

Environmental Management Procedure (EMP) 4.4.6.1.1

Subject: Stationary Air Pollution Source Construction, Installation, Modification, Movement, or Removal.

1. Purpose: This EMP establishes the procedures for the proper management of Stationary Air Pollution Sources Construction, Installation, Modification, Movement, or Removal.
2. Document Control: This is a controlled document. Controlled documents are updated as required, reviewed at least annually, and re-dated if changed. Any documents to include blank forms appearing in paper form are not controlled and should be checked against the file version prior to use on the:

JBLE – Eustis Environmental website: <http://www.jble.af.mil/Units/Army/Eustis-Enviromental/>

3. References:
 - A. JBLE-I 32-101, Environmental Management
 - B. EMP Dictionary
 - C. EMP 4.4.6.1 Air Pollution Management
 - D. Joint Base Langley-Eustis Stationary Source Permit 17 December 2010
4. Scope: This EMP applies to all Activities and personnel, including military, civilians, vendors, suppliers, and contractor personnel who enter JBLE-Eustis. The definition of an Activity can be found in JBLE I 32-101.
5. Roles and Responsibilities:
 - A. The CED/Environmental/ (CEIE) will execute the program.
 - B. Activities will:
 - (1). Minimize their impact on air quality to the maximum extent possible.
 - (2). Ensure are procedures and reporting requirements are met.
6. Procedures:
 - A. Stationary Air Pollution Source Construction, Installation, Modification, Movement, or Removal.
 - (1). New or Modified Sources. The proponent for the construction, reconstruction, installation, or modification of an air pollution source will coordinate with CED/CEIE or the appropriate environmental office. Additional actions may be required prior to execution of the project.
 - (2). Permit to Construct and Operate. An application for a Permit to Construct and Operate must be submitted to and approved by the local air pollution control authority to construct, reconstruct or modify air pollution generating equipment/sources as per 9 VAC 5-80. The project proponent will insure completion and submission of these documents through CED/CEIE or the appropriate environmental office.
 - B. Examples of equipment/sources requiring a Application and a Permit to Construct and Operate for approval include:
 - (1). Fuel burning equipment such as boilers, heaters, or generators.

- (2). Refuse burning equipment such as incinerators.
 - (3). Process equipment such as air strippers, degreasers/parts washers, gasoline/avgas storage tanks.
 - (4). Processes such as media blasting, dry cleaning, electroplating, fiberglass operations, soil venting, indoor spray painting operations, and woodworking/other material working equipment using a vacuum system to collect dust.
 - (5). Training equipment such as engine test cells.
- C. Responsibility for obtaining the Permit to Construct and Operate.
- (1). Work done in-house: Coordination will be made with CED/CEIE for project review and assistance in completing the application. CED/CEIE will submit the application and obtain the Permit to Construct and Operate.
 - (2). Work done by contractor: Coordination will be made with CED/CEIE for project review and assistance in completing the application. CED/EE will obtain the Permit to Construct and Operate.
- D. Implement the Best Available Control Technology (BACT) as determined by the regulatory authority in the air pollution source design and construction/installation/operation.
- E. Assure that all the standards/limits included in the Permit to Construct and Operate are implemented or met. This includes performance testing of the air pollution source, installing control equipment or monitoring equipment, and installing equipment that meets the specified emission limits.
- F. General Conformity Determination. 40 CFR Part 51 requires that the federal government evaluate the affect of specific criteria air pollutants generated by projects funded by the federal government or that occur on federal land. The criteria air pollutants that must be evaluated are those for which the project area is in maintenance or nonattainment. Fort Eustis is in maintenance area for nitrogen oxides (NOx) and volatile organic compounds (VOCs). When the project will result in emissions of one or more of these pollutants:
- (1). A general conformity applicability analysis must be completed which examines the direct and indirect emissions produced by a project. If the requirements of the general conformity rule do not apply to a specific action, a Record of Non-Applicability (RONA) shall be prepared. A RONA is a short, written document which verifies that a proposed action has been reviewed properly, and provides written evidence of that review in the form of a project description, emission rate calculation (if necessary), citation of exemption category (if applicable) and any other information necessary to support the declaration of "non-applicability." CED/CEIE will provide guidance and assist activities in preparing a RONA.
 - (2). If the project emissions exceed the *de minimus* level for that pollutant or if the project does not qualify for one of the listed exemptions, a general conformity determination must be completed.
 - (3). Mitigative measures or emissions trading may be needed to continue the project.
- G. Removal or Movement of a Stationary Source. CED/CEIE must be notified (878-4123 ext. 306) when a registered source of air pollution has been removed or planned for movement. The movement of a source may require one of the actions outlined under paragraph "A. 2" above.
- H. H. General Operating and Equipment Requirements for Stationary and Fugitive Air Pollution Sources.
- (1). Owners/operators of air pollution sources must obtain the proper permits, if applicable, as outlined in paragraph 6 above.

