

PORTABLE ENGINE/GENERATOR OPERATION AND MAINTENANCE (O&M)

1. Version, Date. 1, 1 April 2012
2. Purpose. This Environmental Standard Operating Procedure (ESOP) establishes the requirements for the operation and maintenance (O&M) of portable engines and generators at Marine Corps Base, Quantico (MCBQ). Portable engines include internal combustion engines on items such as landscaping equipment (e.g., lawn mowers, trimmers, blowers), golf carts, motorized pumps, and generators. These procedures are implemented to minimize the potential for impact to the environment and to ensure the optimal working condition of equipment.
3. Applicability
 - a. Audience. This ESOP is directed towards individuals who perform any of the operations described herein. All personnel aboard MCBQ shall take responsibility to follow the procedures contained within this ESOP.
 - b. Scope. This ESOP applies to the routine operation of portable equipment and generators as well as the testing of this equipment for maintenance purposes. This ESOP does not apply to stationary generators in use at MCBQ, which are discussed in separate ESOPs, including: Material Storage Area - Hazardous Materials Management (ESOP #3), Emergency Generator Procurement (ESOP #4), and Emergency Generators Operation & Maintenance (ESOP #5).
4. Definitions. The following definitions are provided to support this procedure:
 - a. Generator. For the purposes of this ESOP, the term generator refers to the entire generator set (generator and associated parts, e.g., internal tanks, controllers, batteries) that provides power by way of combustion.
 - b. Internal combustion engine. An engine of one or more working cylinders in which the process of combustion takes place within the cylinders.
 - c. Landscaping equipment. Gasoline-powered equipment used in the maintenance, upkeep of lawn and plants, and subsequent cleanup (e.g., lawn mowers, trimmers, and blowers).
 - d. Portable generator. A generator that is not fixed for use in one location, is easily transported, and is used for less than one year in any one location (regardless of runtime). If stationary for

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more than one year, the portable generator is considered a fixed generator and subject to stationary generator requirements.

e. Release. Discharge of hazardous substances (including petroleum products), as defined by the Clean Water Act.

5. Responsible Parties. Personnel listed below are responsible for implementing the procedures described in this ESOP:

a. G-5, Public Works Branch, Facilities and Logistics Service Section (FLSS), Shop 51 (Electrical/HVAC Shop), Generator maintenance personnel.

b. G-5, NREA Branch, Environmental Compliance Section.

c. G-6, Communications, Supply Branch.

6. Procedures for Portable Engine/Generator O&M (Procedures for Operational Control)

a. The proper O&M of portable engines and generators is not governed by air permits, as portable engines/generators are exempt from Virginia (9 VAC 5-80-710 and 720) and Federal regulation (40 CFR 71.3).

b. Nevertheless, operation of portable engines and generators requires the use of materials that can be hazardous such as oil, fuel, antifreeze, greases, and batteries. These materials must be managed properly to lessen impacts to human health and the environment. The proper O&M of portable engines and generators not only lengthens the lifespan of the equipment, but also lessens the potential for leaks and equipment malfunctions.

c. Therefore, the following operational procedures shall be followed for portable engine/generator O&M:

(1) Follow all recommended O&M procedures in the owner's manual. If the owner's manual is not available, either search the internet for applicable manuals or contact the manufacturer for assistance.

(2) Contact the Facilities Maintenance Branch for assistance with O&M as necessary.

(3) Ensure that Material Safety Data Sheets (MSDSs) for any hazardous materials involved in O&M are available and current.

(4) If required by equipment user manuals, wear personal protective equipment (PPE) during O&M activities, including gloves, aprons, eye and ear protection, and steel toed boots.

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(5) For proper management procedures for the storage of hazardous materials and hazardous waste, refer to Hazardous Materials Management Storage Area - Hazardous Materials Management ESOP (ESOP #3).

7. Inspections and Corrective Actions

a. Routinely inspect areas where portable equipment are stored and/or located for signs of leaks.

b. Report any releases to the NREA Branch, Environmental Compliance Section at (703) 784-4030.

8. Internal Communication

a. Contact the NREA Branch, Environmental Compliance Section to obtain guidance and/or coordinate the implementation of corrective actions for releases.

b. Contact the NREA Branch, Environmental Compliance Section with any questions regarding whether a particular generator may not be exempt from air program requirements.

9. Training/Awareness

a. Hazard Communication (HAZCOM) training provides workers training and awareness of the properties and potential health and safety hazards associated with materials to which they are exposed to in the workplace. All individuals working with compressed gas cylinders as part of their normal duties should receive appropriate HAZCOM training.

b. Initial, on-the-job training to provide basic O&M procedures for portable equipment/generators.

c. Training should also be provided to address storm water management procedures; spill, prevention, control, and countermeasure (SPCC) procedures; and, emergency response procedures.

10. Emergency Preparedness and Response

a. For a release resulting from a malfunction or overfill of a portable engine/generator:

(1) Cease all operations (e.g., fuel transfer, engine power, etc.) and evacuate to a safe distance upwind and updrift from spill.

(2) Restrict ignition sources (e.g., motors, electric currents, open flame, etc.).

(3) Pass the word to personnel in adjacent areas.

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(4) Inform shop supervisor or supervisor of nearest facility.

(5) Report the spill to MCBQ Fire Department (911), NREA Branch ([703] 784-4030), and MCBQ Command Duty Officer (CDO) ([703] 784-2707).

b. Only if it is safe to do so, take steps to control (e.g., stop the source, shut off valves, etc.) and/or contain (e.g., apply sorbent materials, block drains, etc.) the spill.

11. References and Related Documents. The following references are relevant to this procedure:

- a. 40 CFR 71.3, Federal Operating Permit Programs, Sources Subject to Permitting Requirements.
- b. MCO 4450.12A, Storage and Handling of Hazardous Materials.
- c. MCO P5090.2A, Environmental Compliance and Protection Manual.
- d. MCBO 6280.1B, Handling, Transfer, and Disposal of Hazardous Materials and Hazardous Waste.
- e. ESOP #3, Hazardous Material Storage Area - Hazardous Materials Management.
- f. ESOP #4, Emergency Generator Procurement.
- g. ESOP #5, Emergency Generator Operation and Maintenance.

12. Document Revision History. The following provides a history of revisions of this ESOP:

Revision Number	Date	Revision Made By	Section	Page	Summary of Change and Reason	Signature

13. Document Owner. This document has been reviewed and approved by the practice owners. Should the practice change, resulting in a need to modify this ESOP, practice owners will notify the NREA Branch, Environmental Management System Section at (703) 432-0536.

- a. Document Owner. NREA Branch, Environmental Compliance Section.
- b. Document Approval. Chair, E²MS Implementation Team.