report must be certified within the Operating Report required for the same reporting period per Condition 11.*

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.*