- (2). Owners/operators of air pollution sources must follow the Joint Base Langley-Eustis Stationary Source Permit to Operate and any additional applicable source specific permits. Joint Base Langley-Eustis' most recent Permit to Operate was issued on 17 December 2010. Contact Environmental (878-4123) regarding applicable permits.
- (3). Owners/operators of affected air pollution sources identified in a permit must prepare and maintain an Operation and Maintenance (O&M) Plan. Guidance on preparation of O&M Plans is at paragraph 8 below.
- (4). Any exceedances or violations by an air pollution source must be reported to CEIE or the appropriate environmental office verbally within one business day and written within three business days.
- (5). Air pollution source operators must perform testing, monitoring, record keeping, inspections and reporting requested by CEIE or required by an applicable permit, or regulation.
- (6). All equipment must be maintained in good working order and operated following good industrial practice.
- (7). Air pollution monitoring devices must be calibrated and maintained according to manufacturer's instructions, industry practice, regulation or permit.
- (8). Monitoring gauges such as opacity, pressure differential monitors, and flow monitors will be marked with the permitted operating range as per manufacturer's instructions, industry practice, regulation, or permit.
- (9). An air pollution source must not emit visible emissions (i.e. visible smoke from a stack or dust from a bag-house) exceeding the visible emission limit standard outlined in the permit or an applicable regulation.
- (10). Waste derived fuel (e.g., used oil) must not be burned in any Fort Eustis air pollution source without prior coordination with CED/CEIE (878-7373).
- (11). Fugitive dust (created from projects such as construction, demolition, or material transfer) will be minimized by employing a technique such as water spray or a closed system. Fugitive dust must not be emitted from air pollution generating equipment such as boilers and incinerators.
- (12). An air pollution source must not emit air pollutants in such quantities and of such characteristics and duration which are likely to be injurious to human health, plant or animal life, property, or which unreasonably interfere with enjoyment of life and property.
- (13). Persons must not conceal or mask the emission of an air pollutant, which violates air pollution regulations or causes a detriment to the health, safety, or welfare of any person.
- (14). All activities shall keep solvent, paint, Misc. containers, and parts washing sinks closed when not in immediate use to avoid fugitive emissions. Parts Washing Sinks must be labeled at all times with official signage available at CED/CEIE. 878-7373.

I. Guidance for Preparations of O&M Plans.

- (1). The JBLE-Eustis Stationary Source Permit to Operate issued by the Commonwealth of Virginia Department of Environmental Quality (DEQ) requires operators of equipment generating or controlling air pollution on JBLE- Eustis to take the following measures in order to minimize the duration and frequency of excess emissions.
- (2). Develop a maintenance schedule and maintenance records of all scheduled and non-scheduled maintenance.

- (3). Maintain an inventory of spare parts.
- (4). Have available written operation procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- (5). Train operators in the proper operation of all such equipment and familiarize the operators with the written operation procedures. Training records shall be maintained to include the names of trainees, the date of training and the nature of the training.

J. Source Specific Operating and Equipment Requirements for Stationary Air Pollution Sources:

- (1). JBLE- Eustis' Stationary Source Permit to Operate lists the permitted equipment, operating requirements/emission limitations, records, and general conditions. A copy of the permit can be obtained from CED/CEIE. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.

K. Distillate oil requirements from the JBLE- Eustis Stationary Source Permit to Construct and Operate.

7. **Fuel** - The distillate oil shall meet the specifications below:

DISTILLATE OIL which meets the ASTM D396 specification for numbers 1 or 2 fuel oil:

Maximum sulfur content per shipment:	0.5 %
Maximum sulfur content for NSPS IIII generators:	0.0015 %

(9 VAC 5-80-850, 9 VAC 5-80-1180, 9 VAC 5-50-260, and 9 VAC 5-50-410)

8. **Fuel Certification** - The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil for the boilers (587-1, 587-2, 2701-1, 2701-2, 2701-3) and the NSPS IIII applicable generators (IC-D-2 and IC-D-3). Each fuel supplier certification shall include the following:

- a. The name of the fuel supplier;
- b. The date on which the distillate oil was received;
- c. The quantity of distillate oil delivered in the shipment;
- d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications (ASTM D396) for numbers 1 or 2 fuel oil; and
- e. The sulfur content of the distillate oil.

Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition number 7. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.

(9 VAC 5-80-850, 9 VAC 5-80-1180, and 9 VAC 5-50-260)

9. **Semi-Annual Reports** - The permittee shall submit fuel quality reports for the boilers (587-1, 587-2, 2701-1, 2701-2, and 2701-3) to the Director, Tidewater Regional Office within 30 days after the end of each semi-annual period. If no shipments of distillate oil were received during the semi-annual period, the semi-annual report shall consist of the dates included in the semi-annual period and a statement that no oil was received during the semi-annual period. If distillate oil was received during the semi-annual period, the reports shall include:

- a. Dates included in the semi-annual period;
- b. A copy of all fuel supplier certifications for all shipments of distillate oil received during the semi-annual period or a semi-annual summary from each fuel supplier that includes the information specified in Condition 8 for each shipment of distillate oil; and
- c. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the distillate oil burned or received at the facility.

One copy of the semi-annual report shall be submitted to the U.S. Environmental Protection Agency at the address specified in Condition 18.

(9 VAC 5-80-850, 9 VAC 5-170-160, and 9 VAC 5-50-50)

Facility
#60333

NSPS III, Stationary Compression Ignition Internal Combustion Engines

Applicable requirements for EMERGENCY Engines with displacement < 10 liters per cylinder.

Requirement	Observations	Compliance Status
<p>1. Hour Meter: Installed a non-resettable hour meter prior to the startup of the engine 40 CFR 60.4209(a)</p>	<p><input type="checkbox"/> Has non-resettable meter. <input type="checkbox"/> Unknown whether it was installed prior to start-up.</p>	<p><input type="checkbox"/> In <input type="checkbox"/> Out</p>
<p>2. Non-emergency use <= 100 hr/yr and limited to maintenance checks & readiness testing that is recommended by Fed, state, or local gov't, the mfg, the vendor or the insurance co. associated with the unit. May petition the Adm. for more hrs. but that is unnecessary if fed, state or local stds. require more. 40 CFR 60.4211(e)</p>	<p><input type="checkbox"/> Mr. ____ says that they run once each per ____ for approx. ____ hr.</p>	<p><input type="checkbox"/> In <input type="checkbox"/> Out</p>
<p>3. Changes: Make no changes to engine settings except those allowed by the manufacturer. 40 CFR 60.4211(a)</p>	<p><input type="checkbox"/> No changes made according to _____ . <input type="checkbox"/> Changes made but only those allowed by mfg. Attached is a list of changes allowed. <input type="checkbox"/> Unauthorized changes made.</p>	<p><input type="checkbox"/> In <input type="checkbox"/> Out</p>
<p>4. O&M: Operate and maintain the engine according to the manufacturer's written instructions (or according to procedures developed by the permittee and approved by the engine manufacturer), in order for the engine to meet the emission standards for its useful life. 40 CFR 60.4211(a) Records of maintenance. 40 CFR 60.4214(a)(2)(ii)</p>	<p><input type="checkbox"/> Chosen to follow mfg's instructions. <input type="checkbox"/> Records demonstrate that maintenance is conducted in accordance with mfg. instructions (what and when).</p>	<p><input type="checkbox"/> In <input type="checkbox"/> Out</p>
<p>5. DEQ Fuel Certification obtained from supplier with each shipment. Content: a) name of supplier; b) date of delivery; c) quantity; d) statement that oil complies with ASTM spec for that grade. e) sulfur content of oil. Permit Condition</p>	<p>A <input type="checkbox"/> spot check or <input type="checkbox"/> a complete check of records from _____ to _____ shows that required content is present.</p>	<p><input type="checkbox"/> In <input type="checkbox"/> Out</p>
<p>6. Fuel: Approved fuel from Oct. 1, 2007 until Oct 1, 2010 is distillate oil with %S ≤ 0.05%. Approved fuel after Oct 1, 2010 is distillate oil with %S ≤ 0.0015%. Does not apply to holders of a national security exemption. (Owners of pre-2011 model year engines may petition the EPA Administrator for approval to use remaining non-compliant fuel for a period up to 6 months beyond the dates and may repetition again.) 40 CFR 60.4207 & 80.510</p>	<p><input type="checkbox"/> The record check shows that ____ %S oil is being used.</p>	<p><input type="checkbox"/> In <input type="checkbox"/> Out</p>

<p>7. Compliance (Pre-2007 Model Year): Demonstrate compliance with the emission standards by means of one of the following:</p> <p>a) Purchase an engine certified according to 40 CFR Part 89 or 40 CFR Part 94, as applicable; install and configure the engine according to the manufacturer’s specifications.</p> <p>b) Keep records of performance test results for each pollutant for a test conducted on a similar engine using the same test methods specified in the subpart, which methods must have been properly followed .</p> <p>c) Keep records of engine manufacturer data indicating compliance with the emission standards.</p> <p>d) Conduct an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 60.4212, as applicable.</p> <p style="text-align: right;">40 CFR 60.4211(b)</p> <p>Records to show that engine meets the emission standards. 40 CFR 60.4214(a)(2)(iv)</p>	<p>Records shows the engine meets the emission standards by</p>	<p><input type="checkbox"/> In <input type="checkbox"/> Out</p>
<p>8. Compliance (2007 & Later Model Years): Purchase an engine certified to the emission standards for the same model year and max engine power. Install and configure engine according to mfg’s specs.</p> <p style="text-align: right;">40 CFR 60.4211(c)</p> <p>Documentation from mfg. that engine is certified to meet the emission standards.</p> <p style="text-align: right;">40 CFR 60.4214(a)(2)(iii)</p>	<p><input type="checkbox"/> Engine mfg documentation present.</p>	<p><input type="checkbox"/> In <input type="checkbox"/> Out</p>

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